# MANAGING SURFACE WATER-GROUNDWATER TO RESTORE FALL FLOWS IN THE COSUMNES RIVER

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|---|---|
| Title | Managing Surface Water-Groundwater to Restore Fall Flows in the Cosumnes River |
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| Abstract | Declining fall flows are limiting the ability of the Cosumnes River to support large fall runs of Chinook salmon. Management scenarios linking surface water and groundwater alternatives to provide sufficient fall flows are examined using groundwater flow and channel routing models. Results show that groundwater overdraft in the basin has converted the river to a predominantly losing stream, practically eliminating base flows. Management alternatives to increase net recharge (for example, pumping reductions) were examined along with surface water augmentation options. Using a minimum depth standard for fish passage, average surface water flow deficits were computed for the migration period of Chinook salmon. Groundwater deficits were evaluated by comparing simulated current groundwater conditions with conditions under various scenarios. Increases in net recharge on the order of 200 to 300 million m3/year would be required to reconnect the regional aquifer with the channel and in turn reestablish perennial base flows. Options that combine surface water augmentation with groundwater management are most likely to ensure sufficient river flows in the short term and to support long-term restoration of regional groundwater levels. |
| URL | http://baydelta.ucdavis.edu/files/crg/reports/Fleckenstein_WRPM_2004.pdf |

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

**EDMUND G. BROWN JR.**, *Governor*

**DEPARTMENT OF WATER RESOURCES**
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

April 30, 2014

**Report to the Governor's Drought Task Force – Groundwater Basins with Potential Water Shortages and Gaps in Groundwater Monitoring**

The Department of Water Resources (DWR) prepared the attached groundwater report as required by Governor's January 17, 2014 Emergency Drought Proclamation (Order Action Number 11). The proclamation required that DWR describe basins with potential water shortages and gaps in groundwater monitoring. Preparing the report entailed compiling and evaluating all available data, including information presented in California Water Plan Update 2013.

A follow-up groundwater report will be provided by November 30, 2014, as required by Governor's April 25, 2014 Executive Order (Order Action Number 11) that addresses areas where the drought has significant impacts to groundwater resources. DWR will conduct intensive outreach, provide technical assistance to local agencies in order to increase groundwater monitoring, and collect and analyze groundwater data. The focus of this report will be to identify groundwater basins with water shortages, gaps in groundwater monitoring, and provide the latest information on land subsidence and agricultural land fallowing.

Groundwater is a key priority for the Governor. The January 2014 California Water Action Plan developed by the Natural Resources Agency, California Environmental Protection Agency, and Department of Food and Agriculture identifies the critical need to improve groundwater management in the State. The Governor's 2014-15 budget proposes $618.7 million for funding actions in the Water Action Plan, including measures for drought response and to support improved groundwater management. The Water Action Plan expresses the Governor's commitment to work with local governments and agencies, Native American tribes, and the Legislature to identify and provide additional tools, resources, guidance, and the authority local managers need to sustainably manage groundwater resources. Recognizing that the State should protect groundwater basins that are at risk of permanent damage when a local agency is unable or unwilling to do so, the Governor's proposed budget provides resources to the State Water Resources Control Board to act as a backstop until an adequate local groundwater management plan is put in place.

In the next few months, DWR will continue to collaborate with the Governor's Office and other State agencies to develop the framework for a statewide sustainable groundwater management program, and DWR will take a lead role in implementing the program to fulfill the Governor's vision.

William A. Croyle, PE
Drought Manager

Attachment - Public Update for Drought Response Groundwater Basins with Potential Water Shortages and Gaps in Groundwater Monitoring, dated April 2014

State of California

The Resources Agency

Department of Water Resources

# Public Update for Drought Response
# Groundwater Basins with Potential Water Shortages and Gaps in Groundwater Monitoring

**April 30, 2014**

| Edmund Brown Jr. | John Laird | Mark W. Cowin |
|---|---|---|
| Governor | Secretary for Resources | Director |
| State of California | The Resources Agency | Department of Water Resources |

State of California
**Edmund G. Brown Jr., Governor**

California Natural Resources Agency
**John Laird, Secretary for Natural Resources**

Department of Water Resources
**Mark W. Cowin, Director**
**Laura King-Moon, Chief Deputy Director**

| | | |
|---|---|---|
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| Policy Advisor<br>**Waiman Yip** | Public Affairs Office<br>**Nancy Vogel, Ass't Dir.** | Security Operations<br>**Sonny Fong** |

*Deputy Directors*

| | |
|---|---|
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| Delta and Statewide Water Management<br>**Paul Helliker** | Integrated Water Management<br>**Gary Bardini** |

State Water Project
**Carl Torgersen**

Document prepared under direction of the Department of Water Resources, Drought Management Team, Drought Management Operations Center

| | | |
|---|---|---|
| William Croyle | David Gutierrez | Jon Ericson |
| Manucher Alemi | Dane Mathis | Mary Scruggs |

Contributions provided by:

| | | |
|---|---|---|
| Chris Bonds | Bill Brewster | Bill Ehorn |
| Roy Hull | Trevor Joseph | Cordi McDaniel |
| Michael McGinnis | Dan McManus | Charlie Olivares |
| Bob Pierotti | Tim Ross | Steven Springhorn |
| Brett Wyckoff | | |

## Executive Summary

Year 2013 closed as the driest in recorded history for many areas of California. On January 17, 2014, Governor Brown signed a Proclamation of a State of Emergency in response to the drought. This Public Update addresses Order #11 of the Governor's Proclamation and provides information regarding groundwater basins with potential water shortages and gaps in groundwater monitoring.

Groundwater is a vital resource in California providing close to 60 percent of the state's water supply in a dry year. Drought conditions typically result in an increase of groundwater well activity and pumping to compensate for water supply shortages. Increased groundwater pumping can lead to adverse conditions including dry wells, subsidence, decreased water quality, saline intrusion, and stream depletion. Evaluation of available data produced the following:

- Groundwater levels have decreased in nearly all areas of the state since spring 2013, and more notably since spring 2010.
- Since spring 2008, groundwater levels have experienced all-time historical lows (for period of record) in most areas of the state and especially in the northern portion of the San Francisco Bay Hydrologic Region, the southern San Joaquin Valley, and also for the South Lahontan and South Coast hydrologic regions.
- In many areas of the San Joaquin Valley, recent groundwater levels are more than 100 feet below previous historical lows.
- The greatest concentration of recently deepened wells is in the fractured bedrock foothill areas of Nevada, Placer, and El Dorado counties.
- The Kaweah and Kings subbasins have the greatest numbers of deepened wells in an alluvial groundwater basin.
- Thirty-six alluvial groundwater basins that have a high degree of groundwater use and reliance may possess greater potential to incur water shortages as a result of drought. The basins exist in the North Coast, Central Coast, Sacramento River, Tulare Lake, and South Coast hydrologic regions.
- Of California's 515 alluvial groundwater basins, 169 are fully or partially monitored under the California Statewide Groundwater Elevation Monitoring (CASGEM) Program.
- Forty of the 126 High and Medium priority basins are not monitored under CASGEM. There are significant CASGEM groundwater monitoring data gaps in the Sacramento, San Joaquin River, Tulare Lake, Central Coast, and South Lahontan hydrologic regions.
- Although there are 4,122 CASGEM wells and 39,429 Voluntary wells in the Water Data Library groundwater level database, gaps in groundwater monitoring persist.
- Several areas of the state lack a current groundwater management plan that addresses all related requirements of the California Water Code.

DWR is contracting with National Aeronautics and Space Administration (NASA) Jet Propulsion Laboratory for use of satellite-based radar data to measure subsidence in the Sacramento and San Joaquin valleys. NASA, the U.S. Geological Survey, and U.S. Department of Agriculture are developing an automated system for estimating fallowed agricultural acreage. For detailed information regarding groundwater and groundwater management in California, please visit DWR's Groundwater Information Center at www.water.ca.gov/groundwater. For more information regarding DWR's drought response efforts, please visit www.water.ca.gov/waterconditions.

# Table of Contents

Executive Summary ..... ii
1.0 INTRODUCTION ..... 1
2.0 PURPOSE ..... 1
3.0 FINDINGS ..... 2
4.0 GROUNDWATER BASINS WITH POTENTIAL WATER SHORTAGES ..... 5
4.1 Groundwater Well Deepening Activity ..... 8
4.2 Groundwater Reliance ..... 11
4.3 Groundwater Levels ..... 13
4.4 Key Hydrographs ..... 20
North Coast Hydrologic Region – Figure 14 ..... 24
San Francisco Bay Hydrologic Region– Figure 15 ..... 24
Sacramento River Hydrologic Region– Figure 16 ..... 24
San Joaquin River Hydrologic Region– Figure 17 ..... 28
Tulare Lake Hydrologic Region– Figure 18 ..... 28
North Lahontan Hydrologic Region– Figure 19 ..... 28
5.0 GAPS IN GROUNDWATER MONITORING ..... 32
5.1 CASGEM Basin Prioritization ..... 34
5.2 Groundwater Level Monitoring Networks ..... 37
5.3 Groundwater Management ..... 42
6.0 CONCLUSION ..... 45

## Figures

Figure 1 - 2014 Drought - Potential Groundwater Shortages ..... 4
Figure 2 - Bulletin 118-03 Alluvial Groundwater Basins ..... 6
Figure 3 - Contribution to California Water Supply by Hydrologic Region ..... 7
Figure 4 - Water Wells Deepened 2010-2014 ..... 9
Figure 5 - Depth to Groundwater - Spring 2014
Selected Groundwater Basins in Northern California ..... 14
Figure 6 - Depth to Groundwater - Spring 2014
Selected Groundwater Basins in North Central California ..... 15
Figure 7 - Depth to Groundwater - Spring 2014
Selected Groundwater Basins in South Central California ..... 16
Figure 8 -Depth to Groundwater - Spring 2014
Selected Groundwater Basins in Southern California ..... 17
Figure 9 - Groundwater Level Change - Spring 2013 to Spring 2014 ..... 18
Figure 10 - Groundwater Level Change - Spring 2010 to Spring 2014 ..... 19
Figure 11 - Groundwater Level Change – Northern Central Valley, Spring 2013 to Spring 2014 ..... 21
Figure 12 - Groundwater Level Change – Southern Central Valley, Spring 2013 to Spring 2014 ..... 22
Figure 13 - Groundwater Level Change – Historical Low Spring 1900-1998
to Drought Low Spring 2008-2014 ..... 23
Figure 14 - Selected Hydrographs – North Coast Hydrologic Region ..... 25
Figure 15 - Selected Hydrographs – San Francisco Bay Hydrologic Region ..... 26
Figure 16 - Selected Hydrographs – Sacramento River Hydrologic Region ..... 27
Figure 17 - Selected Hydrographs – San Joaquin River Hydrologic Region ..... 29
Figure 18 - Selected Hydrographs – Tulare Lake Hydrologic Region ..... 30
Figure 19 - Selected Hydrographs – North Lahontan Hydrologic Region ..... 31
Figure 20 - Groundwater Basins and Portions of Basins Monitored
under the CASGEM Program ..... 33
Figure 21 - Draft CASGEM Basin Prioritization ..... 35
Figure 22 - Unmonitored High and Medium Priority Basins, and Monitored Basins
under the CASGEM Program ..... 36
Figure 23 - Water Data Library Monitoring Distribution - Wells with Spring 2013 Data ..... 38
Figure 24 - Distribution of CASGEM Wells in Northern California ..... 39
Figure 25 - Distribution of CASGEM Wells in Central California ..... 40
Figure 26 - Distribution of CASGEM Wells in Southern California ..... 41
Figure 27 - Groundwater Management Plans ..... 44

## Tables

Table 1 - Counties with Wells Deepened from 2010 through early 2014 ..... 10
Table 2 - Groundwater Basins with Wells Deepened from 2010 through early 2014 ..... 11
Table 3 - Groundwater Basins with High Groundwater Reliance ..... 12

# Groundwater Basins with Potential Water Shortages and Gaps in Groundwater Monitoring

## 1.0 INTRODUCTION

Groundwater is a vital resource to residents, businesses, farms, and industries in California. It provides close to 40 percent of the state's water supply in an average year and as much as 45 percent in dry years. During extensive dry or drought years, groundwater can provide close to 60 percent of the water supply. Some communities are 100 percent reliant upon groundwater for municipal and agricultural purposes. Year 2013 closed as the driest year in recorded history for many areas of California. On January 17, 2014, in response to these drought conditions, Governor Brown signed a Proclamation of a State of Emergency (www.gov.ca.gov/news.php?id=18368).

## 2.0 PURPOSE

The purpose of this document is to address Order #11 of the Governor's Proclamation: *The Department of Water Resources will evaluate changing groundwater levels, land subsidence, and agricultural land fallowing as the drought persists and will provide a public update by April 30 that identifies groundwater basins with water shortages and details gaps in groundwater monitoring.*

Specifically, this Public Update (Update) provides information regarding groundwater basins with potential water shortages and addresses gaps in groundwater monitoring. The California Department of Water Resources (DWR) utilized available information from several sources to identify groundwater basins with potential water shortages and gaps in groundwater monitoring. Data were compiled and analyzed from the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, the Water Data Library (WDL) groundwater level database, the draft Bulletin 160 *California Water Plan Update 2013*, and from well completion reports (driller's logs) submitted to DWR. The focus of this Update was to analyze the available data and identify areas with potential groundwater shortages and gaps in groundwater level monitoring; water quality concerns were not investigated or directly included in the analysis. Where feasible, the most recent and available data were considered. Since spring groundwater level measurements are typically collected in March and April, and most are subsequently uploaded to the WDL database via the CASGEM Online System by July, some spring 2014 data was not yet available to include in this Update. DWR utilized groundwater level data available as of April 15, 2014. In addition, the well completion report data are likely incomplete because there is a lag time for drillers to submit the required reports to DWR. This Update can also serve as an indicator that additional groundwater information is needed to adequately address groundwater issues in the state.

This Update responds to the specific requirement in Proclamation Order #11 to provide a report on groundwater basins and groundwater monitoring. The proclamation also directs DWR to evaluate land subsidence and agricultural land fallowing. DWR is currently working with federal agencies such as the

National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration in a separate process to carry out this work by utilizing advanced technologies for monitoring drought impacts. DWR is contracting with NASA Jet Propulsion Laboratory for use of satellite-based Interferometric Synthetic Aperture Radar (InSAR) data to measure relative changes in land surface elevation in portions of the Sacramento and San Joaquin valleys from 2007 through 2014; this analysis is expected to be completed by early summer 2015. A test area along the California Aqueduct will also be evaluated using aircraft-based InSAR data; this work is expected to be completed about December 2014. NASA, the U.S. Geological Survey, and U.S. Department of Agriculture, National Agricultural Statistics Service are developing an automated system for DWR that will estimate fallowed agricultural acreage during the growing season. The system will rely on crop census data and on indices of vegetation greenness measured by satellite sensors. Monthly estimates of fallowed acreage will be reported from spring through fall 2014; the initial estimate is expected to be available at the end of April 2014.

## 3.0 FINDINGS

Groundwater is the primary supply of water in several areas of the state. Groundwater levels in these areas are more susceptible to impacts from drought conditions due to reductions in natural recharge, managed recharge, and subsurface inflow. Such reduced conditions typically result in an increase of groundwater well activity and pumping to compensate for water supply shortages. Although there may be active groundwater management programs, many areas do not have controls in place to restrict or stop groundwater pumping. Groundwater pumping is expected to increase as drought conditions worsen. The increased pumping can lead to adverse conditions including dry wells, subsidence, decreased water quality, saline intrusion, and stream depletion. Figure 1 depicts areas of the state that have a high degree of groundwater use and reliance, have experienced significant lowering of groundwater levels since spring 2010, and have experienced groundwater levels at all-time historical lows (for period of record) since spring 2008.

Water shortages and potential shortages have been identified in areas of alluvial groundwater basins and in areas that derive groundwater from fractured bedrock (foothill and mountainous areas). Several alluvial groundwater basin areas are already known to experience groundwater shortages, while other basins possess indicators associated with potential water shortage. There are several areas of the state experiencing decreasing groundwater levels and deepening of water wells.

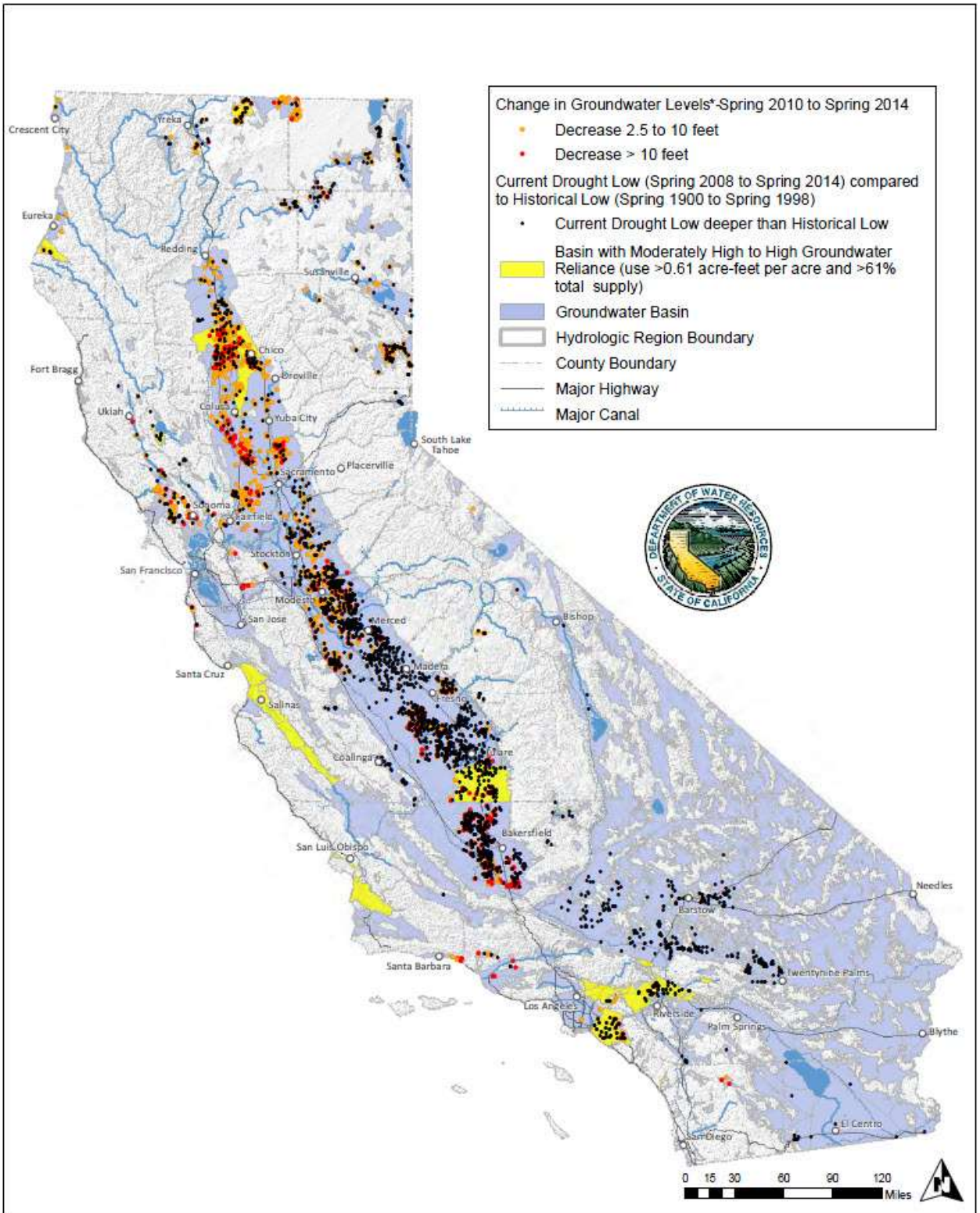
> Groundwater levels have decreased in nearly all areas of the state since spring 2013, and more notably since spring 2010. Since spring 2008, groundwater levels have experienced all-time historical lows in most areas of the state and especially in the northern portion of the San Francisco Bay Hydrologic Region, the southern San Joaquin Valley, and also for the South Lahontan and South Coast hydrologic regions – these areas exhibit groundwater levels more than 50 feet below previous historical lows experienced sometime prior to 2000. There are many areas of the San Joaquin Valley where recent groundwater levels are more than 100 feet below previous historical lows. The greatest concentration of recent well deepening activity is in the foothill areas of Nevada, Placer, and El Dorado counties. The Kaweah and Kings subbasins have the greatest numbers of deepened wells within the San Joaquin Valley. A total of 36 alluvial groundwater

basins have a high degree of groundwater use and reliance. As such, these basins may possess greater potential to incur water shortages as a result of drought. The basins exist in five hydrologic regions: North Coast (2), Central Coast (17), Sacramento River (5), Tulare Lake (1), and South Coast (11).

Monitoring groundwater levels is critical for assessing the status of a groundwater basin over time, and is particularly important during dry years and drought conditions. There are several areas within the state that appear to lack sufficient groundwater monitoring.

Only 169 of California's 515 alluvial groundwater basins are fully or partially monitored under the CASGEM Program. Forty of the 126 High and Medium priority basins are not monitored under CASGEM. There are significant groundwater monitoring data gaps in the Sacramento, San Joaquin River, Tulare Lake, Central Coast, and South Lahontan hydrologic regions. There are gaps on a statewide scale – basins that are not yet being monitored under the CASGEM Program, as well as gaps on the basin scale – basins with spatial data gaps. With respect to groundwater management plans, several areas of the state either lack a plan, or the existing plan has not been updated to address the requirements of the California Water Code as of 2002 (SB 1938) or 2012 (AB 359). Such areas may also lack sufficient monitoring and/or management of groundwater and are potentially subject to increased stress or impacts due to drought conditions.

**Figure 1 - 2014 Drought - Potential Groundwater Shortages**




*Groundwater level change determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/15/2014. Document Name: 2014_Drought_Potential_Groundwater_Shortages Updated: 04/23/2014 Data subject to change without notice.

# 4.0 GROUNDWATER BASINS WITH POTENTIAL WATER SHORTAGES

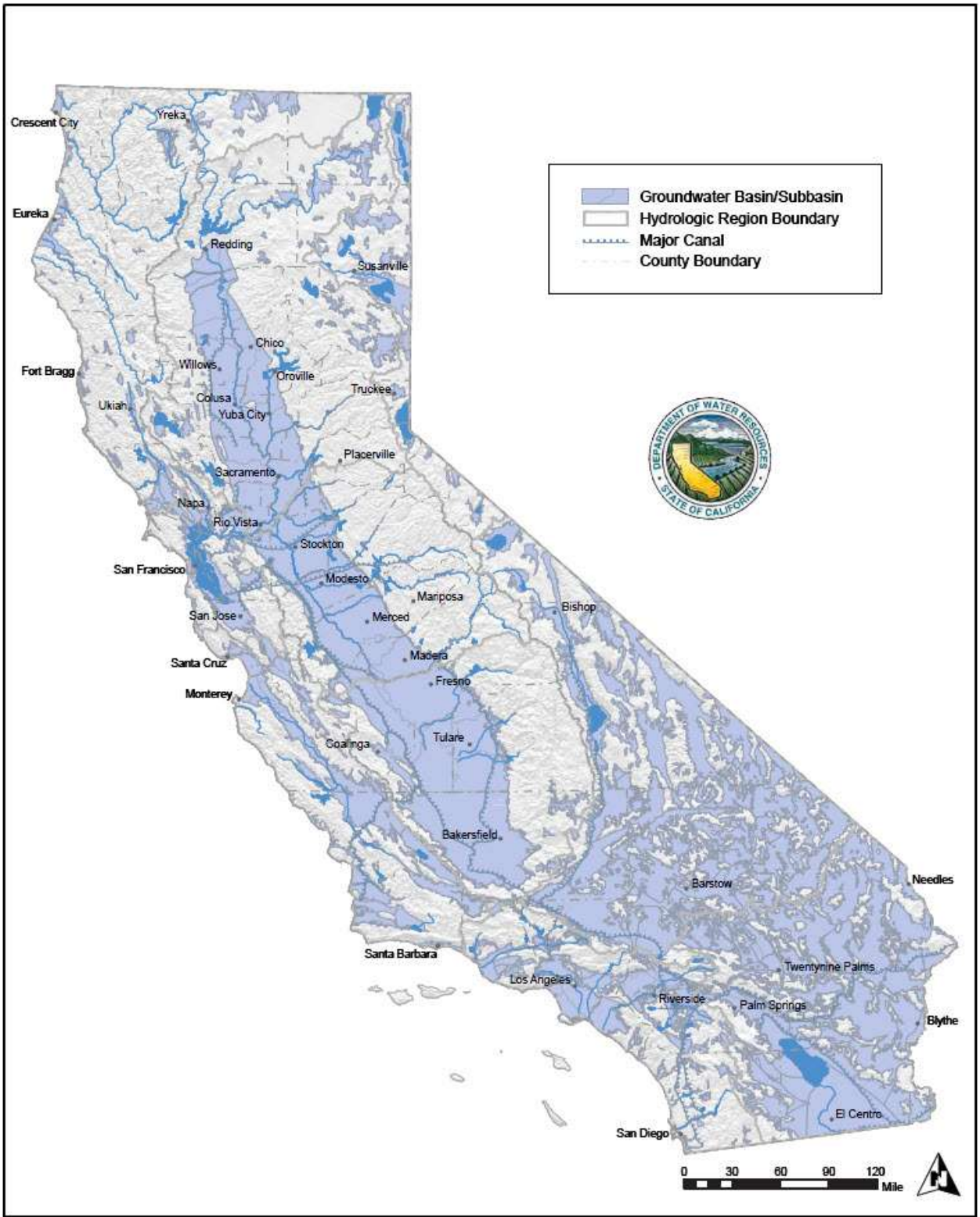
In California, most groundwater is found in basins filled with alluvial deposits. Figure 2 depicts 515 alluvial groundwater basins as defined in DWR's Bulletin 118 Update 2003 (Bulletin 118-03, www.water.ca.gov/groundwater/bulletin118/update2003). Close to 90 percent of the groundwater used in California is extracted from only about 126 of the 515 alluvial groundwater basins. Groundwater is also found in fractured bedrock in foothill and mountainous areas. However, the amount of groundwater found in fractured bedrock is relatively small compared with the amount found in alluvial basins. Nevertheless, fractured bedrock is the sole source of water supply for many communities in California, and for many individual residences.

Some communities rely solely on surface water, some rely solely on groundwater, and some rely on both surface water and groundwater to meet demands. The amount of groundwater use relative to the amount of surface water use varies greatly over the state. Figure 3 summarizes statewide contribution of groundwater compared to the total water use as reported in the draft *California Water Plan Update 2013* (www.waterplan.water.ca.gov/cwpu2013). Based on average annual data for years 2005 to 2010, groundwater use was near 16.5 million acre feet and accounted for about 39 percent of the total water supply in California.

The amount of groundwater use relative to surface water use also varies over time. In years of greater precipitation and runoff, more surface water is available to replenish groundwater basins and fractured bedrock; whereas, in dry years when less surface water is available, groundwater is relied upon to meet water demands. The practice of using surface water when available and relying more heavily on groundwater when surface water becomes scarce is known as conjunctive water use or conjunctive water management. Under conjunctive water management, during wet seasons or years, surface water replenishes groundwater basins and water levels in wells typically increase. During dry seasons or dry years, more groundwater is extracted and water levels in wells typically decline.

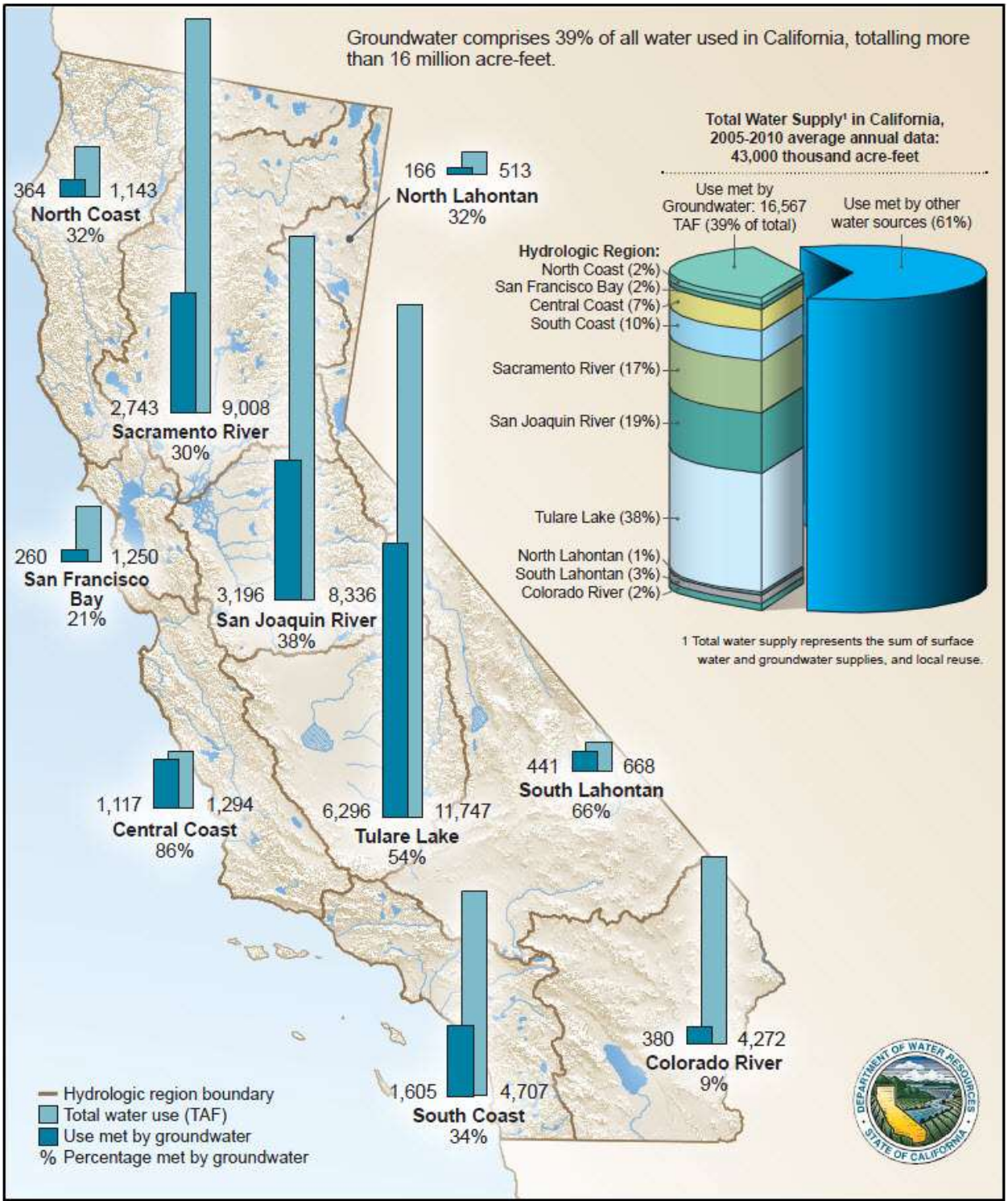
The decline of water levels in a groundwater basin may be a sign that water use is outpacing the short-term recharge of that groundwater basin. However, in dry years the basin may be managed such that groundwater is extracted, lowering water levels until more recharge is available in the next wet year. To be able to discern whether a groundwater basin may be in shortage, groundwater levels must be analyzed over a time period that includes dry and wet years. Some groundwater basins hold vast amounts of water with decades or centuries of water supply in the basin. Even for a basin that exhibits overdraft conditions, groundwater may not be in shortage. The activity of deepening water wells is an indicator that water levels have declined to a point where a well no longer supplies adequate water. Groundwater levels at historical lows may also be an indicator that water use in the current drought is causing a greater decline in water levels than in previous dry years or droughts.

**Figure 2 - Bulletin 118-03 Alluvial Groundwater Basins**




Map based on groundwater basin boundaries established in *Bulletin 118 Update 2003*, Department of Water Resources

**Figure 3 - Contribution to California Water Supply by Hydrologic Region**




Source: *Draft California Water Plan Update 2013*, Department of Water Resources

## 4.1 Groundwater Well Deepening Activity

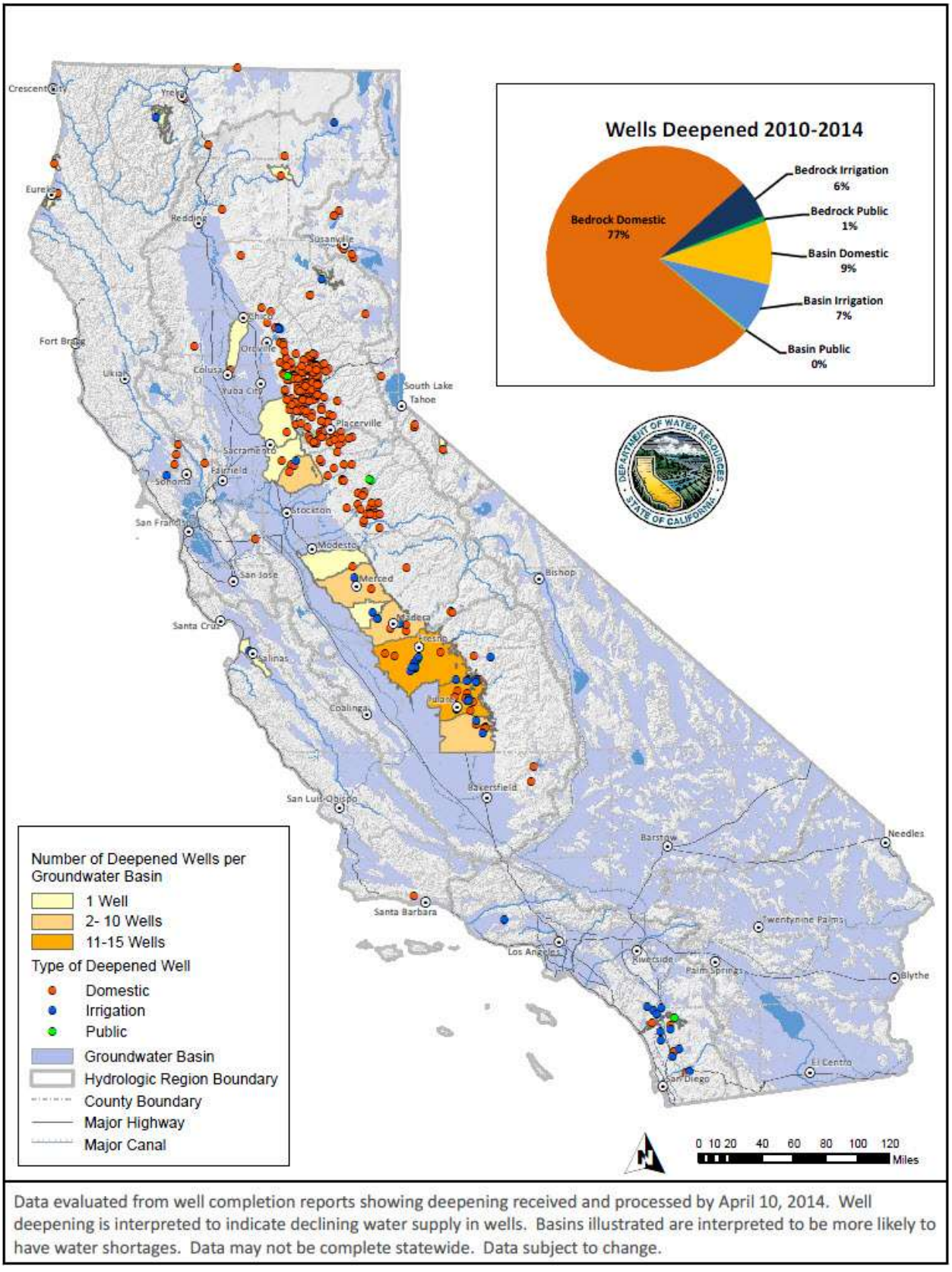
Groundwater levels typically decline during drought, and when groundwater levels decline below the level of the pump in a water well, the pump must be lowered. If groundwater levels decline to the point where the pump cannot be lowered, the yield is too small, or the well goes dry, a well owner may need to deepen the existing well or potentially drill a new well. Analysis of well completion reports (driller's logs) submitted by water well drillers can provide information about where the effects of drought may result in a water shortage.

New water wells are drilled during both wet and dry periods, including droughts. It is likely that wells are deepened primarily during dry periods when groundwater levels are declining, well yields are decreasing, or wells dry. As such, a correlation exists between the deepening of water wells and drought-related water shortages. However, there are limitations with the analysis as well completion reports do not discern if a new well is drilled to replace an existing well or if it is drilled to provide additional or new water supply.

DWR analyzed available well completion reports for water wells that were deepened from 2010 through early 2014. The analysis identified the location of each well and determined whether the well is in a defined groundwater basin or in an area of fractured bedrock. The analysis also determined whether the well is for domestic use, irrigation, or public water supply. Figure 4 depicts the locations of water wells that were deepened from 2010 through early 2014. Table 1 shows the totals for each type of water well that was deepened, by county, and whether the wells are in a groundwater basin or in an area of fractured bedrock. About 86 percent of the wells deepened are for domestic water supply, about 13 percent of the wells are for irrigation, and one (1) percent of the wells are for public water supply. About 16 percent of the wells deepened are in alluvial groundwater basins, whereas 84 percent of the wells deepened are in fractured bedrock areas. The greatest concentration of deepened wells is found in the foothill areas of Nevada, Placer, and El Dorado counties.

Table 2 shows the totals and types of water wells deepened in alluvial groundwater basins. The Kaweah and Kings subbasins have the greatest number of deepened wells. About 55 percent of the water wells deepened in groundwater basins are for domestic supply, about 43 percent of the wells are for irrigation, and two (2) percent (one well) are for public supply. The groundwater basins where water wells were deepened are highlighted on Figure 4.

**Figure 4 - Water Wells Deepened 2010-2014**




Data evaluated from well completion reports showing deepening received and processed by April 10, 2014. Well deepening is interpreted to indicate declining water supply in wells. Basins illustrated are interpreted to be more likely to have water shortages. Data may not be complete statewide. Data subject to change.

**Table 1 - Counties with Wells Deepened from 2010 through early 2014**

| | Wells in Alluvial Groundwater Basins | | | Wells in Fractured Bedrock | | | Total |
|---|---|---|---|---|---|---|---|
| **County** | **Domestic** | **Irrigation** | **Public** | **Domestic** | **Irrigation** | **Public** | |
| Alameda | | | | 1 | | | 1 |
| Alpine | | | | 3 | | | 3 |
| Amador | | | | 6 | | | 6 |
| Butte | | | | 12 | 2 | | 14 |
| Calaveras | | | | 11 | | 2 | 13 |
| Del Norte | 1 | | | | | | 1 |
| El Dorado | | | | 41 | | | 41 |
| Fresno | 5 | 6 | | 3 | 1 | | 15 |
| Humbolt | 2 | | | | | | 2 |
| Kern | | | | 2 | | | 2 |
| Lassen | | | | 8 | | | 8 |
| Madera | 4 | 2 | | 1 | 2 | | 9 |
| Merced | 2 | 1 | | | | | 3 |
| Modoc | | 1 | | 1 | | | 2 |
| Mono | 1 | | | | | | 1 |
| Monterey | | 1 | | | | | 1 |
| Napa | | | | 2 | | | 2 |
| Nevada | | | | 90 | | | 90 |
| Placer | 1 | | | 43 | | | 44 |
| Plumas | 1 | 1 | | 1 | | | 3 |
| Sacramento | 4 | 1 | | 1 | | | 6 |
| San Diego | | | 1 | 5 | 11 | | 17 |
| Santa Barbara | | | | 1 | | | 1 |
| Shasta | 1 | | | 1 | | | 2 |
| Sierra | | | | 1 | | | 1 |
| Siskiyou | | 1 | | 3 | | | 4 |
| Sonoma | | | | 2 | 1 | | 3 |
| Tulare | 10 | 10 | | 1 | 2 | | 23 |
| Tuolumne | | | | 17 | | | 17 |
| Ventura | | 1 | | | | | 1 |
| Yuba | | | | 16 | | 1 | 17 |
| **Total** | **32** | **25** | **1** | **273** | **19** | **3** | **353** |

Findings of this analysis support a conclusion that water wells in areas of fractured bedrock are more vulnerable to water shortages than wells in groundwater basins. This conclusion is consistent with observations made during previous droughts in California (www.water.ca.gov/waterconditions). The

findings of this analysis are based on available well completion reports submitted to DWR as of April 11, 2014 and those reports that were readily available for obtaining information on well deepening. There are likely additional records of deepened wells not included herein as well completion reports may be submitted up to 60 days after work is completed. Moreover, in some places, well owners may have decided to drill a new well rather than deepen an existing well. Consequently, the magnitude of possible shortages and the extent of the areas with possible water shortages may be greater than this analysis reflects.

**Table 2 - Groundwater Basins with Wells Deepened from 2010 through early 2014**

| Hydrologic Region | Basin Number | Basin/Subbasin | Domestic | Irrigation | Public | Total |
|---|---|---|---|---|---|---|
| North Coast | 1-5 | Scott River Valley | | 1 | | 1 |
| | 1-9 | Eureka Plain | 1 | | | 1 |
| | 1-27 | Big Lagoon Area | 1 | | | 1 |
| Central Coast | 3-4.01 | Salinas Valley - 180/400 Foot Aquifer | | 1 | | 1 |
| Sacramento River | 5-2 | Alturas Area | | 1 | | 1 |
| | 5-5 | Fall River Valley | 1 | | | 1 |
| | 5-9 | Indian Valley | | 1 | | 1 |
| | 5-21.58 | Sacramento Valley - West Butte | 1 | | | 1 |
| | 5-21.64 | Sacramento Valley - North American | 1 | | | 1 |
| | 5-21.65 | Sacramento Valley - South American | 1 | | | 1 |
| | 5-95 | Meadow Valley | 1 | | | 1 |
| San Joaquin River | 5-22.03 | San Joaquin Valley - Turlock | 1 | | | 1 |
| | 5-22.04 | San Joaquin Valley - Merced | 1 | 1 | | 2 |
| | 5-22.05 | San Joaquin Valley - Chowchilla | | 1 | | 1 |
| | 5-22.06 | San Joaquin Valley - Madera | 4 | 1 | | 5 |
| | 5-22.16 | San Joaquin Valley - Cosumnes | 3 | 1 | | 4 |
| Tulare Lake | 5-22.08 | San Joaquin Valley - Kings | 5 | 7 | | 12 |
| | 5-22.11 | San Joaquin Valley - Kaweah | 6 | 7 | | 13 |
| | 5-22.13 | San Joaquin Valley - Tule | 4 | 2 | | 6 |
| North Lahontan | 6-7 | Antelope Valley | 1 | | | 1 |
| South Coast | 4-15 | Tierra Rejada | | 1 | | 1 |
| | 9-7 | San Luis Rey Valley | | | 1 | 1 |
| **Total** | | | **32** | **25** | **1** | **58** |

## 4.2 Groundwater Reliance

California Water Code Section 10933 requires DWR to prioritize California's groundwater basins and subbasins (as identified in Bulletin 118-03). In January 2014, DWR released the draft CASGEM basin prioritization process and results for public review. The final basin prioritization process and results are expected to be completed by May 2014 (www.water.ca.gov/groundwater/casgem).

To identify groundwater basins with potential water shortages, DWR used the draft CASGEM basin prioritization results related to groundwater reliance. For the CASGEM basin prioritization process, analysis of groundwater reliance included consideration of the total annual volume of groundwater use,

the annual volume of groundwater use per acre, and the percent to which groundwater contributes to the overall water supply for the basin.

Using the available CASGEM data, this analysis to identify potential groundwater shortages focused on 1) basins with high groundwater use (groundwater use greater than 0.61 acre-feet per acre), and 2) basins with a high groundwater reliance relative to overall supply (groundwater reliance greater than 61 percent). A total of 36 groundwater basins (Table 3) have a moderately high or a high degree of both groundwater use and groundwater reliance. As such, these basins may possess greater potential to incur water shortages as a result of drought. Figure 1 depicts the locations of these 36 basins. The basins exist in five hydrologic regions: North Coast (2), Central Coast (17), Sacramento River (5), Tulare Lake (1), and South Coast (11). These 36 basins account for a total of about 2.54 million acres of land and a population of approximately 6.18 million. Although the basins listed in Table 3 are heavily reliant on groundwater, some of the basins are less likely than others to experience water shortages because the basin is either adjudicated (Raymond, Chino, and San Gabriel Valley) or managed by a water district (Coastal Plain of Orange County) that actively monitors and controls groundwater extraction.

**Table 3 - Groundwater Basins with High Groundwater Reliance**

| Basin Number | Basin | Subbasin | Hydrologic Region |
|---|---|---|---|
| 1-3 | Butte Valley | | North Coast |
| 1-10 | Eel River Valley | | North Coast |
| 3-1 | Soquel Valley | | Central Coast |
| 3-2 | Pajaro Valley | | Central Coast |
| 3-4.01 | Salinas Valley | 180/400 Foot Aquifer | Central Coast |
| 3-4.02 | Salinas Valley | East Side Aquifer | Central Coast |
| 3-4.04 | Salinas Valley | Forebay Aquifer | Central Coast |
| 3-4.05 | Salinas Valley | Upper Valley Aquifer | Central Coast |
| 3-4.09 | Salinas Valley | Langley Area | Central Coast |
| 3-7 | Carmel Valley | | Central Coast |
| 3-8 | Los Osos Valley | | Central Coast |
| 3-9 | San Luis Obispo Valley | | Central Coast |
| 3-12 | Santa Maria | | Central Coast |
| 3-37 | Villa Valley | | Central Coast |
| 3-38 | Cayucos Valley | | Central Coast |
| 3-39 | Old Valley | | Central Coast |
| 3-40 | Toro Valley | | Central Coast |
| 3-41 | Morro Valley | | Central Coast |
| 3-42 | Chorro Valley | | Central Coast |
| 4-13 | San Gabriel Valley | | South Coast |
| 4-23 | Raymond | | South Coast |
| 5-14 | Scotts Valley | | Sacramento River |
| 5-15 | Big Valley | | Sacramento River |
| 5-21.51 | Sacramento Valley | Corning | Sacramento River |
| 5-21.57 | Sacramento Valley | Vina | Sacramento River |
| 5-21.58 | Sacramento Valley | West Butte | Sacramento River |

**Table 3 - Groundwater Basins with High Groundwater Reliance (Cont.)**

| Basin Number | Basin | Subbasin | Hydrologic Region |
|---|---|---|---|
| 5-22.13 | San Joaquin Valley | Tule | Tulare Lake |
| 8-1 | Coastal Plain of Orange County | | South Coast |
| 8-2.01 | Upper Santa Ana Valley | Chino | South Coast |
| 8-2.04 | Upper Santa Ana Valley | Rialto-Colton | South Coast |
| 8-2.05 | Upper Santa Ana Valley | Cajon | South Coast |
| 8-2.06 | Upper Santa Ana Valley | Bunker Hill | South Coast |
| 8-2.07 | Upper Santa Ana Valley | Yucaipa | South Coast |
| 8-7 | Big Meadows Valley | | South Coast |
| 9-4 | Santa Margarita Valley | | South Coast |
| 9-10 | San Pasqual Valley | | South Coast |

Note: Groundwater Use >0.61 acre-feet per acre and Groundwater Supply >61 percent of Total Supply

## 4.3 Groundwater Levels

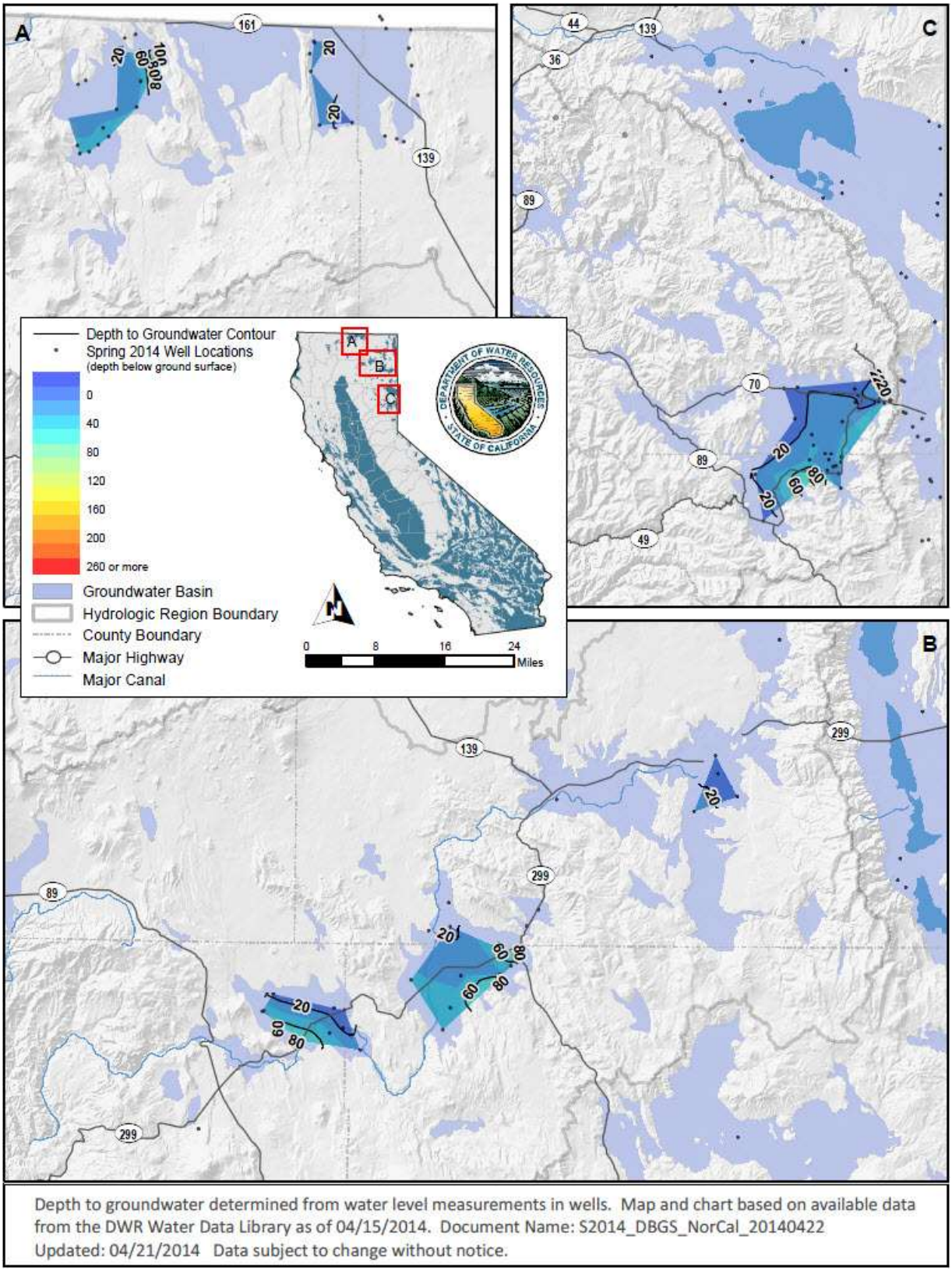
Groundwater level measurement data are often analyzed using maps and graphs to illustrate and evaluate current or past groundwater conditions, groundwater level trends, or changes in groundwater conditions between two monitoring periods. Preparation and review of groundwater level data provides important information about where groundwater shortages could exist, and where more data are needed. Areas with relatively low groundwater levels may be more vulnerable to groundwater shortages in dry years. Also, areas or regions with declining groundwater levels may be susceptible to groundwater shortages in the future.

The maps and figures developed for this Update rely on groundwater level measurements collected during the spring. In California, spring measurements typically depict the highest groundwater elevations for the year, at a time just prior to the irrigation season and after groundwater levels have had an opportunity to rebound from winter precipitation and snowmelt. Fall measurements typically reflect groundwater conditions after the irrigation season is over and prior to winter precipitation when groundwater levels in many basins are expected to be at or near their lowest levels for the year. The groundwater level maps prepared for this Update include available data as of April 15, 2014.

Depth to groundwater contour maps use lines of equal depth to depict where the top of the groundwater surface is relative to land surface. These maps are particularly useful when considering installation of dedicated groundwater monitoring wells or the design and operating costs of new production wells. Depth to groundwater information is also useful when compared to construction depths of existing domestic and production wells. The analysis of groundwater levels can help identify areas with wells that may be impacted by the continued decline of groundwater levels. Figures 5 through 8 depict spring 2014 depth to groundwater contours for selected basins in California. The areas selected were based on the density of available data and the ability to illustrate representative contours.

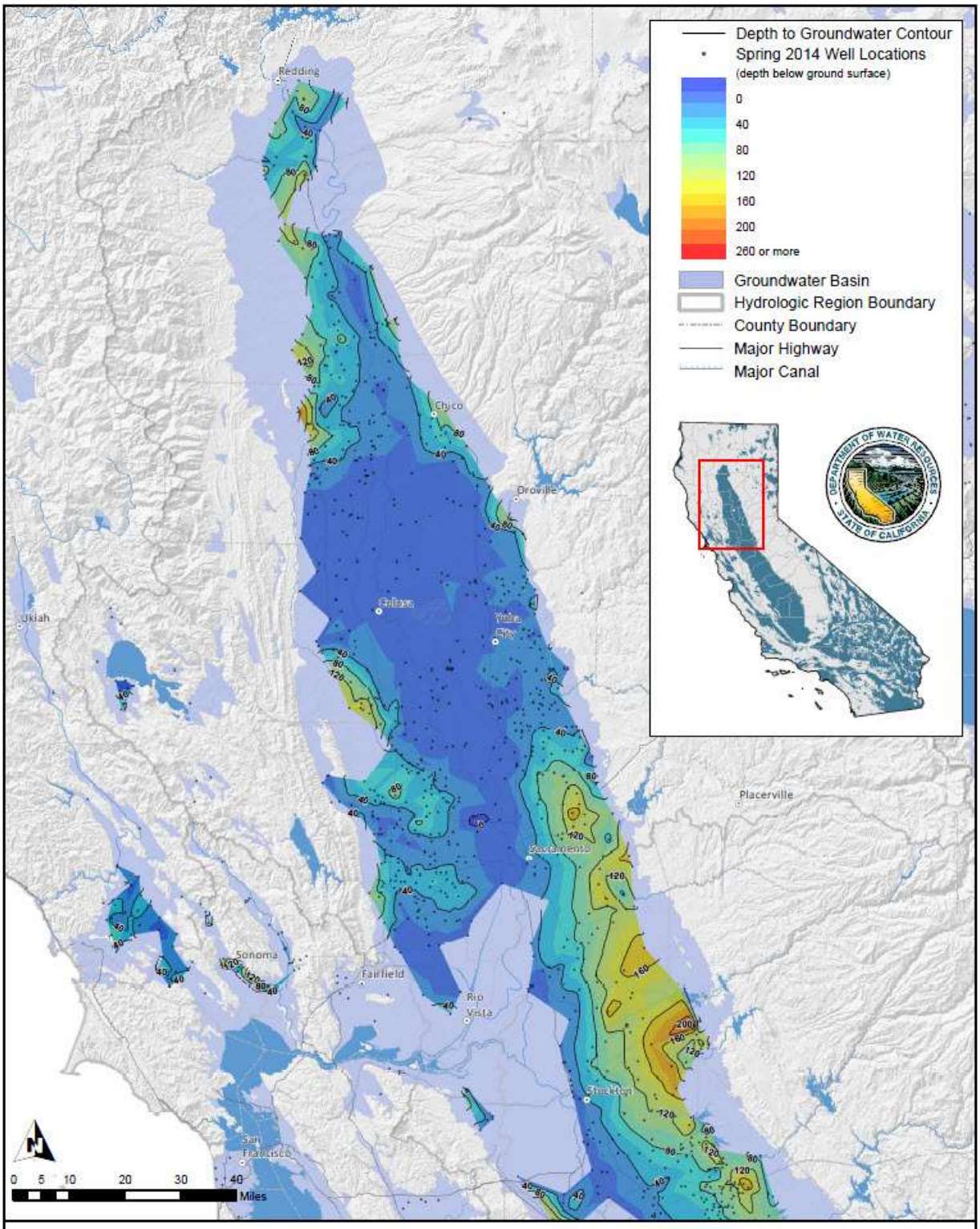
Groundwater level change maps depict the difference between groundwater levels over a specified time period. Plotting the difference between groundwater level measurements collected at different times and at discrete locations is a simple way to depict changes in groundwater levels and evaluate regional trends. Figures 9 and 10 depict change of groundwater levels at well locations from spring 2013 to spring 2014 and from spring 2010 to spring 2014, respectively. Based on the available data, groundwater levels have decreased in nearly all areas of the state since spring 2013, and more notably since spring 2010.

**Figure 5 - Depth to Groundwater - Spring 2014**
**Selected Groundwater Basins in Northern California**



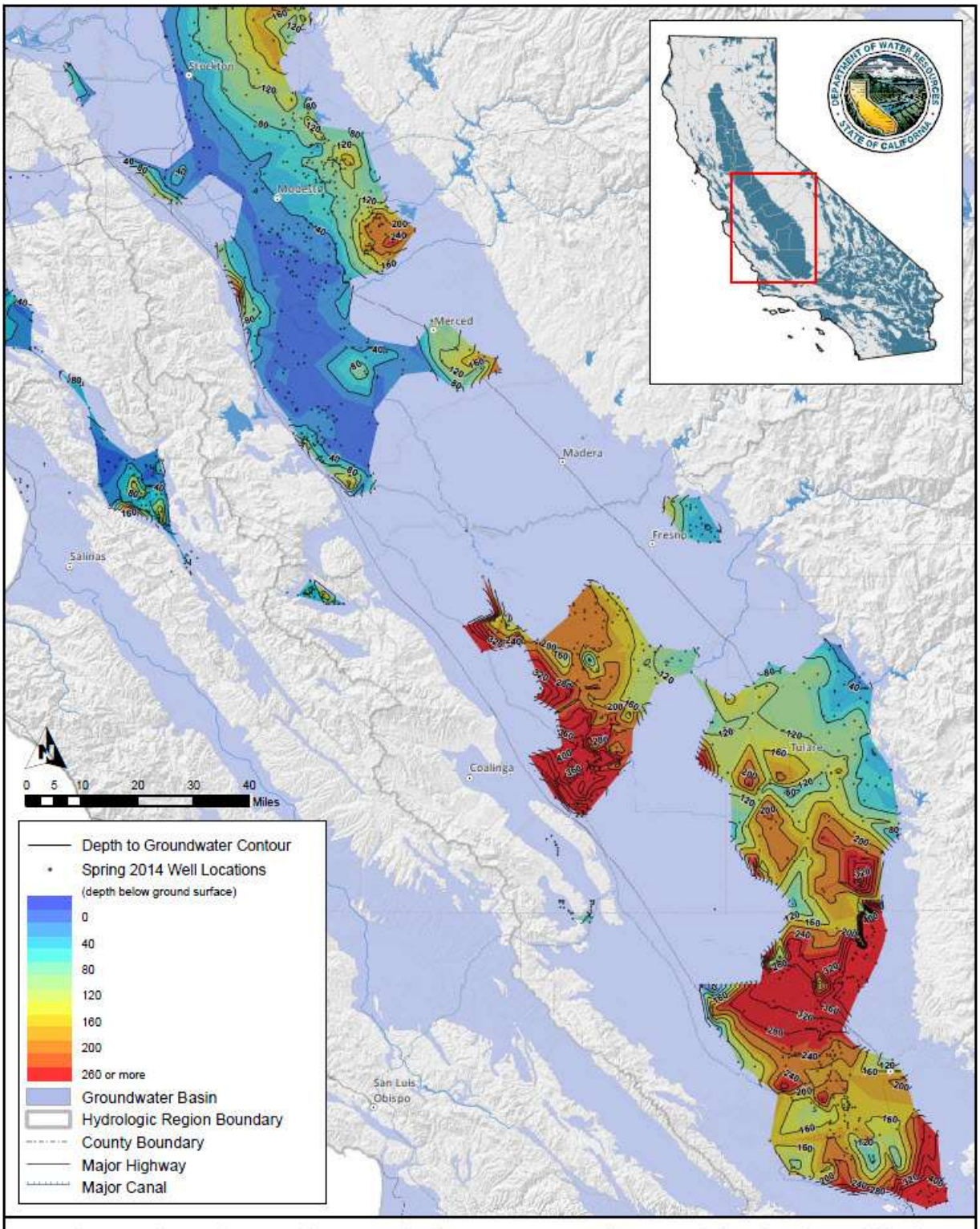

Depth to groundwater determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/15/2014. Document Name: S2014_DBGS_NorCal_20140422
Updated: 04/21/2014 Data subject to change without notice.

**Figure 6 - Depth to Groundwater - Spring 2014**
**Selected Groundwater Basins in North Central California**



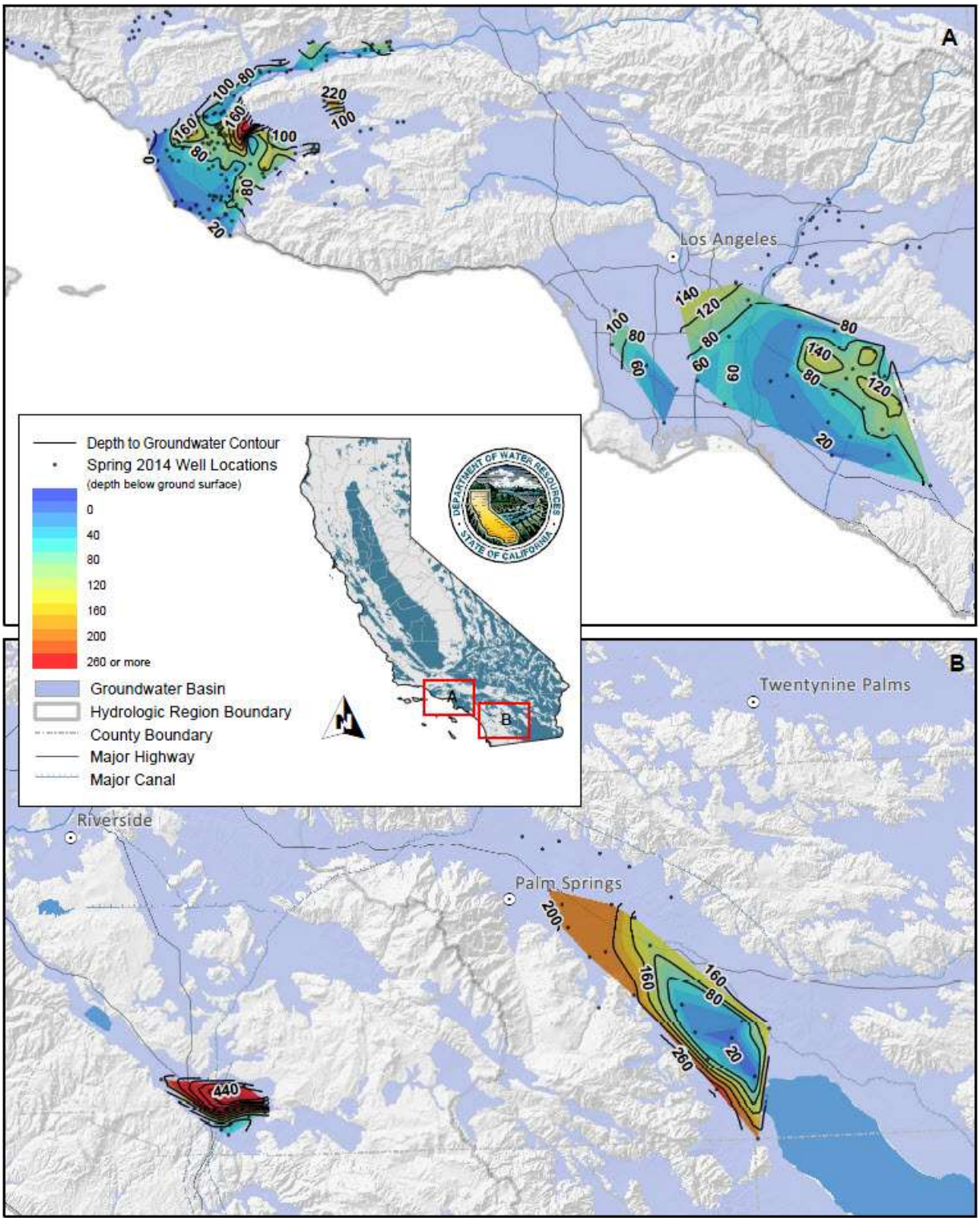

Depth to groundwater determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/16/2014. Document Name: S2014_DBGS_NorthCV_20140415
Updated: 04/21/2014 Data subject to change without notice.

**Figure 7 - Depth to Groundwater - Spring 2014**
**Selected Groundwater Basins in South Central California**



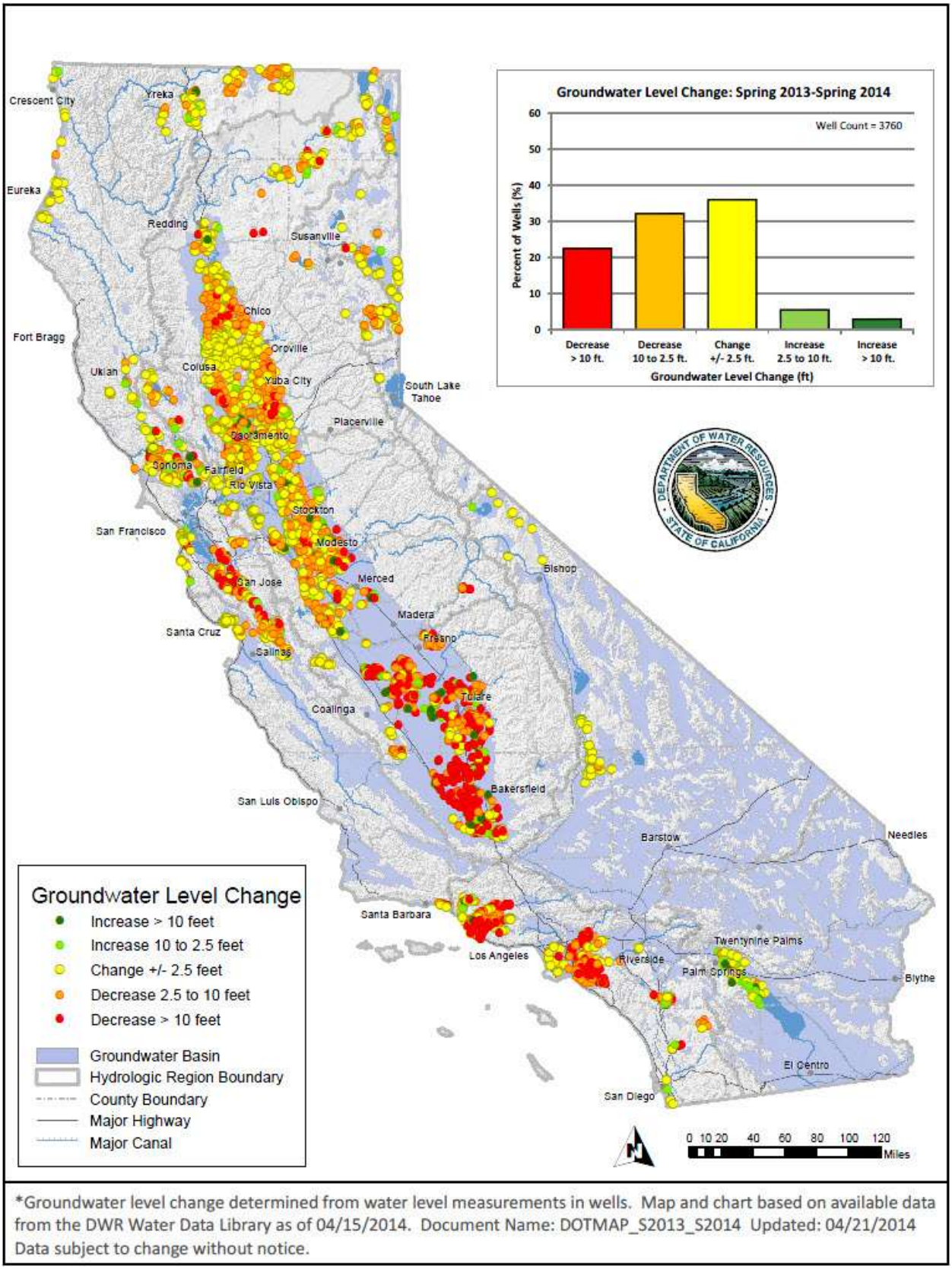

Depth to groundwater determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/16/2014. Document Name: S2014_DBGS_SouthCV_20140415
Updated: 04/21/2014 Data subject to change without notice.

**Figure 8 - Depth to Groundwater - Spring 2014**
**Selected Groundwater Basins in Southern California**



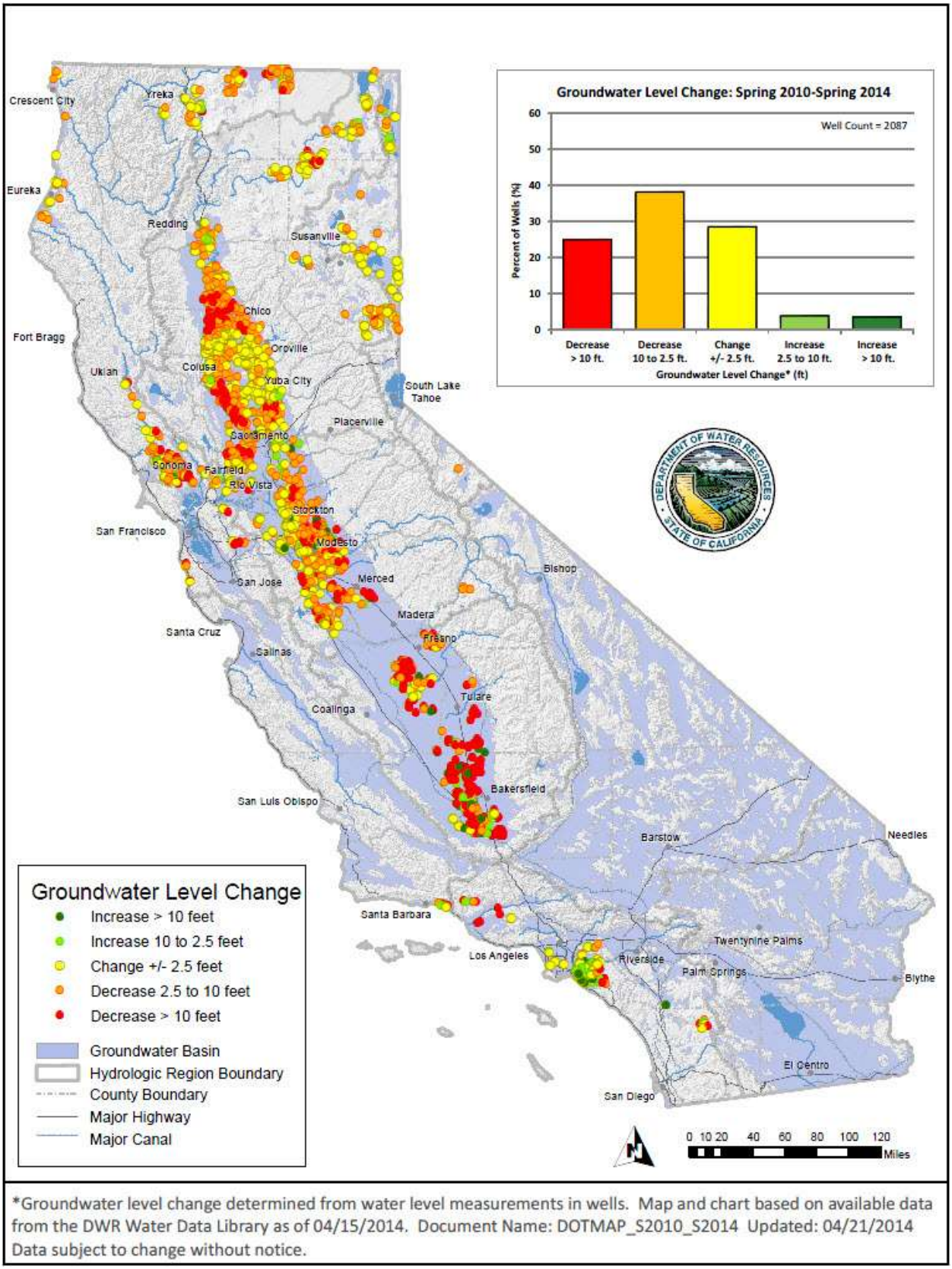

Depth to groundwater determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/16/2014. Document Name: S2014_DBGS_SoCal_20140415
Updated: 04/21/2014 Data subject to change without notice.

**Figure 9 - Groundwater Level Change* - Spring 2013 to Spring 2014**




*Groundwater level change determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/15/2014. Document Name: DOTMAP_S2013_S2014 Updated: 04/21/2014
Data subject to change without notice.

**Figure 10 - Groundwater Level Change* - Spring 2010 to Spring 2014**




*Groundwater level change determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/15/2014. Document Name: DOTMAP_S2010_S2014 Updated: 04/21/2014
Data subject to change without notice.

A more detailed method of evaluating regional differences in groundwater levels is through the use of groundwater contour change maps. Groundwater contour maps require data collected using guidelines related to the timing of data collection and the type of wells that are measured. Groundwater level change contours represent lines of equal groundwater level change. The shape, distribution, and extent of these contours also help identify the regional distribution and local magnitude of groundwater level changes. Furthermore, regional groundwater contour maps provide information about the groundwater levels where appropriate data exist and also illustrate where data is absent. Figures 11 and 12 depict regional change in groundwater levels for the Central Valley for spring 2013 to spring 2014.

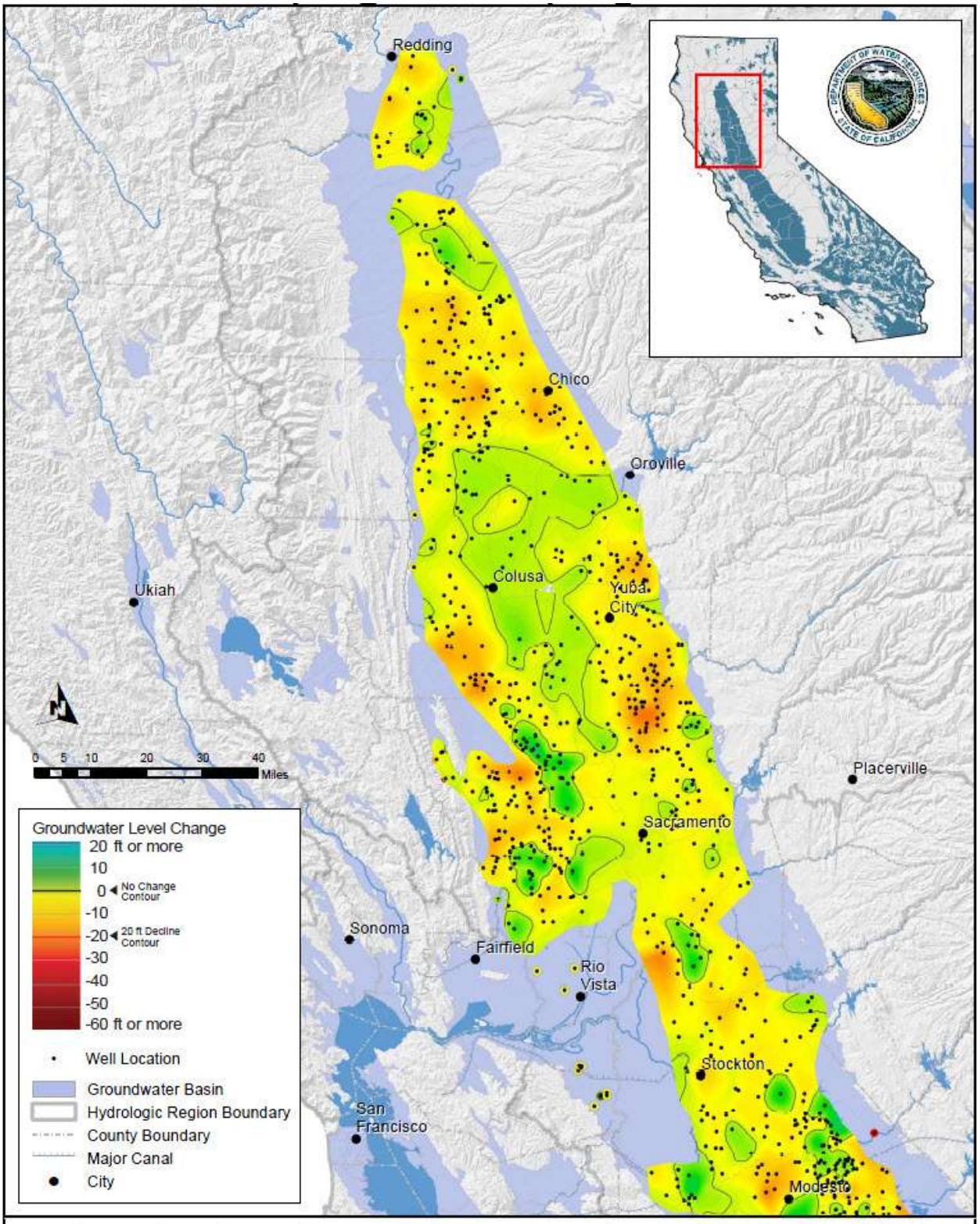
Analysis of historical groundwater levels at discrete locations was also completed to evaluate recent groundwater lows compared to former historical lows. Figure 13 depicts the comparison of historical low spring levels collected between spring 1900 to 1998 to more recent low spring levels collected between spring 2008 to 2014. Since spring 2008, groundwater levels are at all-time historical lows (for period of record) in most areas of the state and especially in the northern portion of the San Francisco Bay Hydrologic Region, the southern San Joaquin Valley, and also for the South Lahontan and South Coast hydrologic regions – these areas exhibit groundwater levels more than 50 feet below previous historical lows experienced sometime prior to 2000. There are many areas of the San Joaquin Valley where recent groundwater levels are more than 100 feet below previous historical lows.

## 4.4 Key Hydrographs

Hydrographs depict groundwater levels for a specific well plotted over time. These graphs allow for the analysis of seasonal and long-term groundwater level variability and trends over the time period of record. For this Update, some of the same wells and hydrographs used for the draft Bulletin 160 *California Water Plan Update 2013* (www.waterplan.water.ca.gov/cwpu2013) were updated with recent groundwater level data. Due to the highly variable nature of the aquifer systems within each groundwater basin, and the effects of annual groundwater availability, recharge, and surrounding land use practices, the hydrographs presented herein are not intended to illustrate or depict aquifer conditions over a broad region. The selected hydrographs are intended to portray how the local groundwater levels respond to changing conditions over time and how the local aquifer has responded to recent drought conditions.

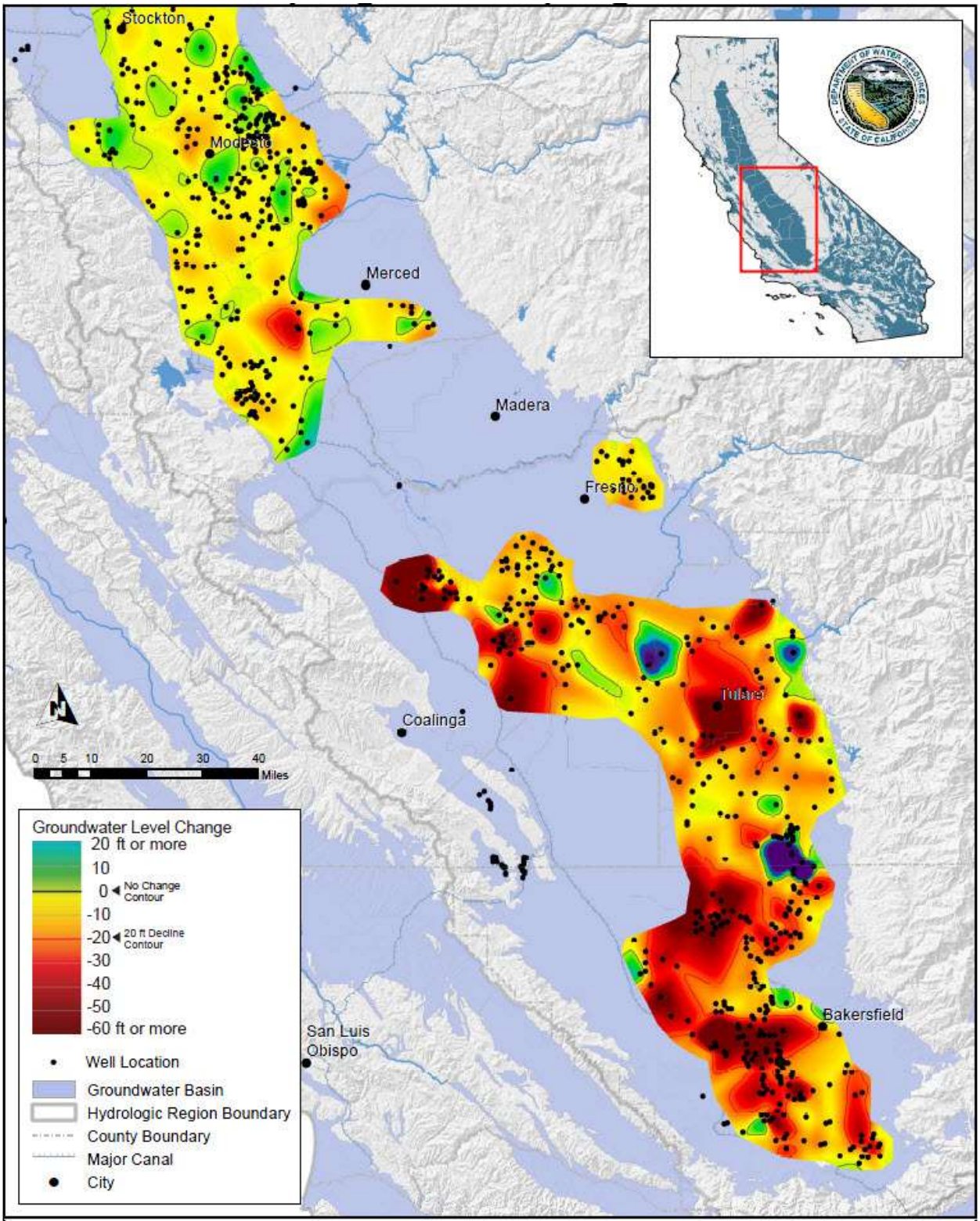
The wells selected for this analysis had spring 2013 and/or spring 2014 groundwater data available as of April 9, 2014. There are a total of 12 wells and six hydrologic regions included herein. The selection of wells is not exhaustive, yet they illustrate response to current drought conditions. The spring measurements typically indicate the previous year's total groundwater extractions minus any recharge to the aquifer. Lower recharge due to dry conditions in 2012 and 2013 is expected to cause a reduction of groundwater in the aquifers, which is reflected in lower groundwater elevations. For each hydrologic region, the location of the wells and corresponding hydrographs are shown in Figures 14 through 19. The hydrographs are designated according to the State Well Number System (SWN), which identifies each well by its location using the Public Land Survey System of township, range, section, and tract. The following narratives correlate with the selected wells and hydrographs, grouped by hydrologic region.

**Figure 11 - Groundwater Level Change – Northern Central Valley, Spring 2013 to Spring 2014**



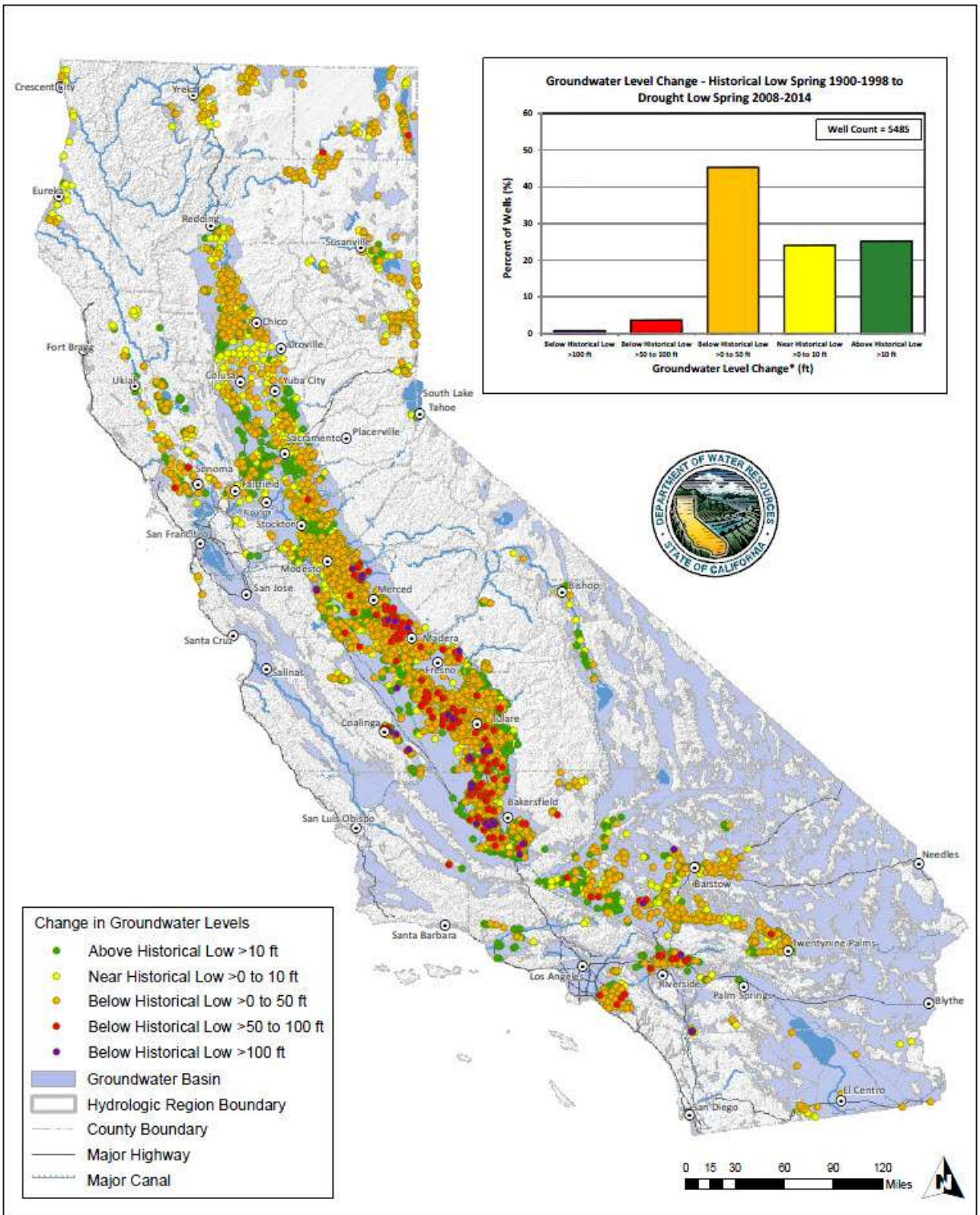

Depth to groundwater determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/16/2014. Document Name: S2013toS2014_NCV_20140416
Updated: 04/21/2014 Data subject to change without notice.

**Figure 12 - Groundwater Level Change – Southern Central Valley, Spring 2013 to Spring 2014**




Depth to groundwater determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/16/2014. Document Name: S2013toS2014_SCV_20140416
Updated: 04/21/2014 Data subject to change without notice.

**Figure 13 - Groundwater Level Change* – Historical Low Spring 1900-1998 to Drought Low Spring 2008-2014**




*Groundwater level change determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/15/2014. Document Name: Historical_Low_Spring_Map_Final
Updated: 04/23/2014 Data subject to change without notice.

### North Coast Hydrologic Region – Figure 14

Hydrograph 48N03E34N001M is for an irrigation well in the Tule Lake Subbasin of Klamath River Valley in the northern part of the state near the Oregon border. Relatively stable water levels existed through 2008 followed by declining levels through 2013 with a slight recovery during 2010 and 2011. For this well, the groundwater levels declined nearly 17 feet from 2008 to 2013.

Hydrograph 43N06W33C001M is for an irrigation well in the Shasta Valley Basin near the town of Gazelle in northern California. Water levels generally declined with some increase during the mid-1980s and late 1990s wet year periods. From 2011 to 2013, water levels declined about seven feet.

Hydrograph 07N09W35D002M is for a domestic well in the Santa Rosa Plain Subbasin (Santa Rosa Valley) in the city of Sebastopol, north of San Francisco. Relatively stable water levels have persisted throughout the record except during the 1976-1977 drought. Recently, the water levels declined about seven feet from 2010 to 2013.

### San Francisco Bay Hydrologic Region– Figure 15

Hydrograph 05N06W02N002M is for a domestic well in the Sonoma Valley Subbasin (Napa-Sonoma Valley) in the city of El Verano, northwest of Sonoma. The surrounding area is agricultural. Water levels in this well generally show a long-term decline of about two feet per year. The water levels were relatively stable from 1974 to 2000, followed by declining water levels through 2014. The water levels have declined nearly 20 feet since 2012.

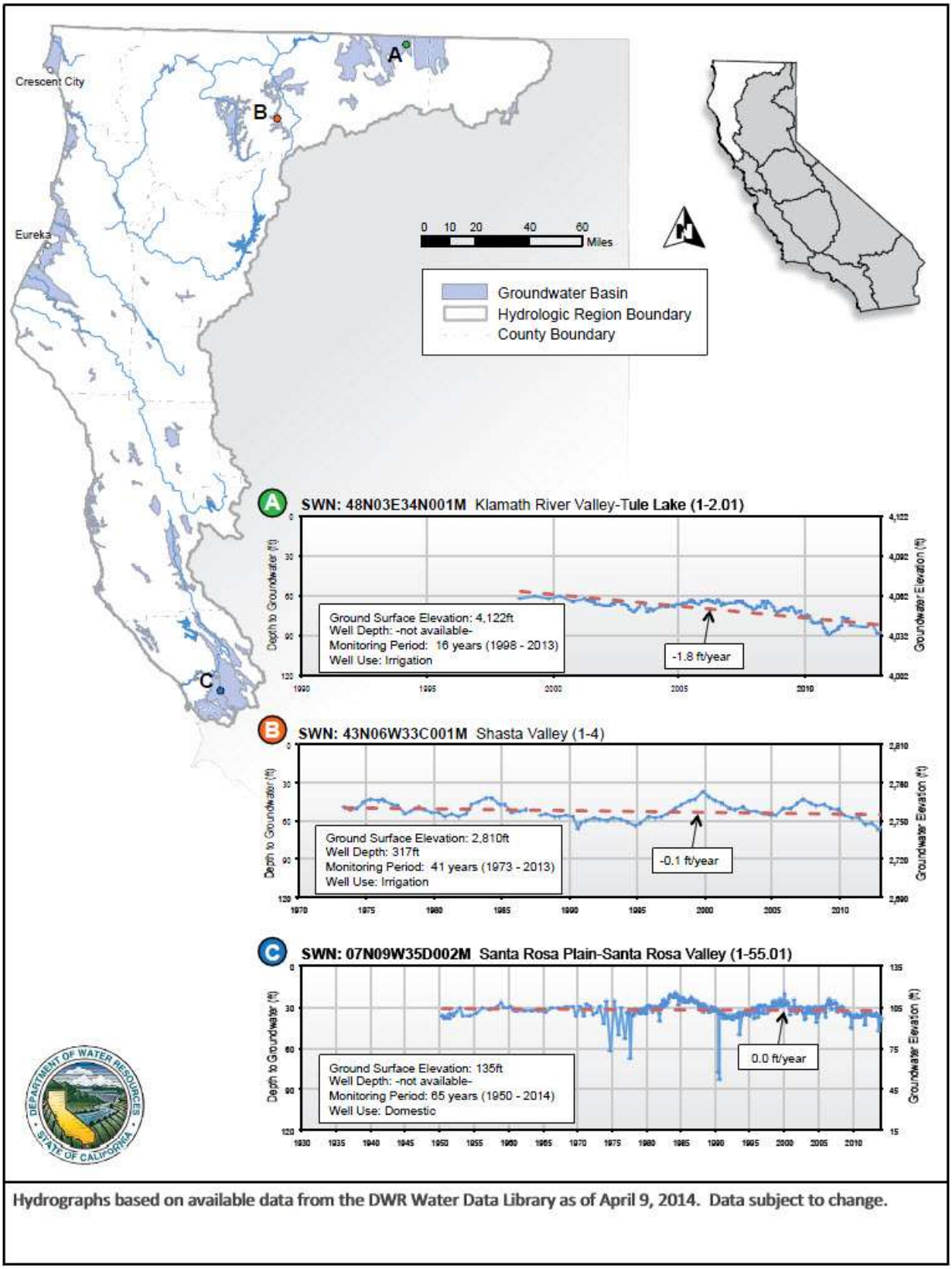
### Sacramento River Hydrologic Region– Figure 16

Hydrograph 38N07E23E001M is for a domestic well in the Big Valley Basin. The Big Valley area is occupied by rural cattle ranching and hay cropping and is largely dependent on groundwater for irrigation during dry years. Water levels have fluctuated between about five to eight feet during average water years, and between about 15 to 20 feet during drought periods. Historical spring groundwater levels show gradual decline associated with the 1987-1993 drought and partial recovery after 2001. Declining water levels over time indicate that groundwater extraction is exceeding aquifer recharge in this area. Some water level recovery is noted during the 2010 and 2011 water years, yet water levels declined about 18 feet from 2012 to 2013.

Hydrograph 21N03W33A004M is for an irrigation well in the Colusa Subbasin (Sacramento Valley) in Glenn County between Orland and Willows. Water levels generally declined during the 1970s and prior to import of surface water through the Tehama-Colusa Canal. During the 1980s, groundwater levels recovered due to import and use of surface water supply and because of the 1982 to 1984 wet water years. Water levels declined again in the 2008 drought period, followed by a brief recovery during 2010 to 2011, and then returning to 2008 levels (which are notably lower than the 1977-79 drought levels).

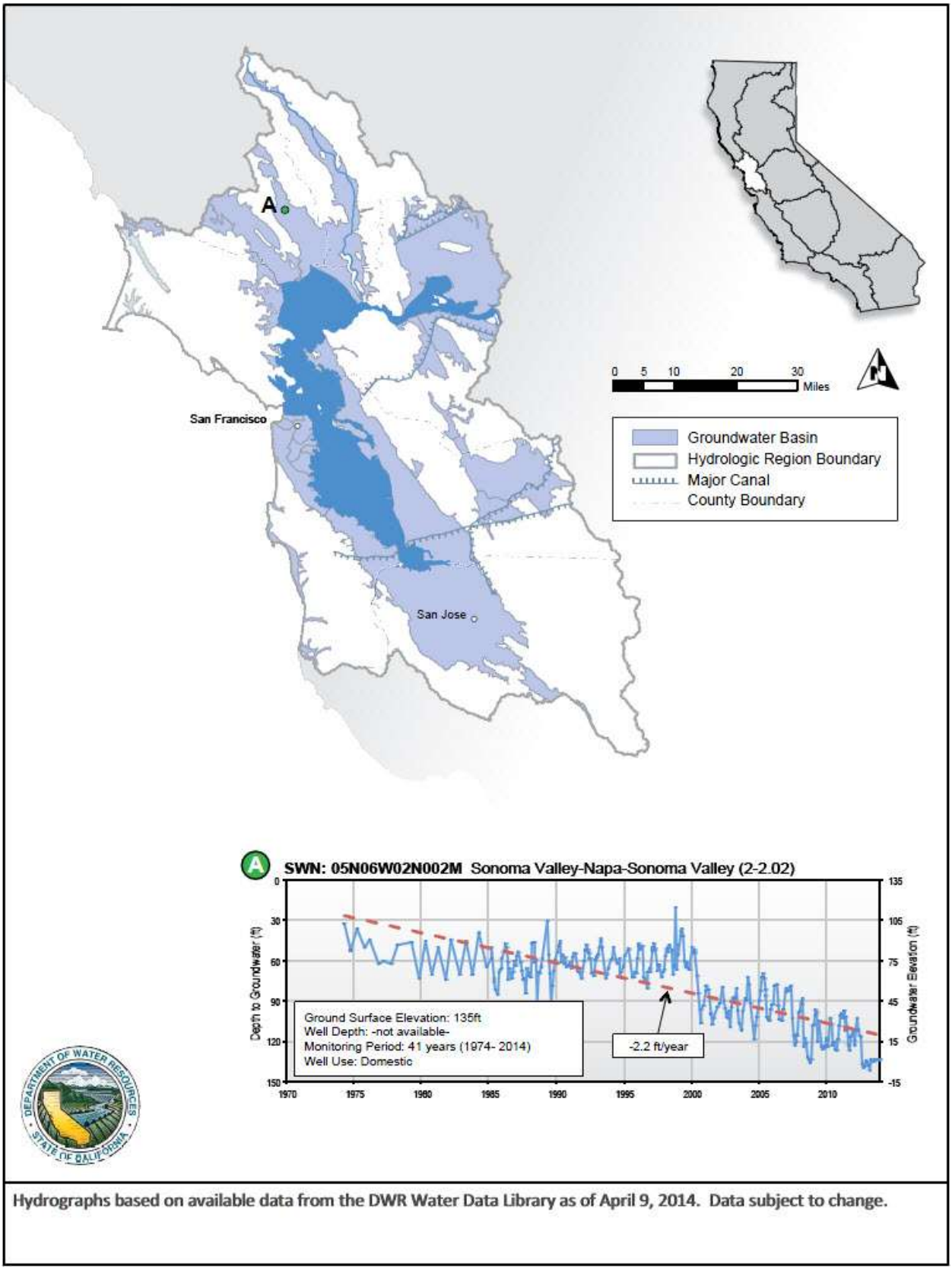
Hydrograph 15N03W01N001M is for an industrial well in the Colusa Subbasin (Sacramento Valley) in Colusa County, north of Williams. The surrounding area is agricultural. Groundwater levels generally declined until 1978 and then recovered during the 1982-1984 wet years. After the 2008-2009 drought, water levels declined to historical lows. Water levels recovered quickly during 2010 and 2011, then after returned to the trend of long-term decline.

**Figure 14 - Selected Hydrographs – North Coast Hydrologic Region**



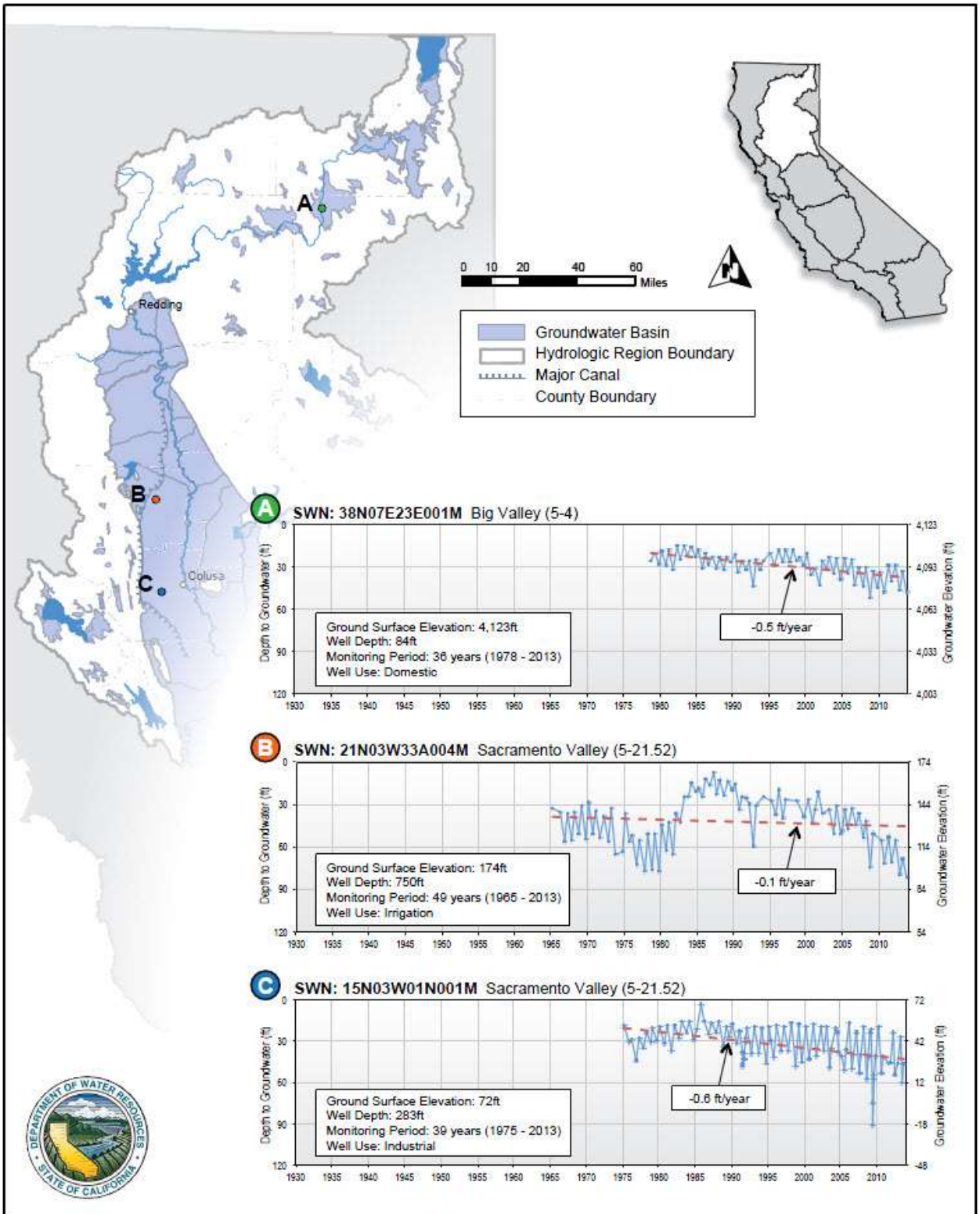

Hydrographs based on available data from the DWR Water Data Library as of April 9, 2014. Data subject to change.

**Figure 15 - Selected Hydrographs – San Francisco Bay Hydrologic Region**




Hydrographs based on available data from the DWR Water Data Library as of April 9, 2014. Data subject to change.

**Figure 16 - Selected Hydrographs – Sacramento River Hydrologic Region**




**Hydrographs based** on available data from the DWR Water Data Library as of April 9, 2014. Data subject to change.

### San Joaquin River Hydrologic Region– Figure 17

Hydrograph 05S12E11G001M is for an irrigation well in the Turlock Subbasin (San Joaquin Valley) within the Eastside Water District, approximately 10 miles east of Turlock. The area lacks surface water and is solely dependent on groundwater. Water levels have generally declined over time. Water levels stabilized from about 1990 to 2002 likely due to utilization of efficient irrigation techniques. During 2003 and 2004, increased agricultural activity may have contributed to the declining water levels. From 2011 to 2013, the water levels declined nearly 20 feet. From 1970 to 2013, the water levels have declined a total of about 96 feet.

Hydrograph 11S10E24N001M is for an industrial well in the Delta-Mendota Subbasin (San Joaquin Valley) in western Merced County. Although water levels generally increased from 1960 to 2000, there has been a decline of almost 30 feet since 2001.

### Tulare Lake Hydrologic Region– Figure 18

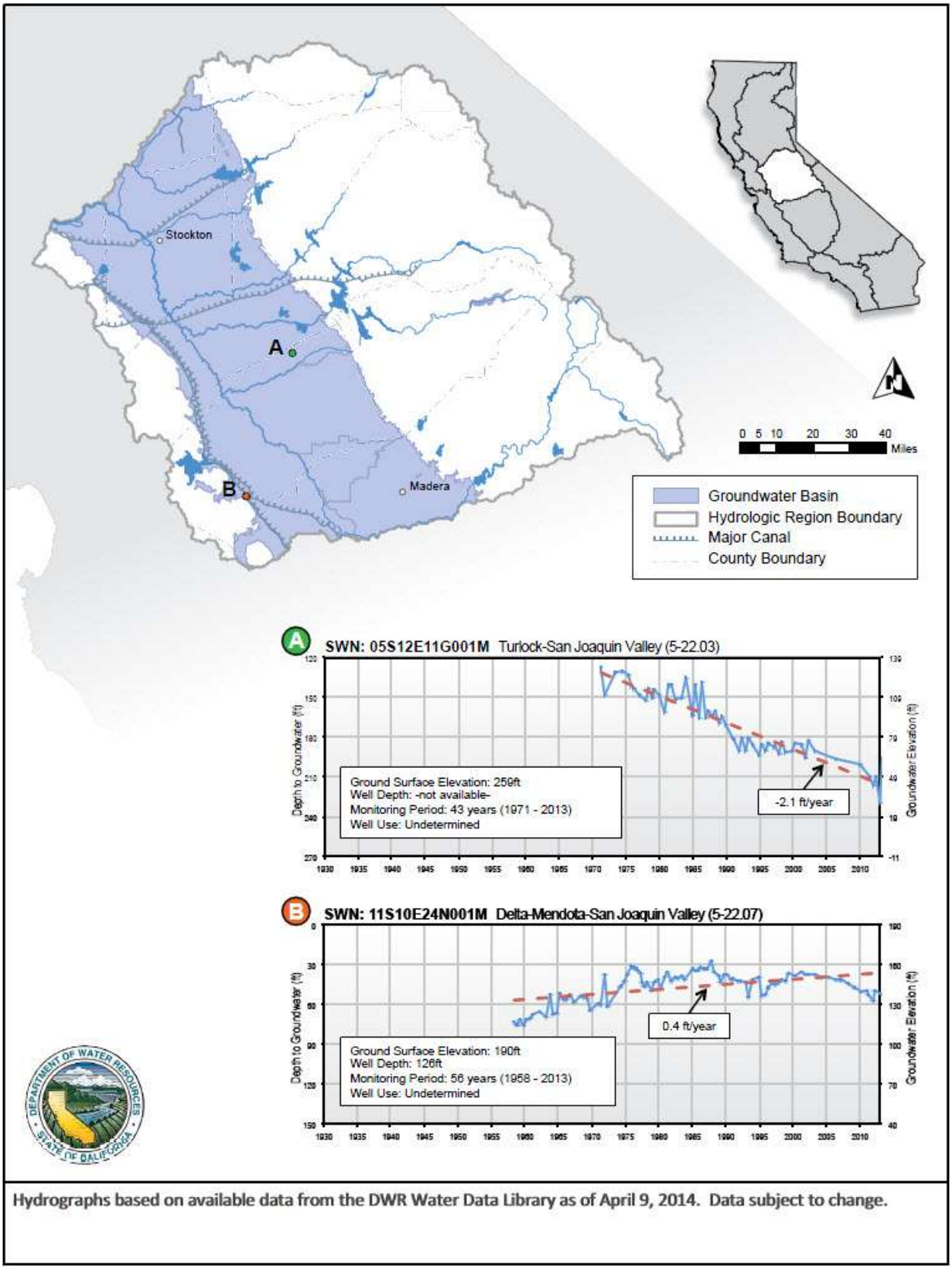
Hydrograph 25S26E16P001M is for an observation well in the Kern County Subbasin (San Joaquin Valley) near the Friant-Kern Canal in northern Kern County. Due to increased surface water deliveries from the Friant-Kern Canal and reduced demand on groundwater, water levels generally increased from the mid-1960s. Water levels declined slightly during 1977 and 1978 and then increased more than 30 feet during the wet years of the mid-1980s. From 1990 to 2006, the water levels remained relatively stable. Water levels declined in 2008 and 2009 then stabilized during the above average water years of 2010 and 2011. From 2007 to 2013, water levels declined a total of almost 60 feet.

### North Lahontan Hydrologic Region– Figure 19

Hydrograph 29N12E16M002M is for a domestic well in the Honey Lake Valley Basin. Groundwater levels generally show a gradual decline over time, yet some recovery is noted after the 1976-1977 and the 1988-94 drought periods. Groundwater levels were at all-time lows after the 2008-2009 drought; about 25 feet below the water levels observed during the 1976-1977 drought and about 15 feet below the levels observed during the 1987-1992 drought. Water levels recovered and generally increased after the above average water year in 2011, and then declined again in 2012 and 2013 to near record lows.

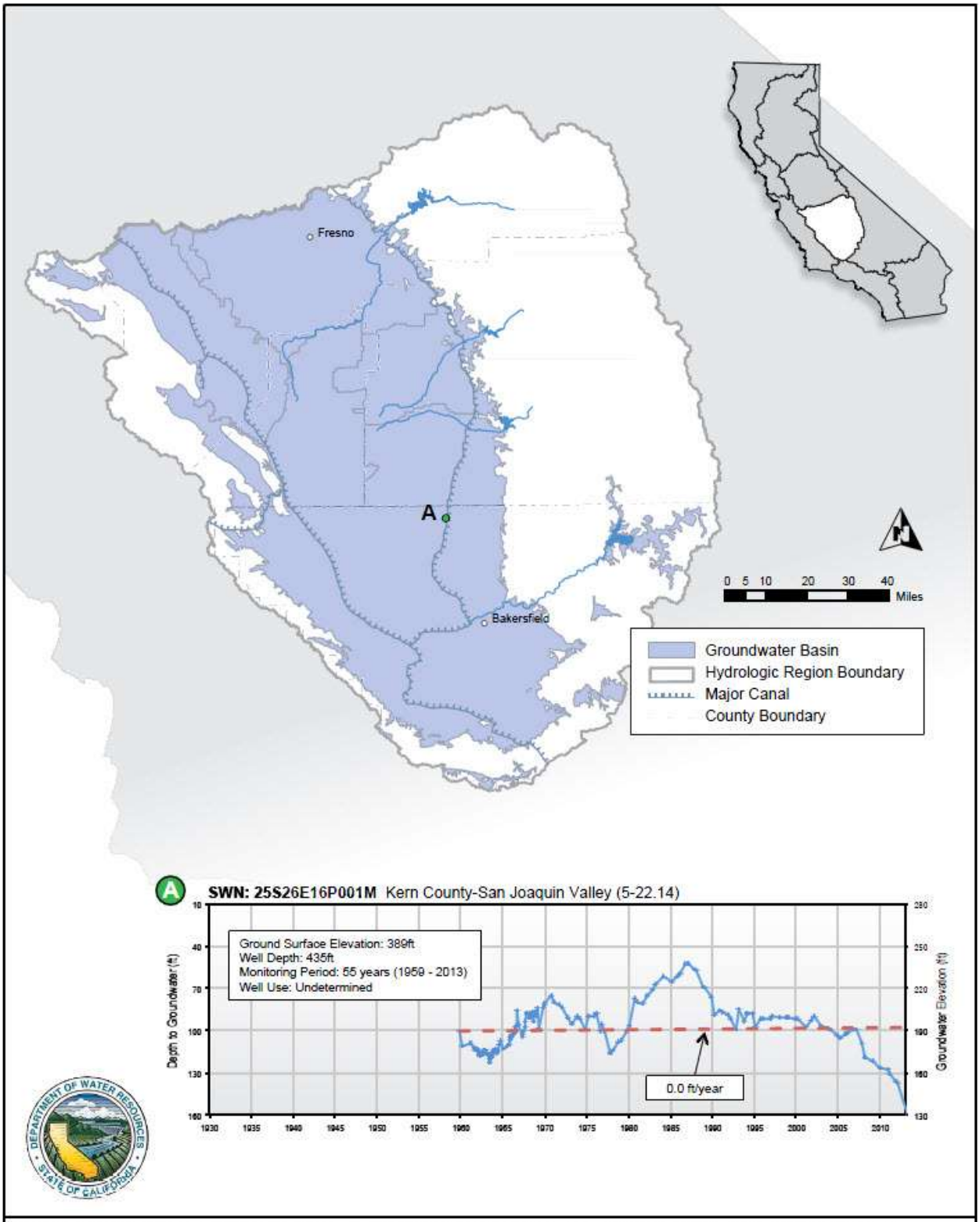
Hydrograph 17N17E29B001M is for an observation well in the Martis (Truckee) Valley Basin on the eastern edge of Truckee. Water levels were relatively stable through 2007 and then abruptly declined during the 2008-2009 drought period. Water levels recovered nearly 27 feet during the 2010 to 2011 above-average water year period, and then declined almost 30 feet during the 2012-2013 drought period.

**Figure 17 - Selected Hydrographs – San Joaquin River Hydrologic Region**



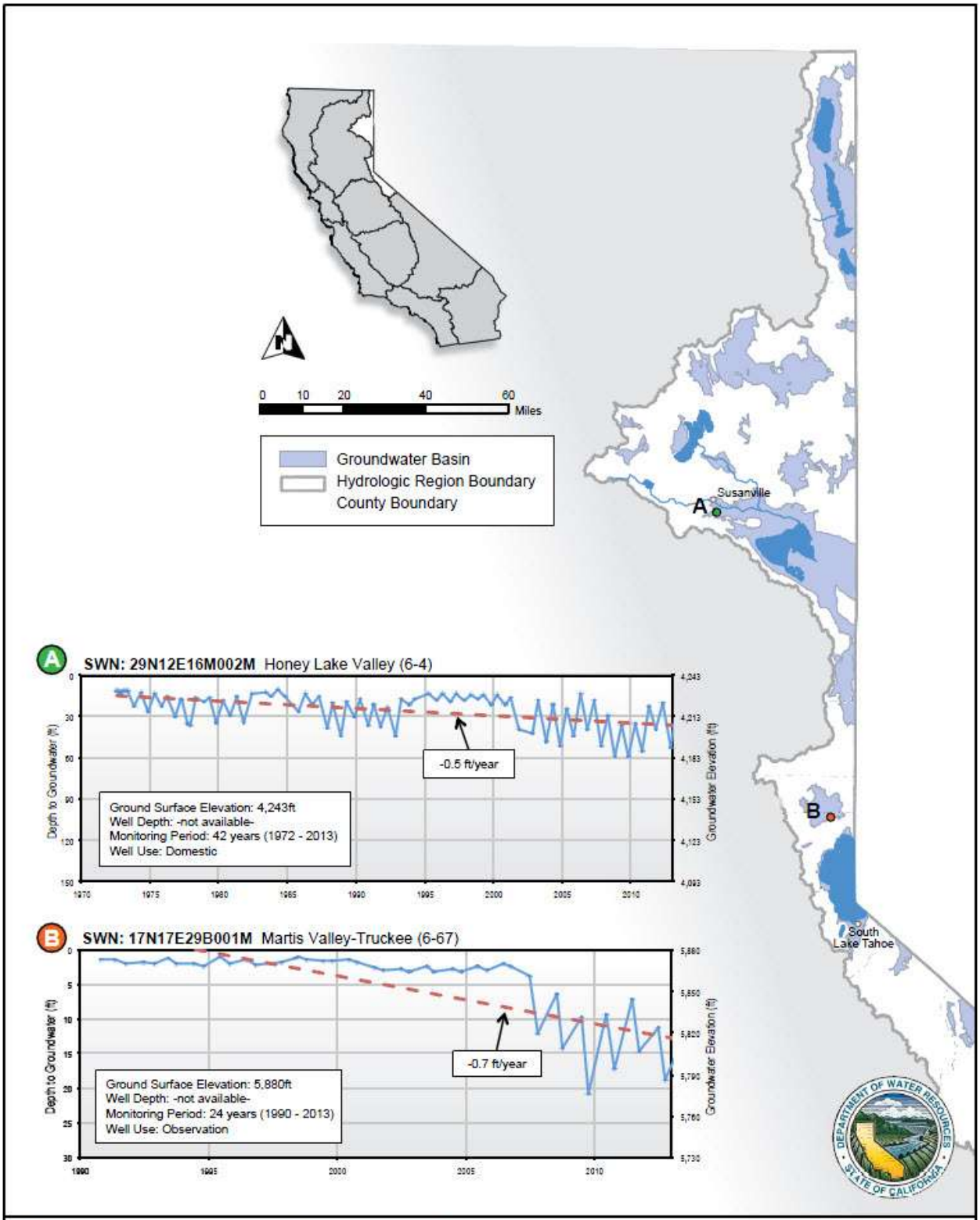

Hydrographs based on available data from the DWR Water Data Library as of April 9, 2014. Data subject to change.

**Figure 18 - Selected Hydrographs – Tulare Lake Hydrologic Region**




Hydrographs based on available data from the DWR Water Data Library as of April 9, 2014. Data subject to change.

**Figure 19 - Selected Hydrographs – North Lahontan Hydrologic Region**



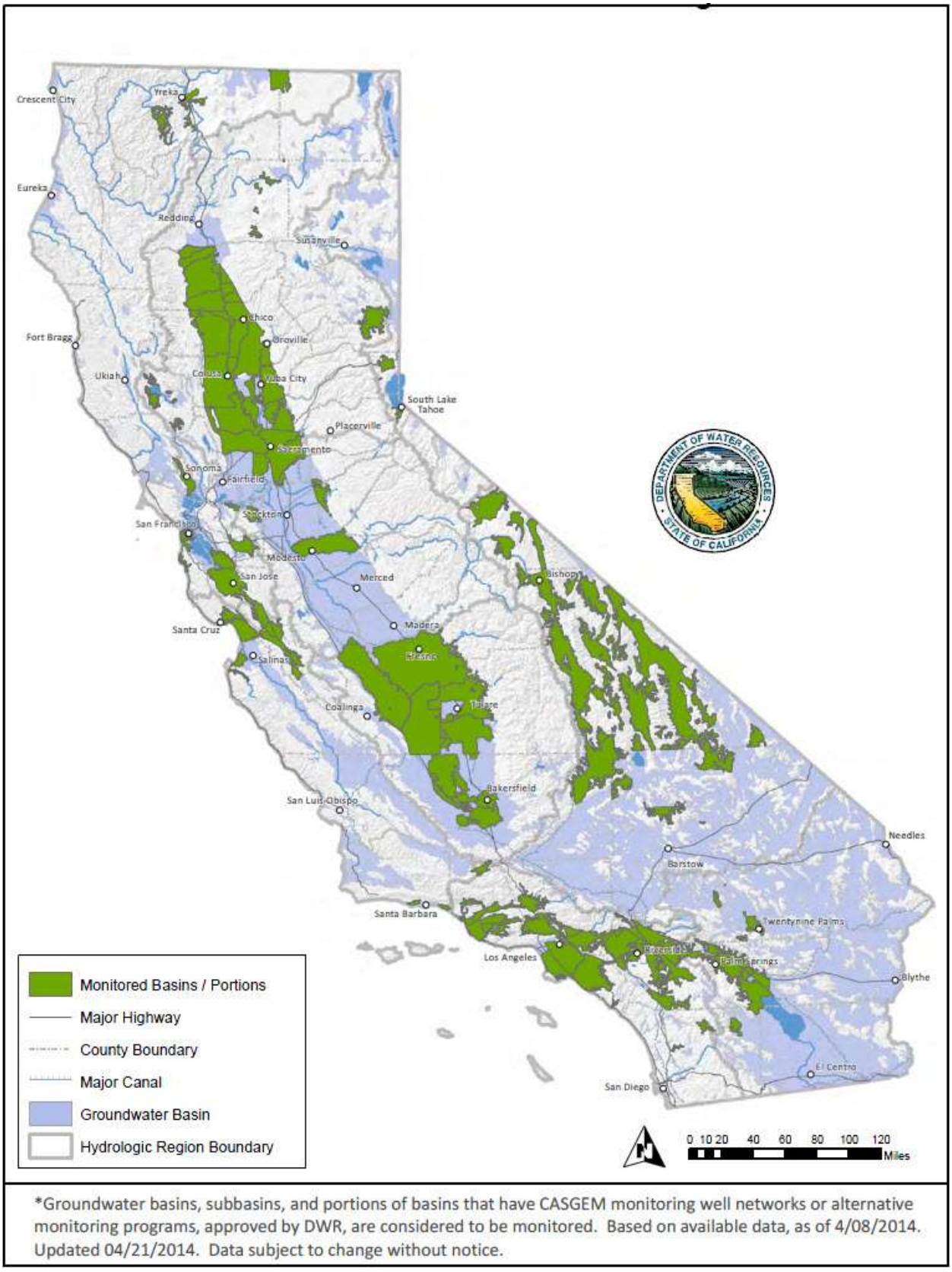

Hydrographs based on available data from the DWR Water Data Library as of April 9, 2014. Data subject to change.

# 5.0 GAPS IN GROUNDWATER MONITORING

A groundwater monitoring gap is an informal term indicative of insufficient data to reasonably assess and interpret groundwater conditions in an aquifer or in a basin. There are two primary gaps that can exist in groundwater monitoring data; spatial and temporal. Spatial data gaps exist where there is inadequate horizontal and/or vertical distribution of groundwater elevation data to accurately represent or assess aquifer conditions within an area of interest (groundwater basin). Sufficient vertical distribution of data is important in groundwater basins having multiple aquifer systems at various depths, and that may also be characterized by varying levels of confinement or changing groundwater elevations. A thorough understanding of a groundwater basin's hydrogeology is essential to assess whether or not the spatial distribution of monitoring wells is adequate for a basin. Groundwater elevation data collected at routine intervals can provide seasonal and long-term trends for a basin, which are essential for accurately estimating aquifer response and change in storage associated with changing hydrology, land use, total water supply, and effects of local groundwater management practices. Temporal data gaps exist when a consistent record of groundwater elevation data, recorded over regular time intervals, is not available.

Before the CASGEM Program originated in 2009, much of the available groundwater elevation data was sourced from the WDL database. This database contained information from wells monitored by DWR and numerous cooperating agencies. While the spatial coverage was adequate in some areas of the state, evaluation of groundwater levels during the 2009 drought conditions identified data gaps in groundwater level information for most basins. In addition, well construction information was not readily available to the public due to well log confidentiality, further limiting adequate analysis of groundwater conditions in some basins. Implementation of the CASGEM Program facilitated the submittal of groundwater elevation data for many areas of the state where data was previously unavailable (www.water.ca.gov/groundwater/casgem). Monitoring Entities within the CASGEM Program are required to provide well construction information (well depth and screen intervals) for their CASGEM wells, which allows the groundwater elevation data obtained from those wells to be analyzed with increased confidence (www.water.ca.gov/groundwater/casgem/entities.cfm). Monitoring Entities are also required to obtain well owner permission prior to including their wells in the CASGEM Program, as all related data is required to be publically available. Some well owners have expressed reluctance to provide permission to the Monitoring Entity to monitor their wells and publicly release the water level and well construction information. As a result, many CASGEM Monitoring Entities have not been able to readily address data gaps in their CASGEM monitoring networks. Absent the important combination of groundwater elevation data and associated well construction information, gaps will continue to exist in the CASGEM monitoring networks. Figure 20 illustrates the statewide distribution of groundwater basins monitored under the CASGEM Program as of April 8, 2014. Only 169 of the 515 alluvial groundwater basins/subbasins are fully or partially monitored under CASGEM.

**Figure 20 - Groundwater Basins and Portions of Basins Monitored* under the CASGEM Program**




*Groundwater basins, subbasins, and portions of basins that have CASGEM monitoring well networks or alternative monitoring programs, approved by DWR, are considered to be monitored. Based on available data, as of 4/08/2014. Updated 04/21/2014. Data subject to change without notice.

## 5.1 CASGEM Basin Prioritization

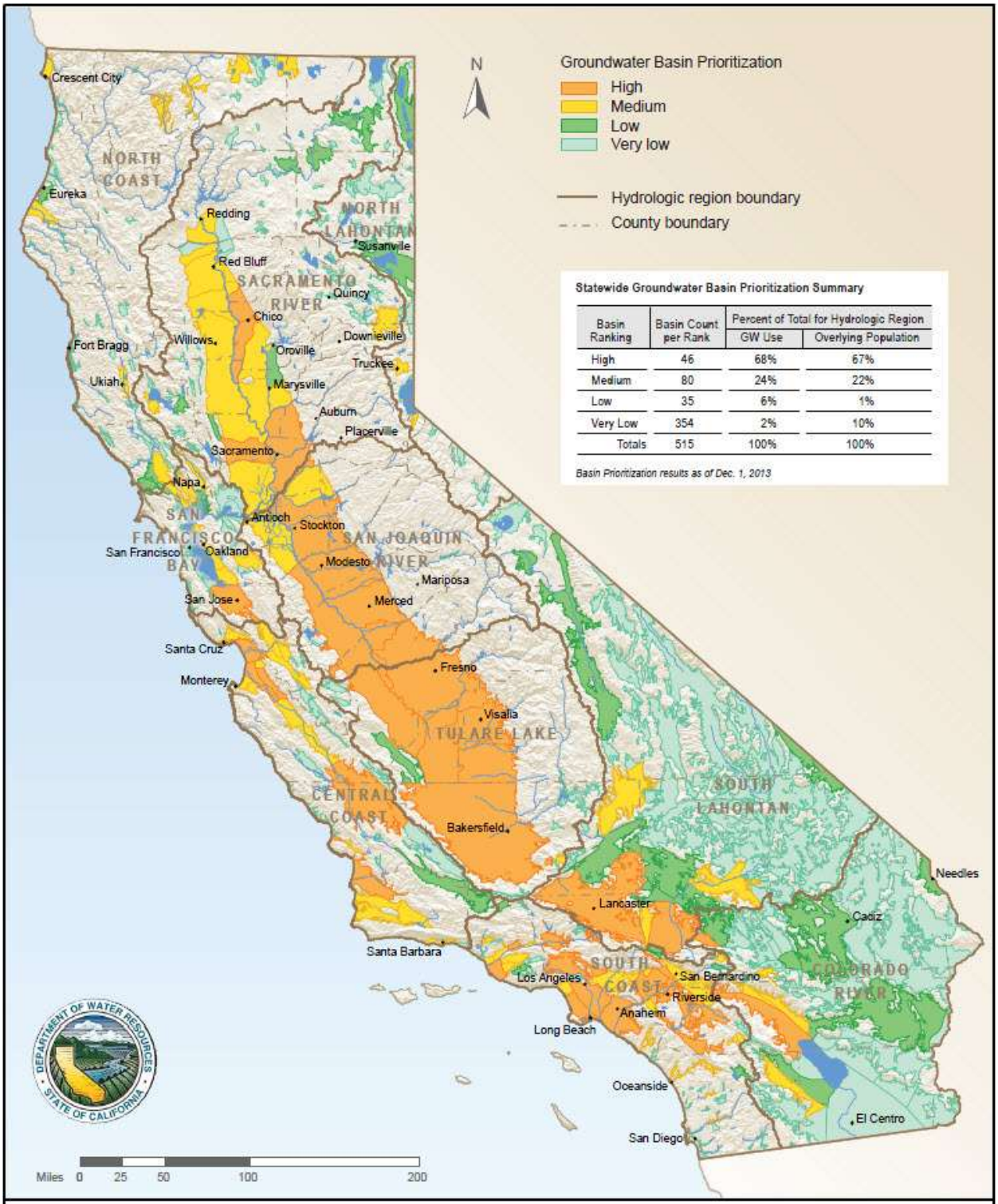
As described previously, the CASGEM basin prioritization process was developed to assess and rank the alluvial groundwater basins throughout the state. The basin prioritization process is based on an evaluation of the eight required data components specified in the California Water Code. DWR expects to finalize the draft basin prioritization process and results by May 2014.

As of December 2013, the draft basin prioritization results ranked 46 of the 515 alluvial groundwater basins as High Priority, 80 as Medium Priority, 35 as Low Priority, and 354 as Very Low Priority. Draft basin prioritization results also found that the 126 highest priority basins (High and Medium), approximately 24 percent of all of California's alluvial groundwater basins, account for close to 90 percent of California's annual groundwater use and about 90 percent of the population overlying the groundwater basins.

Figure 21 depicts the draft results of the Basin Prioritization. Many of the groundwater basins within the Central Coast and South Coast hydrologic regions, and most of the basins within the Central Valley, are ranked as either High or Medium priority. All of the groundwater basins within the Central Valley portion of the San Joaquin River and Tulare Lake hydrologic regions are ranked as High Priority. All but five of the groundwater basins in the Central Valley portion of the Sacramento River Hydrologic Region are ranked as High or Medium priority. The North Lahontan, South Lahontan, and Colorado River hydrologic regions have the lowest number of High and Medium priority groundwater basins, primarily due to the low groundwater use and population.

As of April 9, 2014, about 58 percent (73) of the High and Medium priority groundwater basins are fully monitored under the CASGEM Program. An additional 10 percent (13) of High and Medium priority basins are partially monitored under CASGEM. There are 32 percent (40) of the High and Medium priority basins not monitored under CASGEM. For 35 of the 40 unmonitored basins, there is a local agency that has indicated interest in participating in the CASGEM Program. The areas that lack participation in the CASGEM Program, and with no designated Monitoring Entity as of April 9, 2014, are considered gaps in groundwater monitoring for purposes of this Update. Figure 22 depicts the High and Medium priority basins which are currently not monitored under the CASGEM Program. There are significant monitoring gaps in the Sacramento, San Joaquin River, Central Coast, and South Lahontan hydrologic regions.

**Figure 21 - Draft CASGEM Basin Prioritization**



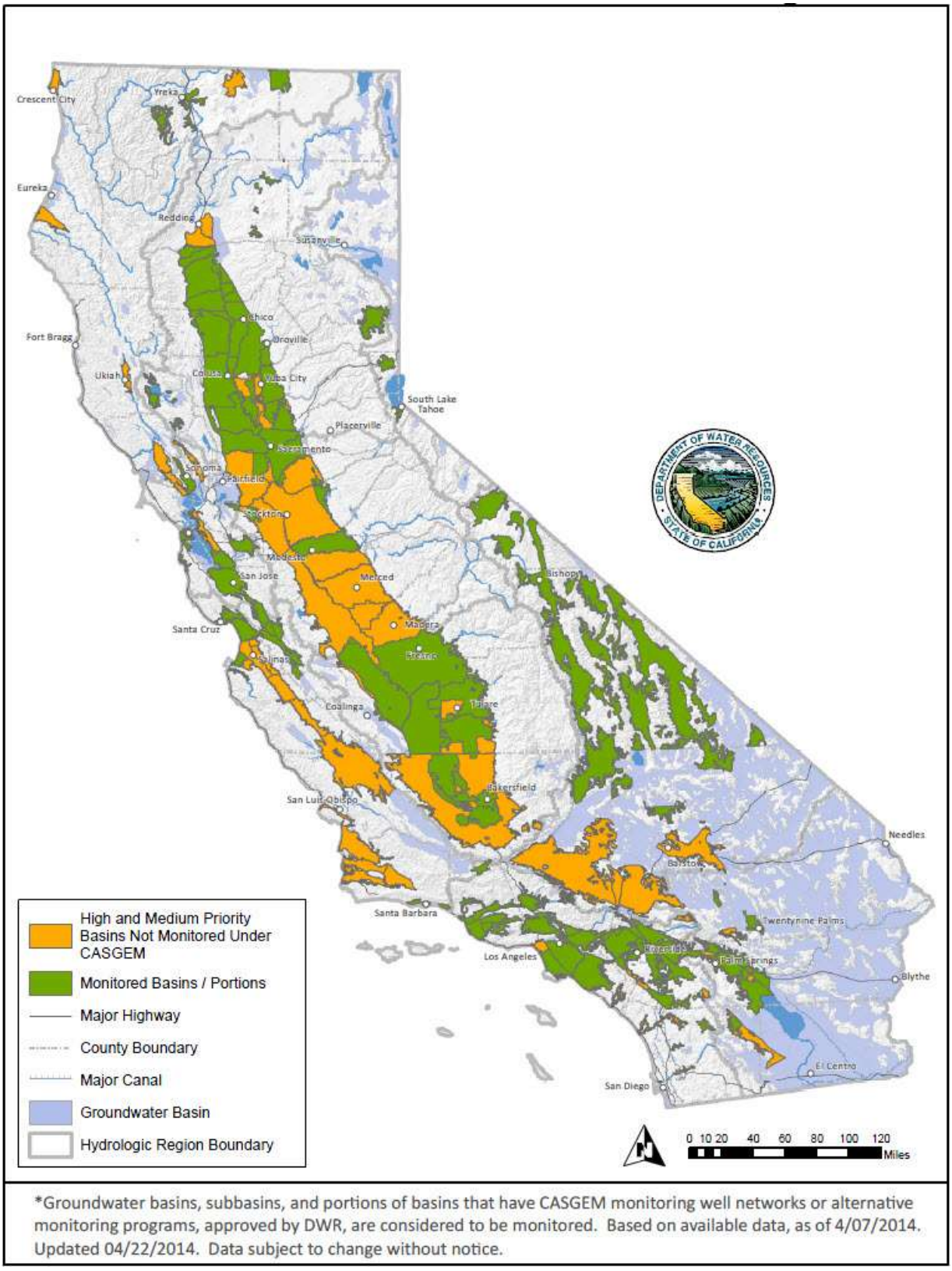

Statewide Groundwater Basin Prioritization Summary

| Basin Ranking | Basin Count per Rank | Percent of Total for Hydrologic Region | |
|---|---|---|---|
| | | GW Use | Overlying Population |
| High | 46 | 68% | 67% |
| Medium | 80 | 24% | 22% |
| Low | 35 | 6% | 1% |
| Very Low | 354 | 2% | 10% |
| Totals | 515 | 100% | 100% |

*Basin Prioritization results as of Dec. 1, 2013*

Source: *Draft California Water Plan Update 2013*, Department of Water Resources. Information sourced from California Statewide Groundwater Elevation Monitoring Program, Draft Basin Prioritization Process and Results, December 2013.

**Figure 22 - Unmonitored High and Medium Priority Basins, and Monitored* Basins under the CASGEM Program**



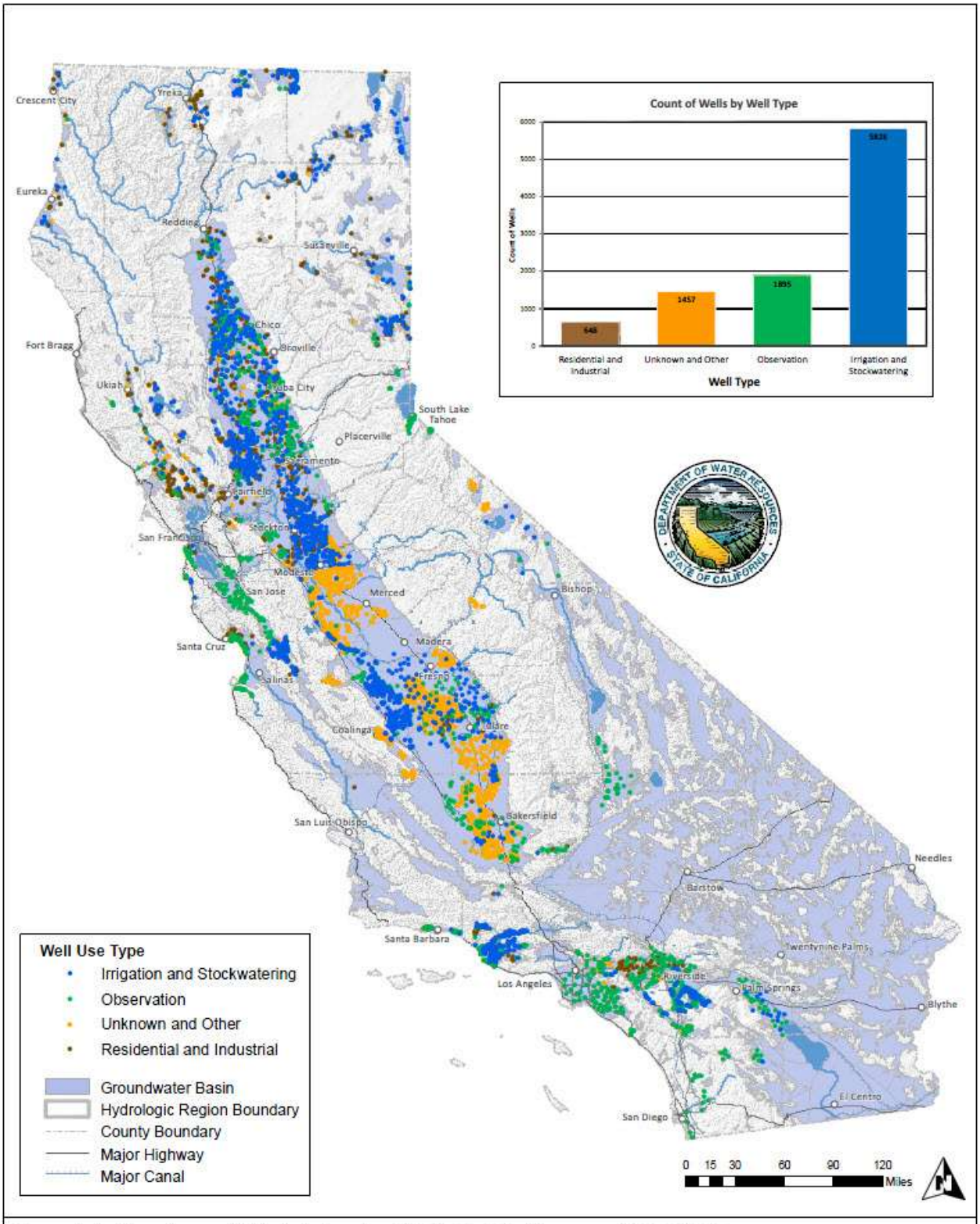

*Groundwater basins, subbasins, and portions of basins that have CASGEM monitoring well networks or alternative monitoring programs, approved by DWR, are considered to be monitored. Based on available data, as of 4/07/2014. Updated 04/22/2014. Data subject to change without notice.

## 5.2 Groundwater Level Monitoring Networks

After development of the CASGEM Online System, the historical data in WDL were transferred to an updated WDL groundwater level database that contains additional data fields specific to the CASGEM Program. Both the CASGEM Online System and WDL interface allow users to view the network of groundwater elevation monitoring locations throughout the state. The individual wells are classified as either "CASGEM" or "Voluntary" wells. CASGEM wells and measurements are used specifically for a CASGEM groundwater elevation monitoring network. Because CASGEM wells are required to be monitored with sufficient frequency to capture data that represents seasonal groundwater elevations within basins, they are also suitable for use in trend analyses. CASGEM wells may possess data prior to the start of the CASGEM Program due to migration of historical data to the updated WDL database, or submittal of historical data by the Monitoring Entity. Well construction information is not disclosed for "Voluntary" wells. While the groundwater elevation data that are provided for voluntary wells may be useful to observe trends in a given well, these data are less useful for conducting more extensive hydrologic analysis such as basin trends and elevation contouring, especially in groundwater basins that have multiple distinct aquifer zones. Figure 23 shows the statewide distribution of groundwater monitoring data for spring 2013. There are significant monitoring gaps in the San Joaquin River, Tulare Lake, Central Coast, and South Lahontan hydrologic regions.

As of April 9, 2014, a total of 169 of the 515 alluvial groundwater basins have a designated Monitoring Entity under the CASGEM Program who is actively monitoring their CASGEM wells. Statewide, there are 4,122 CASGEM wells and 39,429 Voluntary wells represented in the WDL groundwater level database. Despite the monumental progress realized by implementation of the CASGEM Program during the past four years, additional work is needed to establish adequate statewide monitoring of the groundwater basins. There are gaps on a statewide scale – basins that are not yet being monitored under the CASGEM Program, as well as gaps on the basin scale – basins with spatial data gaps. DWR is working cooperatively with Monitoring Entities to improve the existing statewide CASGEM monitoring network and reduce data gaps. Figures 24 through 26 depict the existing CASGEM monitoring networks.

**Figure 23 - Water Data Library Monitoring Distribution - Wells with Spring 2013 Data**




Map and chart based on available data from the DWR Water Data Library as of 03/28/2014.
Document Name: S2013_measured_wells Updated: 04/23/2014
Data subject to change without notice.

**Figure 24 - Distribution of CASGEM Wells in Northern California**

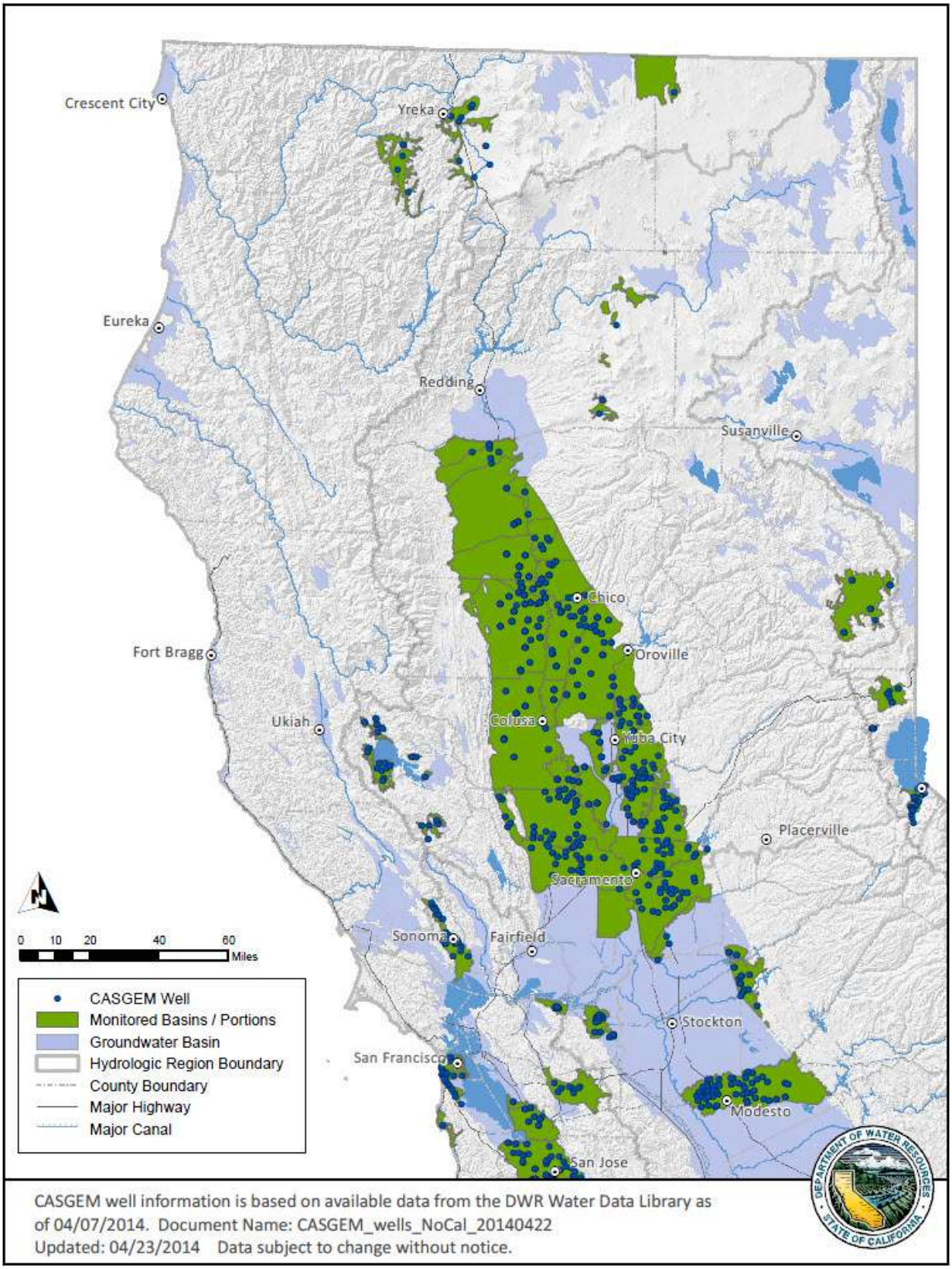


**Figure 25 - Distribution of CASGEM Wells in Central California**

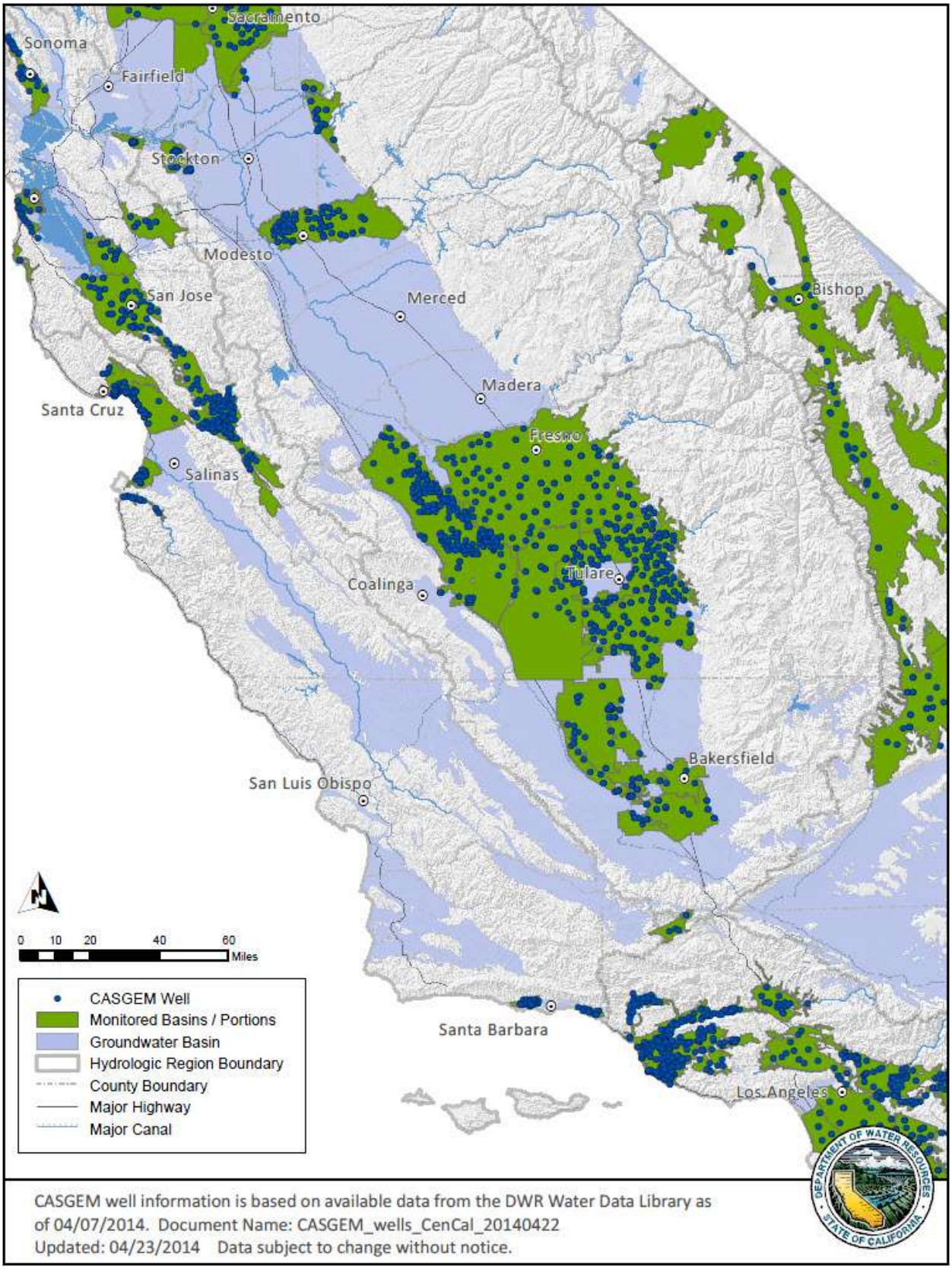
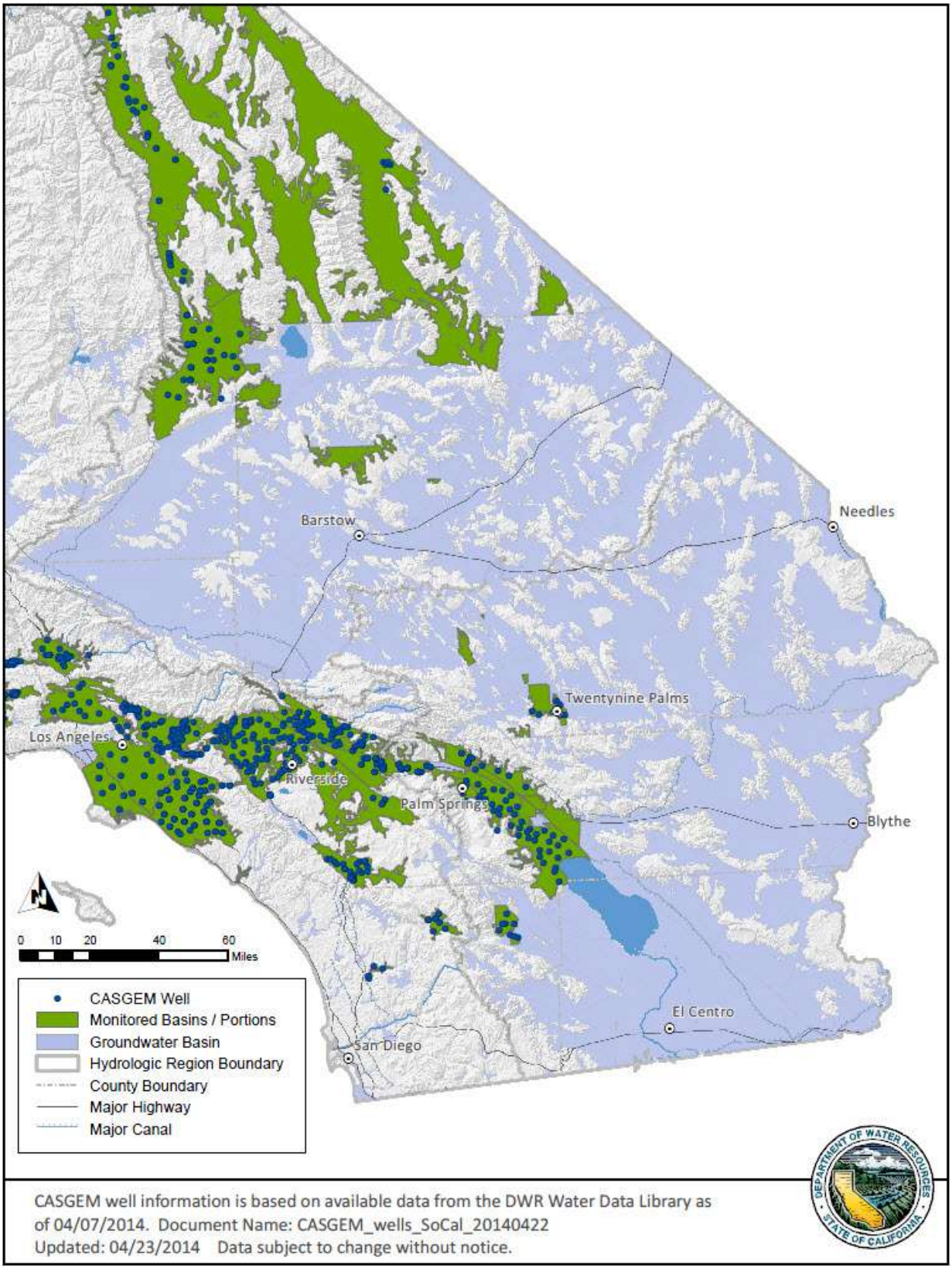


**Figure 26 - Distribution of CASGEM Wells in Southern California**



## 5.3 Groundwater Management

Groundwater plays a key role in meeting California's water supply needs. The effective management of groundwater basins is an essential aspect to maintaining the reliability and sustainability of this vital resource. Components that are essential to groundwater management programs include and/or address the following; basin management objectives (BMOs) with performance monitoring programs for groundwater levels, groundwater quality, land subsidence, and the interactions of groundwater and surface water to evaluate effectiveness of groundwater management activities.

Although California law does not require local agencies to adopt or implement groundwater management plans (GWMPs) or groundwater management programs, incentives exist to encourage local agencies to adopt and implement a GWMP that promotes effective groundwater management. Section 10750 et seq. of the California Water Code requires that six specific components be included in a GWMP for an agency to be eligible for State funding administered by DWR for groundwater projects. The required components include BMOs, agency cooperation, mapping recharge areas, monitoring protocols, and appropriate use of geologic and hydrologic principles for areas outside of alluvial basins.

As part of the draft Bulletin 160 *California Water Plan Update 2013*, DWR reviewed 119 GWMPs (those available as of August 2012) and determined which plans were completed in accordance with the California Water Code as of 2002 [enactment of Senate Bill (SB) 1938]. SB 1938 required that a GWMP have components relating to 1) the monitoring and management of groundwater levels within the basin, 2) groundwater quality degradation, 3) inelastic land subsidence, and 4) changes of surface flow and water quality that directly affect groundwater levels or quality, or are caused by groundwater pumping in the basin.

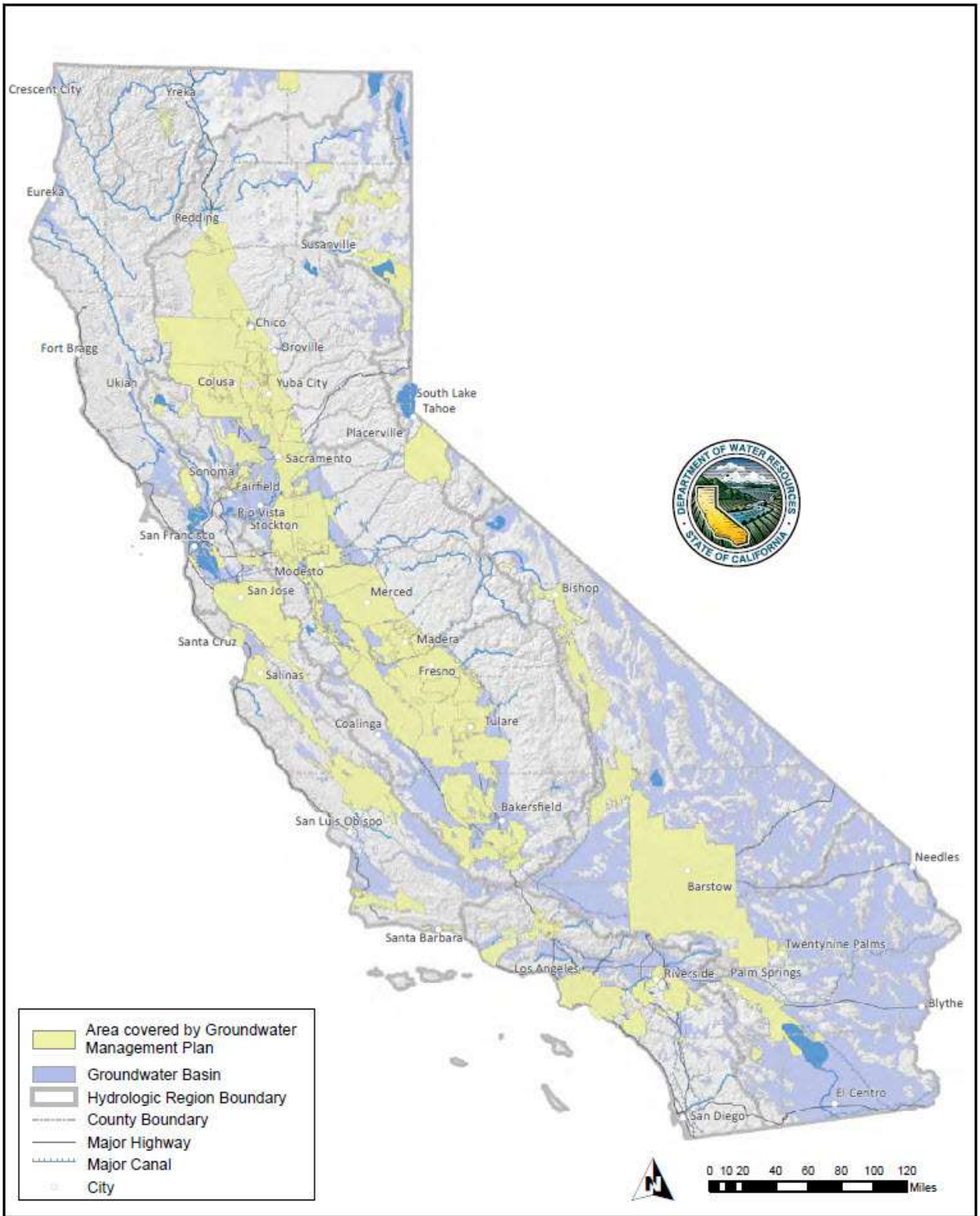
Of the 119 GWMPs, 83 were determined to meet the California Water Code requirements implemented as a result of SB 1938 in 2002. DWR also performed a detailed review of these 83 plans to assess their adherence to the required monitoring and management components. Out of the 83 plans, approximately 90 percent are implementing basin monitoring objectives and protocols for monitoring groundwater levels and groundwater water quality. About 75 percent of the plans have implemented or have provisions to implement monitoring for inelastic land subsidence. Only about 50 percent of the plans address surface water and groundwater interactions. In terms of groundwater management coverage area, about 42 percent of alluvial groundwater basins are encompassed by a GWMP. Also, about 32 percent of alluvial groundwater basins are encompassed by a GWMP determined to address water code requirements pursuant to SB 1938.

GWMPs continue to be developed and updated by the local implementing agencies. For example, plans developed prior to SB 1938 may adopt the provisions of SB 1938 and possibly the more recent additions to the California Water Code in 2012 [enactment of Assembly Bill (AB) 359] concerning groundwater recharge mapping to meet the current requirements. Typical reasons for updating plans are due to changes in basin conditions, changes in legislation, changes in water supply profiles, or increased understanding of the hydrogeology. As of March 20, 2014, the number of GWMPs available to DWR has increased from 119 to 130. A detailed review or analysis of the 11 additional plans has not been conducted. Currently, DWR does not have specific statutory direction regarding any further evaluation of GWMPs.

Figure 27 depicts the GWMP areas throughout California as of October 2013. The GWMP areas are represented as those that were implemented prior to SB 1938, those implemented after SB 1938, and those that also include groundwater recharge mapping pursuant to AB 359.

With respect to GWMPs, several areas of the state either lack a plan, or the existing plan has not been updated to address the requirements of SB 1938. In most cases, plans do not meet the groundwater recharge mapping requirements of AB 359. Reasons vary, but generally it is lack of funding or technical resources to create new or updated GWMPs to meet the necessary elements required by the California Water Code. As a result, such areas may also lack sufficient monitoring and/or management of groundwater and are potentially subject to increased stress or impacts due to drought conditions. For detailed information regarding GWMPs in California, please visit DWRs Groundwater Information Center at www.water.ca.gov/groundwater.

**Figure 27 - Groundwater Management Plans**




GWMP areas throughout California as of October 2013. The GWMP areas are represented as those that were implemented prior to SB 1938, those implemented after SB 1938, and those that also include groundwater recharge mapping pursuant to AB 359. Document Name: Statewide_GWMP_20140423 Updated: 04/24/2014 Data subject to change without notice.

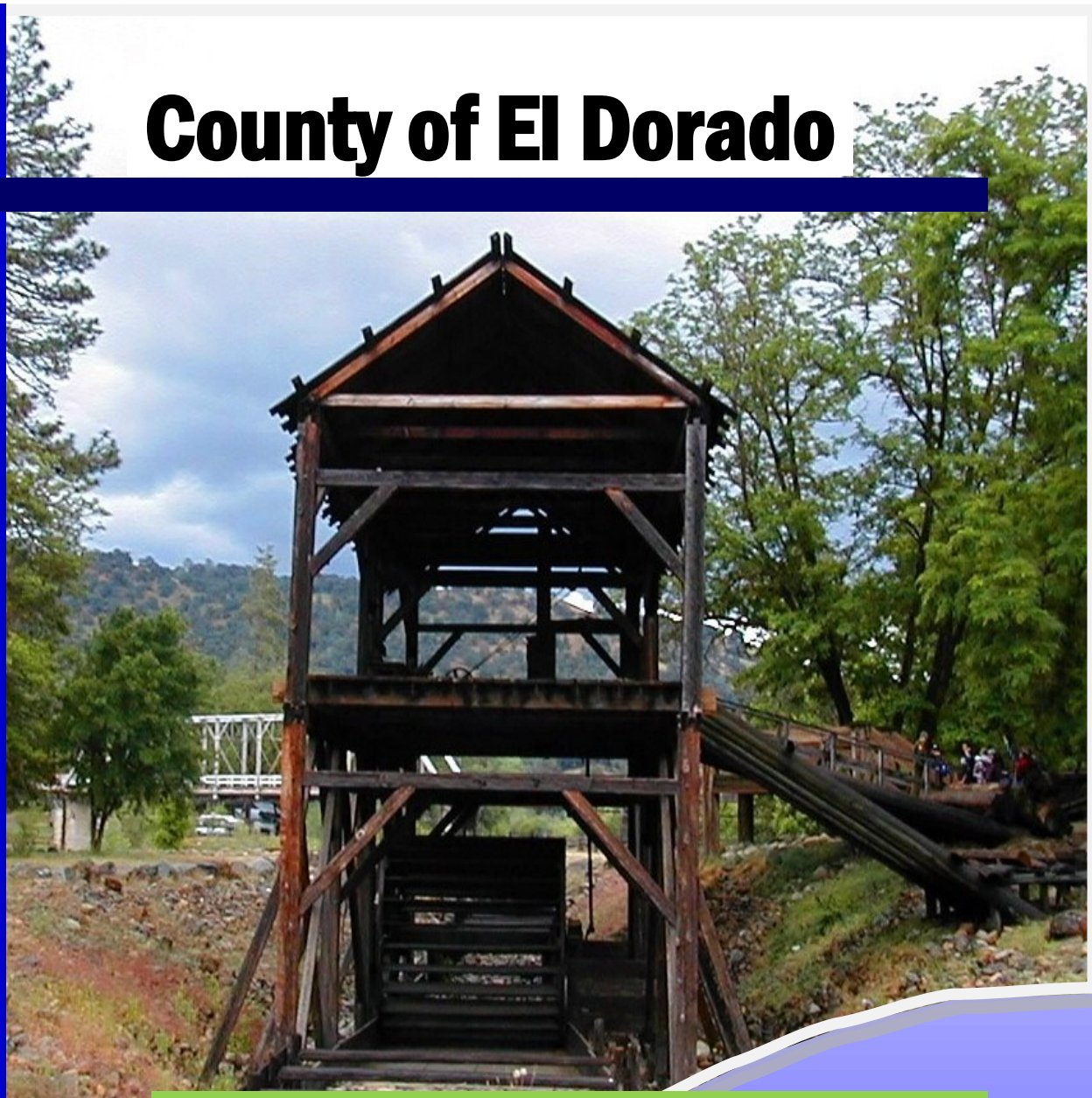
# 6.0 CONCLUSION

Groundwater can serve as the primary supply, and in some cases the only option, to meet water demands in many areas of the state. Draft CASGEM basin prioritization results found that the 126 highest-priority basins (High and Medium) account for close to 90 percent of California's annual groundwater use and about 90 percent of the population overlying the groundwater basins. There are 36 alluvial basins that are highly reliant on groundwater and possess the potential for water shortages due to the stress of drought conditions. These 36 basins account for a total of about 2.54 million acres of land and a population of approximately 6.18 million. Based on the available groundwater level data, there are several areas of the state with recent groundwater levels at all-time historical lows. Groundwater levels throughout the state have generally declined since spring 2013, and more notably compared to levels observed during the last normal water year of 2010. Many basins and counties have experienced significant water well deepening activities since 2010—an activity indicative of declining groundwater levels. Key hydrographs for selected wells throughout the state provide a longer term analysis of water level trends in conjunction with recent declines caused by drought conditions.

Statewide, there are 4,122 CASGEM wells and 39,429 Voluntary wells represented in the WDL groundwater level database. Although there is a fairly robust network of monitoring wells available to assess groundwater conditions, gaps in groundwater monitoring persist. There are 40 High and Medium priority alluvial groundwater basins that are currently not monitored under the CASGEM Program, and another 13 basins that are only partially monitored. Based on monitoring data within the WDL database for 2013, there are notable gaps in groundwater level data for the San Joaquin River, Tulare Lake, Central Coast, and South Lahontan hydrologic regions. With respect to groundwater management planning, several areas of the state either lack a GWMP, or the existing plan has not been updated to address the requirements of the California Water Code as of 2002 (SB 1938) or 2012 (AB 359). Although a local agency may have an adopted GWMP, many areas do not have controls in place to restrict or stop groundwater pumping. Groundwater pumping is expected to increase as drought conditions worsen. The increased pumping can lead to adverse or severe conditions including dry wells, land subsidence, decreased water quality, saline intrusion, and stream depletion.

This Update can also serve as an indicator that additional groundwater information is needed to adequately address groundwater issues in the state. DWR is making progress to fulfill the objectives and actions included in the Governor's California Water Action Plan, and to implement the next phase of the CASGEM Program. DWR promotes sustainable groundwater management at the local and regional level through technical guidance, financial assistance, interagency coordination, groundwater monitoring, basin assessments, and advancement of integrated regional water management. For detailed information regarding groundwater and groundwater management in California, please visit DWR's Groundwater Information Center at www.water.ca.gov/groundwater. For more information regarding DWR's drought response efforts, please visit www.water.ca.gov/waterconditions.

# County of El Dorado



# 2013 General Plan Annual Progress Report

## Strategic Planning For Our Future

Community Development Agency
Long Range Planning Division

June 2014

# TABLE OF CONTENTS

1. PURPOSE OF THIS REPORT ..... 2
2. EXECUTIVE SUMMARY ..... 3
3. GENERAL PLAN OVERVIEW ..... 7
Background and History ..... 7
State General Plan Annual Progress Report Guidelines ..... 7
General Plan Elements ..... 11
Land Use Element ..... 11
Transportation and Circulation Element ..... 15
Housing Element ..... 16
Public Services and Utilities Element ..... 17
Public Health, Safety and Noise Element ..... 17
Conservation and Open Space Element ..... 18
Agriculture and Forestry Element ..... 20
Parks and Recreation Element ..... 21
Economic Development Element ..... 21
4. STRATEGIC PLAN FOR GENERAL PLAN IMPLEMENTATION ..... 23
5. PLANNING AND DEVELOPMENT ACTIVITIES ..... 25
General Plan Amendments ..... 25
Zoning Ordinance Amendments ..... 26
Discretionary Development Applications ..... 29
6. OTHER RELATED ACTIVITIES ..... 31

APPENDICES

A. General Plan Implementation & Mitigation Measures Status Update
B. 2013 Housing Element Implementation Annual Progress Report
C. Growth Monitoring Charts (Population, Jobs, Housing, Land Development)

# 1. PURPOSE OF THIS REPORT

An annual progress report for General Plan implementation is required to be submitted to the County Board of Supervisors, the State Office of Planning and Research (OPR), and the State Department of Housing and Community Development (HCD) that includes:

- The status of the General Plan and progress in its implementation;
- The County's progress in meeting its share of the regional housing needs;
- Local efforts to remove governmental constraints to the maintenance, improvement and development of housing; and
- The degree to which the County's approved General Plan complies with the State General Plan Guidelines and the date of the last revision to the General Plan.

This report has been prepared pursuant to Government Code Section 65400 (a), which requires that all counties shall "investigate and make recommendations to the legislative body regarding reasonable and practical means for implementing the General Plan or element of the General Plan, so that it will serve as an effective guide for orderly growth and development, preservation and conservation of open-space land and natural resources, and the efficient expenditure of public funds relating to the subjects addressed in the General Plan."

In addition, this report supports General Plan Policy 2.9.1.1 which states that the County must "monitor, on an annual basis, the rate at which the land inventory is developed, the population and employment growth of the County, and other useful indicators of the County's growth." As directed by the General Plan (Policies 2.9.1.2, 2.9.1.3 and 2.9.1.4), the results of this monitoring process are to be examined at five year intervals. If the monitoring results indicate that the distribution of growth varies significantly from the major assumptions of this Plan, the County may make appropriate adjustments to the Plan's development potential, including the adjustment of Community Region and Rural Center boundaries, as part of the five year review process. The last General Plan five-year review was completed in April 2011. The next five year review must be submitted to the State by October 1, 2016.

Further, this report also addresses compliance with County-specific monitoring requirements, such as General Plan Policy 2.9.1.5 (periodic review of Policies and Implementation Measures that may reduce environmental damage). Information from this report may be used for identification of necessary adjustments, if any, that should be made to further implement the General Plan. This report will also help identify emerging trends in housing, employment, land development, and population growth to ensure that the General Plan continues to adequately address and meet the needs of El Dorado County residents and visitors for the foreseeable future.

# 2. EXECUTIVE SUMMARY

The General Plan includes nine areas of review, or Elements: 1) Land Use, 2) Transportation and Circulation, 3) Housing, 4) Public Services and Utilities, 5) Public Health, Safety and Noise, 6) Conservation and Open Space, 7) Agriculture and Forestry, 8) Parks and Recreation and 9) Economic Development. Each General Plan Element includes an implementation program with a list of implementation measures that are linked to annual work schedules.

The General Plan currently has a total of 225 implementation measures which are the collective responsibility of several County departments, divisions or agencies. Overall, the County has made significant progress toward implementation of the General Plan since its adoption in 2004. Of the 225 total measures, 142 (63 percent) have been implemented, 61 (27 percent) are in progress, and 22 (10 percent) remain to be initiated and implemented. The status of each of these measures, including specific actions and timeframes associated with the implementation of each of these Elements is included in Appendix A.

This report focuses on highlighting both achievements and challenges during calendar year 2013, and the measures that are in progress and still remain to be implemented.

## Major Planning Activities in 2013

Below is a highlight of significant planning activities related to General Plan implementation either completed or ongoing from the 2013 calendar year. General Plan implementation tasks are also discussed in detail under appropriate section(s) for each General Plan Element.

## General Plan Housing Element Update

On October 29, 2013, the County Board of Supervisors adopted the 2013-2021 Housing Element to the Adopted General Plan. State housing element law requires local governments to update the housing element by the due date specified in statute, generally for either a five-year or eight-year planning period. The previous Housing Element was adopted on July 1, 2008 and amended on April 21, 2009.

The Housing Element is part of the County's General Plan designed to address the existing and projected housing needs of all economic segments of the community. The Housing Element serves as a framework to assess the County's housing needs and establishes the County's housing policies. It is intended to ensure that decent, safe, and affordable shelter is provided for all residents of unincorporated areas of the county.

The Housing Element update process began in January 2012 and was completed with extensive public outreach including public workshops, community meetings, interviews with community residents, surveys, and other input. In November 2013, the County received a certification of compliance from the California Department of Housing and Community Development (HCD) for its adopted 2013-2021 Housing Element.

The County's progress in meeting Housing Element goals is described in detail in the Housing Element Report (Appendix B). The Housing Element Report provides the status of accomplishing the Housing Element implementation program, along with details on the progress of meeting regional housing needs, as well as removing governmental constraints to the development of affordable housing.

## Targeted General Plan and Comprehensive Zoning Ordinance Update

On November 14, 2011 the Board of Supervisors adopted Resolutions of Intention to amend selected General Plan policies and to complete a comprehensive update to the Zoning Ordinance (TGPA-ZOU project) in order to achieve the following goals:

1. Bring differences between the General Plan and other County planning ordinances and manuals into a more useful, beneficial and consistent format;
2. Create a series of changes (reform) to the current regulatory process;
3. Achieve adoption of:
    a. A Zoning Code consistent with the 2004 General Plan;
    b. Targeted General Plan amendments;
    c. A required 2013 Housing Element Update;
4. Complete a Travel Demand Model (TDM) Update

This followed a year-long process of review and consideration of changes determined necessary following recent changes in State law, changes in development patterns and market demand, and findings from the previous General Plan 5-year review. A final Travel Demand Model [Goal 4] was completed in October 2013 and the 2013 Housing Element Update was completed in November 2013 [Goal 3 (c)]. The balance of the TGPA-ZOU [Goals 1, 2, 3(a) and 3 (b)] is still in progress, with final completion tentatively scheduled for October 2014.

## Sign Ordinance Update

In December of 2012, the County executed a contract with Pacific Municipal Consultants, Inc. (PMC) for the preparation of a comprehensive sign ordinance amendment and the related Environmental Impact Report (EIR). The project was initiated in January of 2013 with a presentation by PMC at a joint meeting of the Board and the Planning Commission. In June of 2013, the Board authorized the Sign Ordinance Public Draft to be released for a 60-day review period. The public draft was released on July 8, 2013 and the public comment period closed on September 10, 2013. Written comments were submitted by forty-two individuals and seven agencies. In December of 2013, staff presented to the Board a general summary of the public comments received and asked the Board for direction on several policy issues identified in the public comments. The Board's direction required revisions to the draft sign ordinance which will be presented to the Board in 2014, along with the final EIR, for approval and adoption.

## Airport Land Use Compatibility Plan (ALUCP) General Plan Conformance Amendment

On June 28, 2012, the El Dorado County Transportation Commission (EDCTC), acting as the El Dorado County Airport Land Use Commission, adopted Airport Land Use Compatibility Plans (ALUCPs) for the Cameron Park, Georgetown, and Placerville airports (File No. A13-0003). The plans provide guidance and standards for land uses within the vicinity of the airports to protect public safety and to ensure safe operation of the airports in compliance with the California State Aeronautics Act (Public Utilities Code §21670 et

seq.) Government Code §65302.3 requires cities and counties to amend their General Plans so that they are consistent with the policies of an adopted ALUCP. On May 7, 2013, the County initiated the process to reconcile the General Plan to the newly-approved ALUCP's. Subsequently, Resolution of Intention Number ROI 017-2014 was submitted March 4, 2014 to the Board of Supervisors to initiate the required changes. More information about Airport Land Use Compatibility Plans is available at: http://www.edctc.org/2/Airports.html.

# 3. GENERAL PLAN OVERVIEW

## Background and History

The El Dorado County General Plan was adopted on July 19, 2004 by the Board of Supervisors and ratified by public referendum on March 15, 2005. This represents the first comprehensive General Plan update since 1996.

Prior to adoption of the 2004 General Plan, implementation of the previous 1996 General Plan was largely suspended in 1999 by a court order ("Writ of Mandate") from the Sacramento Superior Court (*El Dorado County Taxpayers for Quality Growth, et al. v. El Dorado County Board of Supervisors*) on the grounds that the 1996 General Plan Environmental Impact Report (EIR) did not adequately analyze potential environmental impacts as required by the California Environmental Quality Act (CEQA). On September 1, 2005, the County requested that the Court re-review the case after the completion of a new EIR associated with the new 2004 General Plan. The Court ruled that the County had satisfied every term of the writ and it was discharged. The Court's ruling was appealed by the plaintiffs. However, on April 18, 2006, the County entered into a settlement agreement with the plaintiffs, settling the lawsuit and allowing full implementation of the 2004 General Plan.

## State General Plan Annual Progress Report Guidelines

The Governor's Office of Planning and Research (OPR) provide suggested content for the General Plan Annual Progress Report (APR). The content below is based on recommendations from the OPR's General Plan Annual Progress Report Guidance.

1. ***Introduction***

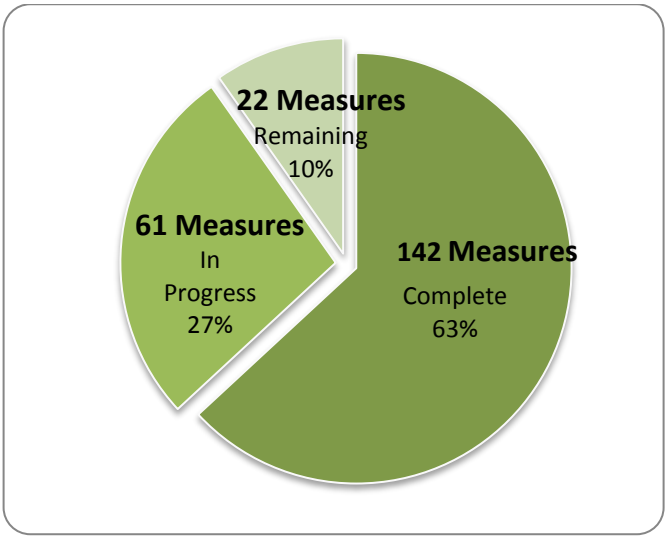
2. ***Table of Contents***

3. ***Date of presentation/acceptance by the local legislative body (agenda item or resolution)***

   The APR was presented to the Board of Supervisors on June 24, 2014. Additional details from this hearing are available on the Board of Supervisor's web site at: http://edcgov.us/BOS/

### 4. *Measures associated with the implementation of the General Plan with specific reference to individual element*

The Board of Supervisors approved an Implementation Plan as part of the 2004 General Plan. The Board subsequently amended the Implementation Plan on October 29, 2013 with the Housing Element update. The amended Implementation Plan contains a total of 225 implementation measures. Since full General Plan implementation began in 2006, 142 measures have been implemented or are ongoing, 61 measures are in progress, and 22 measures have not yet been addressed.




*A comprehensive list of all the implementation measures, by element, with the status of each measure for calendar year 2013, is included in Appendix A.*

### 5. *Housing Element Reporting Requirements*

Government Code Section 65400 establishes the requirement that each city or county prepare an annual report on the status of the Housing Element of its General Plan and progress in its implementation using forms and definitions adopted by the Department of Housing and Community Development (HCD).

The 2013-2021 Housing Element adopted on October 29, 2013 includes 35 Implementation Measures. The implementation status of each of these measures is provided in Table C of the 2013 Housing Element Annual Progress Report which was presented to the County Board of Supervisors in March 2014. The 2013 Housing Element Implementation Progress Report is included as Appendix B.

6. ***The degree to which the General Plan complies with OPR's General Plan Guidelines***

The General Plan has been prepared using the State General Plan Guidelines (Government Code Section 65040.2), and includes the seven mandatory elements and four additional elements. The seven State-mandated elements of the General Plan include Land Use, Mobility (Transportation and Circulation), Housing, Conservation, Open Space, Noise, and Safety. The County General Plan includes the above mandatory elements plus four additional elements: Public Services and Utilities, Agriculture and Forestry, Parks and Recreation and Economic Development. The Conservation and Open Space Elements are combined together as one element. In addition, Public Health has been added to the combined Noise and Safety Element.

7. ***The date of the last update to the General Plan***

The General Plan was last comprehensively updated in July, 2004. In 2013, the General Plan was amended three times, to include:

- **October 29, 2013:** The Housing Element was updated in accordance with state law (File No. A13-0007).
- **November 12, 2013:** The General Plan Land Use Designation was amended from Commercial (C) to Multi-Family Residential (MFR) for a proposed multi-family development project in the Pollock Pines area (File No. A13-0006).
- **December 3, 2013:** The General Plan Land Use Designation was amended from High Density Residential (HDR) to Commercial (C) to allow for the development of a 2,432 square foot market/deli and outdoor picnic area in the Latrobe area (File No. A13-0001).

8. ***Priorities for land use decision making established by the Board of Supervisors***

The El Dorado County General Plan provides direction to monitor growth activity, on an annual basis and at five year intervals, and to make necessary adjustments to the development potential of the plan. On April 4, 2011, during the first five-year review cycle, the County assessed prior activity and determined that the

basic General Plan Assumptions, Strategies, Concepts and Objectives were still generally valid, and that major adjustments would not be needed at this time. The Board further identified goals for the 2011-2016 planning cycle to better address certain land use decision making priorities including: 1) Development of housing affordable to moderate income households, 2) Creation of jobs, 3) Retention of sales tax revenue in the County, and 4) To further promote and protect agriculture and natural resource industries.

9. ***Goal, policies, objectives, standards or other place proposals that need to be added or were deleted, amended, or otherwise adjusted.***

Selected General Plan policy amendments were initiated in calendar year 2011 and are currently in process as part of the Targeted General Plan Amendment-Zoning Ordinance Update (TGPA-ZOU). More detailed information is discussed in the Executive Summary in this report. The current status of the TGPA-ZOU is available online at:

http://www.edcgov.us/Government/LongRangePlanning/LandUse/TGPA-ZOU_Main.aspx

10. ***One or more lists of the following, including reference to the specific General Plan element or policy, status (i.e. approved/denied, initiated/ongoing/ completed, etc.) and brief comment on how each advanced the implementation of the General Plan during the past year: a) Planned activities initiated, b) General Plan Amendments, c) Major development applications processed.***

A list of Implementation Measures by Element, including Mitigation Measures from the adopted Mitigation Monitoring Program, has been provided along with the status of each measure for calendar year 2013, and is included as Appendix A. Planned activities initiated, General Plan Amendments, and major development applications processed during the calendar year 2013 are included in Section 5 (Planning and Development Activities) of this report.

11. ***Additional Useful Content Relevant to General Plan Implementation or Long-Range Planning Efforts: OPR recommends that jurisdictions augment the above content by submitting additional information such as long-term planning projects, actions or measures relevant to that jurisdiction's long-term strategic plan.***

    Discussions of the County's long-term planning projects, measures and General Plan implementation actions are included under the appropriate sections of this report.

## General Plan Elements

Below is a summary of each element included in the County's General Plan.

### *Land Use Element*

The Land Use Element sets forth specific goals, objectives, policies and maps to guide the intensity, location and distribution of land uses. This element highlights planning strategies to produce a land development pattern supporting several key principles: 1) to make the most efficient and feasible use of existing infrastructure and public services, 2) to provide for new and existing development that promotes a sense of community, 3) to define those characteristics which make the County "rural" and provide strategies for preserving these characteristics, 4) to provide opportunities for positive economic growth in such areas including employment, tourism, increased retail sales and high-technology industries and 5) to provide guidelines for new development that maintains and enhances the quality of the County.

The General Plan Land Use Diagram (Land Use Map) is a graphic representation, or picture, of the County's goals, objectives and policies. The General Plan land use map delineates areas where future lower-density rural and agricultural uses are likely to continue and/or expand as well as regions where higher density growth and urban/suburban like activities are anticipated and/or will be directed.

The General Plan land use map contains three primary regions for directing various types of land uses: 1) Community Regions, bounded by an urban limit line demarcating where urban and suburban uses will be developed; 2) Rural Centers, also bounded by a similar limit line, to recognize existing defined places which provide a focus of

activity and provide goods and services to surrounding rural areas; and 3) Rural Regions, which are lands not contained within the boundaries of Community Regions or Rural Centers. Rural Regions provide a land use pattern that maintains the open character of the County, preserves its natural resources, recognizes the constraints of the land and infrastructure and preserves outlying agricultural and forest/timber resources for future generations.

Under the Land Use Element, an important component of the County's strategic plan for General Plan implementation also includes an annual monitoring of "useful" growth indicators during the previous calendar year (General Plan Policies 2.9.1.1 and 2.9.1.6) including: a) population growth; b) employment capacity; c) land development activity; d) new housing starts; and e) availability of future housing.

The results of this annual monitoring can then be analyzed to determine if housing and commercial inventory is adequate to meet General Plan goals and objectives. General Plan parcel monitoring includes tracking the number of residential parcels approved since 1999. Based on the results of regular monitoring since 1999, nearly all home construction in El Dorado County can be derived from one of the following:

1. "Existing Commitments" in place as of 1999, including Specific Plans and Development Agreements for the creation of new lots;
2. Developments for which a Tentative Subdivision or Parcel Map had been approved prior to 1999;
3. Building permits issued before 1999; and
4. Legal lots existing prior to 1999.

Regular monitoring has found the following:

1. As of calendar year 2013, no new Specific Plans (SP) had been approved since before 1999;
2. Less than 1,000 new tentative residential lots ("commitments") have been approved countywide outside of SP areas since adoption of the General Plan. Out of the 1,000 lots, less than 200 new residential parcels were created between January 1999 through December 2013.

3. During the monitoring period from 1999 – 2013, there has been significant growth in various sectors of commercial, non-residential development including the following:

    - 2,436 Building Permits (with new square footage);
    - 7,253,184 square feet (new employment capacity);
    - An estimated total of 15,293 new jobs in the following economic sectors[1]:
        - Education: 195 jobs;
        - Office: 7,765 jobs;
        - Retail: 2,288 jobs;
        - Service: 1,946 jobs;
        - Medical: 404 jobs; and
        - Industrial[2] 2,695 jobs.

[1] **Sources: SACOG, 2001; County of El Dorado, 2013; SACOG, 2013; BAE, 2013.**

[2] **Industrial jobs estimate also includes warehouse and "shell" building permits.**

As directed by General Plan Policies 2.9.1.2, 2.9.1.3 and 2.9.1.4, during the five year review, if the monitoring results indicate that the distribution of growth varies significantly from the major assumptions of the General Plan, the County may make appropriate adjustments to the Plan's development potential, including:

1. Increasing or decreasing the capacity of one or more housing types (e.g. more multi-family vs. single-family; replacement of apartment lands with small lot single-family developments, etc.);
2. Changing the distribution of projected growth, including the adjustment of Community Region and Rural Center boundaries; and
3. Prioritizing infrastructure expenditures such as road improvements to direct new growth into opportunity areas.

A review of historic and forecasted population growth, new housing starts, the forecasted housing supply, and commercial square footage (employment capacity) is found in Appendix C.

During 2013, the County continued to make significant progress with implementation of the Land Use Element. The primary projects associated with implementing the planning principles of the Land Use Element are described below.

## Zoning Ordinance Update (2011-Present)

Beginning on April 4, 2011, the Board of Supervisors initiated the process for a comprehensive Zoning Ordinance update in conjunction with several targeted General Plan Amendments, collectively known as the "TGPA-ZOU" project. The Zoning Ordinance update is the first comprehensive update to the Zoning Ordinance in over 30 years. The primary purposes of this update are to bring zoning regulations into conformance with the General Plan, and other State regulations, and to enhance the economic development of the County (General Plan Implementation Measures LU-A, LU-C, LU-D and LU-G). A detailed status review of applicable land use measures is shown in Appendix A.

In October 2013, the Board authorized the preparation of the Draft Environmental Impact Report (DEIR). The DEIR was released in early 2014 and the final EIR is anticipated to be completed by October 2014.

## Land Development Manual Update (2010-Present)

Land Use Implementation Measure LU-E requires that the Department of Transportation and Planning Department "review and identify needed revisions to the County of El Dorado Design and Improvements Standards Manual" (DISM). The Development Services, Transportation and Environmental Management Divisions of the Community Development Agency, in conjunction with the County Surveyor's Office, the Community Economic Development Advisory Committee, and local fire district personnel, are creating a Land Development Manual (LDM), intended to replace the current Design and Improvement Standards Manual (DISM). The new LDM document is anticipated to be completed in 2015.


## Meyers Community Plan Update (2012-Present)

General Plan Goal 2.10 and General Plan Implementation Measure LU-O direct the County "to coordinate the County's land use planning efforts in the Tahoe Basin with those of the Tahoe Regional Planning Agency" (TRPA).

In December 2012, TRPA updated its 25-year old 1987 Regional Plan. One of the goals of the TRPA Regional Plan Update (RPU) was to allow for local jurisdictions to act as the primary land use and permitting authority within specific areas of the Tahoe Basin. In conformity with the RPU, new Area Plans adopted after 2012 would provide more specific development objectives and standards that are adapted to the needs of each specified area with emphasis in overdeveloped areas of the region that were formerly designated as community plan areas.

In May 2012, an update to the 1993 Meyers Community Plan (MCP) was initiated, as the MCP was over 20 years old and had only minor changes since adoption. In addition to conforming the existing MCP to the 2012 TRPA Regional Plan Update, the updated MCP would provide incentives needed to: 1) encourage transfer of existing development to areas of lower environmental sensitivity, 2) concentrate land uses within less-sensitive areas, 3) rehabilitate and redevelop aging infrastructure, and 4) enhance environmental protections.

Most importantly, the new MCP will provide a planning tool to implement the Meyers community's vision, recognize the unique characteristics of the community and streamline the land development process for the community of Meyers. Finalization of the plan is anticipated by late 2014.

## *Transportation and Circulation Element*

The Transportation and Circulation Element provides the framework for decisions in El Dorado County concerning the countywide transportation system. The system includes facilities for various transportation modes, including roads, transit, non-motorized and aviation. This element provides for coordination with the incorporated cities within the county, the El Dorado County Transportation Commission, the Sacramento Area Council of Governments, the Tahoe Regional Planning Agency, and state and federal

agencies that fund and manage the county's transportation facilities. The Transportation and Circulation Element reflects the urban and rural diversity of the unincorporated areas of El Dorado County and establishes standards that guide development of the transportation system, including access to the road and highway system required by new development.

During 2013, the County continued to implement planning efforts to facilitate a safe, multi-modal road and trail network. The 2013 Capital Improvement Program (CIP) was adopted on June 24, 2013. The new Travel Demand Model (TDM) was completed in 2013. The TDM relies on existing base data (traffic counts, existing development, 2010 Census information, and the County's roadway network). It also includes a forecast of the distribution and timing of future growth within the General Plan horizon (year 2035). A peer review of the model was completed in May 2013. In June 2013, the TDM data (2010 Baseline and Draft 2035 Land use Forecast) was released to run forecast scenarios. A growth forecast was approved by the Board of Supervisors in April 2014, as the starting point for initiating the 5-year major CIP and Traffic Impact Mitigation (TIM) Fee Program updates, anticipated to be completed by late 2015.

## *Housing Element*

The State of California identifies provision of adequate and affordable housing for every Californian as a statewide goal. This Housing Element must meet the requirements of California Government Code Sections 65583 and 65584, which require local governments to adequately plan to meet the existing and projected housing needs of all economic segments of the county. State law requires the Housing Element to contain a program which sets forth a five-year schedule of actions of the local government to implement the goals and objectives of the Housing Element. With the passage of Senate Bill 375 in 2008, Housing Element Law under Government Code Section 65588 was modified to align that time period to eight years for those governments who are located within a region covered by a regional transportation planning agency, such as the Sacramento Area Council of Governments (SACOG). Therefore, from the date of state certification in November, 2013, the County's Housing Element is valid for the planning period from 2013 to 2021. The County's progress in meeting Housing Element goals is addressed in the County's 2013 Housing

Element Implementation Annual Progress Report, which is included as Appendix B. This report provides details on the County's progress in meeting regional housing needs, as well as removing governmental constraints to the development of affordable housing.

## *Public Services and Utilities Element*

Although the Public Services and Utilities Element is not required by State law, the subjects addressed here are critical to the County's future growth and development. Many of the public services are currently operating close to or exceeding capacity level. The purpose of the Public Services and Utilities Element is to promote a pattern of development which maximizes the use of existing services while minimizing the costs of providing new facilities and services. While implementation of the Public Services and Utilities Element has largely been completed prior to calendar year 2013, several implementation measures are still in progress as of the date of this report. A detailed status review of each measure is shown in Appendix A.

## *Public Health, Safety and Noise Element*

The overall focus of the Public Health, Safety, and Noise Element is to provide guidelines for protecting El Dorado County residents and visitors from existing and potential health, safety or noise hazards in El Dorado County. This Element is consistent with the requirements set forth in the California Government Code Section 65302 and other applicable sections. Specifically, California Government Code Section 65302(g) requires communities to identify "any reasonable risk associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiches, and dam failure; slope instability leading to mudslides and landslides, subsidence and other geologic hazards known to the legislative body; flooding; and wildland and urban fires."

The Public Health, Safety, and Noise Element addresses community noise limitations, in accordance with Government Code Section 65302(f). Additionally, this element satisfies the State mandated requirements for the safety General Plan element.

Although implementation of the Public Health, Safety and Noise Element has largely been completed, several noise-related implementation measures remain incomplete. As comprehensive noise regulations have been incorporated into the Zoning Ordinance Update (ZOU), most of the noise-related measures will be fully implemented upon completion of the ZOU, scheduled for completion in October 2014.

## *Conservation and Open Space Element*

The purpose of the Conservation and Open Space Element of the General Plan is to address the management, preservation, and conservation of natural resources and open space of El Dorado County. Management of the County's resources will assure the availability of those resources to future generations and the realization of their full economic potential. Pursuant to Government Code Section 65302, both a conservation and an open space element must be included in a General Plan. The General Plan combines these two elements into the Conservation and Open Space Element and as such satisfies the legal requirements for the Conservation and Open Space Elements defined in the Government Code, Sections 65302(d) and 65560, respectively.

During 2013, the County continued to make progress with implementing many measures associated with the Conservation and Open Space Element, although much implementation still remains incomplete. A detailed status review of all implementation measures within this Element is provided in Appendix A. One of the primary projects associated with implementing the Conservation and Open Space Element is the Oak Woodlands/Biological Resource Policy Updates described below.

### Oak Woodlands/Biological Resource Policy Updates (2008-Present)

On May 6, 2008, the Board of Supervisors adopted the Oak Woodland Management Plan (OWMP) and its implementing ordinance, to be codified as Chapter 17.73 of the County Code (Ord. 4771. May 6, 2008). The primary purpose of this plan was to implement the Option B provisions of Policy 7.4.4.4 and Measure CO-P. These provisions established an Oak Conservation In-Lieu Fee for the

purchase of conservation easements for oak woodland in areas identified as Priority Conservation Areas.

A lawsuit was filed in El Dorado Superior Court on June 6, 2008 against the Oak Woodland Management Plan. On February 2, 2010, the Court ruled to uphold the Board's action to adopt the Plan. However, on appeal, the Appellate Court over-ruled that decision, remanding the case back to Superior Court, with the direction to require the County to prepare an Environmental Impact Report for the OWMP. The OWMP was rescinded on September 4, 2012 (Resolution 123-2012) and its implementing ordinance was rescinded on September 11, 2012 (Ord. No. 4892). For the time being, only Option A of Policy 7.4.4.4 is available to mitigate impacts to oak woodlands.

On September 24, 2012, the Board of Supervisors directed the Development Services Department to prepare a General Plan amendment to amend (biological resource) Policies 7.4.2.8, 7.4.2.9, 7.4.4.4, 7.4.4.5, 7.4.5.1, and 7.4.5.2 and their related implementation measures to clarify and refine the County's policies regarding oak tree protection as well as (biological) habitat preservation. The Board further directed staff to prepare a Request for Proposals to hire a consultant to assist the County in preparing the biological policy amendments and an Environmental Impact Report (EIR).

On October 30, 2013, the Community Development Agency (CDA) conducted a Statement of Qualification (SOQ) solicitation for consultants who could provide professional services to the County necessary to consider appropriate amendments to General Plan biological policies. The County received 5 responses to the SOQ. Staff reviewed and ranked all responses received. The top 2 consultants were then interviewed by staff. As a result of this process, Dudek, an environmental consulting firm, was identified as the consultant most qualified to provide the requested services.

On March 11, 2014, the Board of Supervisors approved an agreement for services with Dudek to review the biological resource policies and implementation measures within County’s General Plan and prepare an EIR.

## Agriculture and Forestry Element

The Agriculture and Forestry Element addresses the conservation, management, and utilization of the County's agricultural and forest lands. Prudent management of the County's agriculture and forestry resources is needed to provide future generations with opportunities to experience both the economic benefits and rural lifestyle residents now enjoy. This current management strategy involves maintenance of large parcel sizes and the minimization of incompatible land use encroachment into these resource rich lands. The County's Implementation Plan for the Agriculture and Forestry Element is fully consistent with the requirements set forth in State law regarding the following:

1. Distribution, location and use of agricultural lands;
2. Conservation, development and utilization of natural resources; and
3. Creating and maintaining open space for managed production of agricultural resources.

During calendar year 2013, progress continued with the implementation of this Element. However, out of twelve required implementation measures, only three measures have been fully implemented, seven implementation measures were in various stages of progress and two measures remained unaddressed. A detailed status review of all implementation measures within this Element is provided in Appendix A. During 2013, key planning efforts to implement this Element included the item(s) below:

### Expansion of Agricultural Districts (2009-Present)

Land Use Implementation Measure AF-J requires the completion of an inventory of agricultural lands in active production and/or lands determined by the Agricultural Commission to be suitable for agricultural production with the intent of adding these lands to the existing Agricultural Districts. The El Dorado County General Plan established Agricultural Districts to conserve, protect, and promote agricultural use. Within these districts are buffering protections, parcel size restrictions and policies supporting agricultural development. In July of 2009, the Agricultural Department began an inventory of parcels in close proximity to the existing Agricultural Districts

and analyzed those parcels using the following criteria: General Plan land use designations, parcel size, soil type, elevation, present land use, current Williamson Act contracts, and slope. Between July of 2009 and June of 2010, the Agricultural Commission notified over 580 property owners and held 10 public meetings to address the 17,000 acres of proposed additions. This analysis was received by the Board of Supervisors through a Resolution in January of 2011, which directed the Development Services Department to proceed with the recommendations of the Agricultural Commission and prepare a draft revision to the Agricultural District boundaries. This revision has been incorporated into the Targeted General Plan Amendment/Zoning Ordinance Update (TGPA-ZOU) project, which is anticipated to be completed in October 2014.

## *Parks and Recreation Element*

The Parks and Recreation Element establishes goals and policies that address the long range provision and maintenance of parks and recreation facilities needed to improve the quality of life of existing and future El Dorado County residents. The overall focus of the Parks and Recreation Element is on providing recreational opportunities and facilities on a regional scale, including trails and waterways; securing adequate funding sources; and increasing tourism and recreation-based businesses. The element also addresses the location, demand, management, and provision of parks and recreation facilities. For calendar year 2013, only two measures remained unaddressed. Eight measures have been completed and four are in various stages of progress. The status of each of the measures is included in Appendix A.

## *Economic Development Element*

Although an economic development element is not a required element under State law, California Planning law states that "the General Plan may include any element(s) or address any . . . subject(s) which . . . relate to the physical development of the county (Government Code Section 65303)." The Economic Development Element has been included as part of the County's General Plan in order to strengthen community development activities, enhance economic growth and reinforce the planning process as a positive part of economic development. In addition, this Element seeks to

improve a local business climate by recognizing sub-regional constraints and opportunities, expanding the local tax base and enhancing employment opportunities throughout the County.

Economic Development accomplishments during 2013 are highlighted below:

- Implemented CEDAC recommendations for:
  - Development of El Dorado County Web Portal
  - Micro-grant program for community non-profits
  - Grant Consultant to assist non-profits to pursue additional funding
  - Community Vision and Identity Meetings
  - Targeted General Plan Amendment and Zoning Ordinance Update
- Collaborated with Community Development Agency to assist applicants
- Created Economic Development Incentive Policy J-7 (Feb, 2014)
- Awarded CDBG funding to provide financial and technical assistance to small businesses
- Contracted with Buxton to provide consumer analytics to local businesses
- Funded and collaborated with local Chambers of Commerce on annual Business Walks
- Partnered with Connections/HHSA to place unemployed into on-the-job training (OJT)

# 4. STRATEGIC PLAN FOR GENERAL PLAN IMPLEMENTATION

The Board of Supervisors adopted a (Strategic) Implementation Plan as part of the 2004 General Plan. The implementation Plan includes County activities, processes, reports, programs, assessments, plans and timeframes that are necessary to achieve the General Plan's goals and policies. Each General Plan policy includes one or more implementation measures or programs as a mechanism for its implementation.

As part of the General Plan implementation process, the County is also required by State law to implement a Mitigation Monitoring Program, or MMP. The MMP is a valuable tool to regularly review and assess the progress of specific mitigation measures incorporated into the General Plan to reduce environmental damage (*PRC Sections 21081.6 and 21081.6(b), Government Code Section 65400 and CEQA Guidelines Sections 15091.d and 15097, 15097(b)].* In addition to State requirements, the General Plan also requires regular reviews of these same (environmental) mitigation measures (General Plan Policy 2.9.1.5). As all mitigation measures have been incorporated into the Implementation Plan, the General Plan is deemed "self-mitigating." Therefore, all mitigation measures are included on the Implementation Plan, with the status of many implementation measures directly affecting the completion of the MMP (See Appendix A).

In November, 2013, the Housing section of the Implementation Plan was amended with the Housing Element update. The amended Implementation Plan for the Housing Element is located on the County web site at:
http://www.edcgov.us/Government/LongRangePlanning/LandUse/SupportingDocuments/2013-21_HousingElement_adopted_10-29-2013.aspx

The (Strategic) Implementation Plan for the other ten Elements is provided as Appendix A. The Implementation Plan is organized into eight categories, grouped by Element including the Land Use, Transportation and Circulation, Housing, Health/Safety and Noise, Conservation and Open Space, Agriculture and Forestry, Parks and Recreation and Economic Development Elements. Each category provides program-level strategies to implement each Element. Within each Element category, specific implementation measures are described, along with references to the General Plan Policies supporting each individual measure. In many cases, implementation

measures may implement multiple General Plan policies. In some instances, changes to the Zoning Ordinance or other County codes may be necessary before additional progress can be made to accomplish implementation actions. One example is the requirement to comprehensively regulate noise by adopting a Noise Ordinance (Measure HS-I) where revisions to the existing Zoning Ordinance (or a new Noise Ordinance) are necessary in order to limit noise-generating activities.

# 5. PLANNING AND DEVELOPMENT ACTIVITIES

Other planning and development activities in 2013 included two General Plan Amendments, several Zoning Ordinance Amendments, and eighty Discretionary Development Applications were approved.

## *General Plan Amendments*

The County General Plan was written as a macro-level document, which also includes more specific portions, such as the Land Use Diagram ("Map"). As such, some new development projects that do not conform to the General Plan are able to request General Plan Amendments ("GPAs") that might alter specific aspects of the General Plan when such a change is found to be consistent with the General Plan strategies and objectives.

### *Completed in 2013*

Two privately-initiated GPAs were approved during calendar year 2013:

### Wood Multi-Family Project (File No. A13-0006)

On November 12, 2013, the General Plan Land Use Designation was amended from Commercial (C) to Multi-Family Residential (MFR) for a proposed multi-family development project in the Pollock Pines area.

### Latrobe Market (File No. A13-0001)

On December 3, 2013, the General Plan Land Use Designation was amended from High Density Residential (HDR) to Commercial (C) to allow for the development of a 2,432 square foot market/deli and outdoor picnic area in the Latrobe area.

## *Zoning Ordinance Amendments*

The Zoning Ordinance is the primary tool for administering the General Plan. While the General Plan identifies broad land use designations, the Zoning Ordinance identifies parcel-specific uses and development standards. As mandated by the State, the Zoning Ordinance must be consistent with the General Plan. For consistency purposes, changes made to the General Plan may also require a corresponding update to the Zoning Ordinance.

Zoning Ordinance amendments processed by the County in calendar year 2013 are noted below.

### *Completed in 2013*

Four Zoning Ordinance amendments were approved during calendar year 2013:

#### *Privately-Initiated*

#### Wood Multi-Family Rezone (File No. Z13-0003)

On November 12, 2013, the Board of Supervisors adopted Ordinance No. 5003 to rezone an existing mixed-use developed 0.31 acre lot from Commercial (C) to Multifamily Residential (RM) in order to allow future multi-family units. This request was also processed concurrently with General Plan Amendment A13-0006 to amend the General Plan Land Use Designation for this project.

#### Latrobe Market Rezone (File No. Z13-0001)

On December 3, 2013, the Board of Supervisors adopted Ordinance No. 5004, rezoning an existing parcel from Estate Residential (RE-10) to Commercial (C) to allow for the development of 2,432 square foot market, deli and outdoor picnic area. This request was also processed concurrently with General Plan Amendment A 13-0001 to amend the General Plan land use designation for this project.

*County-Initiated*

### Zoning Ordinance Amendment to Regulate the Distribution of Medical Marijuana (File No. OR 13-0001)

On September 24, 2013, the Board of Supervisors adopted a Zoning Ordinance amendment to regulate the distribution of medical marijuana. The adopted ordinance amended Chapter 17.14.250 of the El Dorado County Ordinance Code prohibiting new medical marijuana distribution facilities, including dispensaries, collectives and cooperatives in all zone districts in the unincorporated areas of the County of El Dorado.

### Zoning Ordinance Amendment to Regulate the Outdoor Cultivation of Medical Marijuana (File No. OR 13-0002)

On September 24, 2013, the Board of Supervisors adopted changes to Chapter 17.14.260 of the El Dorado County Ordinance Code, regulating the outdoor cultivation of medical marijuana in all zone districts in the unincorporated areas of the County of El Dorado. The Ordinance regulates the outdoor cultivation of medical marijuana by setting standards and regulations for: the maximum size area for cultivation; screening; security; residency requirements or owner authorization; environmental requirements (water quality, sewage disposal, and use of chemicals); disposal of waste material; collective cultivation on larger lots; abatement and code enforcement; administrative relief provisions and appeal process, including providing for public notice of administrative relief and appeal requests.

## *In-Process Zoning Ordinance Amendments Submitted in 2013*

*Privately-Initiated*

### Serrano Village J5 and J6 (File No. Z13-0002)

The County is currently processing a rezone request for converting an existing five-acre parcel from Planned Commercial-Planned Development (CP-PD) to Single-Family Residential-Planned Development (R1-PD). This request is part of a larger project (File No. TM 13-1511) to create 119 single-family residential lots ranging in size from 6,900 square feet to 14,123 square feet in size.

## Cameron Hills Rezone (File No. Z13-0005)

The County is processing a rezone request as a "map clean up" in order to allow proposed revisions to the previously-approved lotting map for TM 08-1473.

## FDL Properties Rezone (File No. Z13-0006)

The County is currently processing a rezone request for a single parcel from Planned Agricultural, 20-Acre (PA-20) to Exclusive Agricultural (AE) in order to allow participation in the County's Williamson Act program.

### *County-Initiated*

## El Dorado County Zoning Ordinance Update

On November 14, 2011, the Board of Supervisors adopted Resolutions of Intention (183-2011 and 184-2011) to undertake a comprehensive update of the county's zoning ordinance. The update, the first in over 30 years, is part of the TGPA-ZOU project and was on-going throughout 2013. As part of this comprehensive update, certain zone districts are proposed to be deleted. Three of the changing zone districts are agricultural. In March of 2012 and again in July of 2013, the County, in conjunction with the El Dorado County Farm Bureau, sent out over 3,000 letters, asking property owners, who met certain criteria, if they preferred agricultural zoning or residential zoning for their parcels. The County received over 700 requests for agricultural zoning. Web-based GIS land use maps showing the parcels that met the criteria for the "Ag Opt-In" letter and showing the parcels requesting agricultural zoning were developed by the County Surveyor's Office. The Board of Supervisors will be making a final determination on zoning changes, as part of the TGPA-ZOU project which is anticipated to be completed in October 2014.

## El Dorado County Sign Ordinance Update

In August of 2012, the Board of Supervisors directed staff to contract for the preparation of a comprehensive sign ordinance amendment and the related Environmental Impact Report (EIR). A contract was executed with Pacific Municipal Consultants, Inc. (PMC) in December of 2012. The project was initiated in January of 2013 with a presentation by PMC at a joint meeting of the Board and the Planning Commission. In June of 2013, the Board authorized the Sign Ordinance Public Draft to be released for a 60-day review period. The public draft was released on July 8, 2013 and the public comment period closed on September 10, 2013. Written comments were submitted by forty-two individuals and seven agencies. In December of 2013, staff presented to the Board a general summary of the public comments received and asked the Board for direction on several policy issues identified in the public comments. The Board's direction required revisions to the draft sign ordinance which will be presented to the Board, along with the Notice to Proceed with the EIR, by July of 2014. The final EIR and updated Sign Ordinance are anticipated to be adopted by the Board by the end of 2014.

### *Withdrawn Zoning Amendments*

#### *Privately-Initiated*

## Promontory Village Lot D1 (File No. Z13-0004)

Rezone request Z13-0004 was withdrawn by the applicant on October 22, 2013, as Planning Services staff deemed that a rezone would not be required based on Sections 6.1, 6.2 and 6.3 of the Promontory Specific Plan, in order to accommodate proposed residential uses.

## *Discretionary Development Applications*

In 2013, eighty (80) discretionary development applications were approved. A condition of approval requires consistency with the General Plan goals and objectives. Table 1 on the next page provides a summary of the total discretionary development applications received by the Development Services Division during calendar year 2013.

**Table 1: Summary of Discretionary Development Applications Filed in 2013**[1, 2]

| Application Types | Applications Submitted in 2013 | | | |
|---|---|---|---|---|
| | New Request | Approved | Denied/ Withdrawn | Still in Process |
| General Plan Amendments (Privately-Initiated) | 3 | 2 | 1 | |
| Discretionary Certificates of Compliance | 2 | 1 | | 1 |
| Development Agreements | 2 | | 1 | 1 |
| Design Review Permits | 5 | 5 | | |
| Tentative Parcel Maps | 2 | 2 | | |
| Tentative Subdivision Maps | 3 | 2 | | 1 |
| Special Use Permits | 17 | 9 | | 8 |
| Planned Developments | 5 | 3 | 1 | 1 |
| Specific Plans | 3 | | | 3 |
| Rezones | 6 | 1 | 1 | 4 |
| Variances | 3 | 3 | | |
| Temporary Use Permits | 39 | 37 | 1 | 1 |
| Williamson Act Contracts | 11 | 2 | | 9 |
| Pre-Applications | 14 | 13 | | 1 |
| TOTALS | 114 | 80 | 5 | 29 |

Notes:

1. Table only identifies applications initiated in 2013.
2. County-initiated projects [("Gov") files, County-initiated General Plan Policy Amendments, Zoning Ordinance revisions] and administrative projects [Lot Line Adjustments and Site Plan Reviews] are not included.

# 6. OTHER RELATED ACTIVITIES

***A. Review of: Interagency or intergovernmental coordination efforts and identify areas for improvement. This may include participation in a regional blueprint or partnerships with State or Federal programs.***

The County continues ongoing discussions with City of Placerville regarding coordinating City/County housing programs and other various opportunities to streamline delivery of public services and programs. The County coordinates on a monthly basis with the El Dorado County Transportation Commission (EDCTC) by participation on the EDCTC's Technical Advisory Committee (TAC). EDCTC is the Regional Transportation Planning Agency (RTPA) for the County and the City of Placerville. The County also coordinates with the Sacramento Area Council of Governments (SACOG) by participating in monthly meetings of SACOG's Regional Planning Partnership and Planners Committee. SACOG is the federally mandated Metropolitan Planning Organization (MPO) for six counties and 22 cities in the Greater Sacramento region. Coordination efforts include providing input in the updates to the region's long-range Metropolitan Transportation Plan/Sustainable Communities Strategy, the distribution of affordable housing in the region, Regional Housing Needs Assessment (RHNA), planning efforts related to land use, transportation, and air quality. Coordination efforts with the Tahoe Regional Planning Agency (TRPA) are also ongoing. In an effort to improve interagency coordination with TRPA, the County began planning a joint workshop with TRPA in late 2013. The half-day workshop included face-to-face meetings and presentations by County and TRPA staff on each respective current and long-range planning effort. This special workshop was held in January 2014.

***B. Review of: The implementation of mitigation measures from the General Plan Final Environmental Impact Report or Negative Declaration.***

The review of the implementation of the mitigation measures is addressed in the "Strategic Plan for General Plan Implementation" section of this report.

***C. Summarize efforts to: Promote infill development, reuse, and redevelopment particularly in underserved areas while preserving cultural and historic resources.***

An integral part of the Zoning Ordinance Update is the proposed Mixed Used Development Guidelines. A draft Mixed Use Design Manual was released in March 2014 for public review. This guide was developed to provide a framework for good design that promotes economic and cultural revitalization while respecting historical foundations. The Mixed Use Design Guide takes into consideration El Dorado County's historic Gold Rush roots.

***D. Summarize efforts to: Encourage efficient development patterns.***

The 2004 General Plan includes vision statements, goals and objectives that encourage efficient development patterns. The development of these visions and strategies serves to provide for the underlying approach of the General Plan. This approach is the identification of distinct planning concept areas where growth will be directed as a means of providing for a more manageable land use pattern. The concepts of the Plan also recognize that differing levels of service will occur within community and rural areas.

1. Community Regions where growth will be directed and facilitated;

2. Rural Centers where growth and commercial activities will be directed to serve the larger Rural Regions; and

3. Rural Regions where resource based activities are located will be enhanced while accommodating reasonable growth.

Higher levels of infrastructure and public services of all types shall be provided within Community Regions to minimize the demands on services in Rural Regions. The Capital Improvement Plan for the County and all special districts will prioritize improvements. It is the explicit intent of the Plan, through the appropriate application of these planning concept areas, to: (1) foster a rural quality of life; (2) sustain a quality environment; (3) develop a strong diversified, sustainable local economy; (4) plan land use patterns which will determine the level of public services appropriate to the character, economy, and environment of each region;

and (5) accommodate the County's fair share of the regional growth projections while encouraging those activities that comprise the basis for the County's customs, culture, and economic stability.

In 2013 eighty (80) Discretionary Development Applications (see Table 1) were approved. Conditions of approval require a finding of consistency with General Plan Vision, Goals and Objectives supporting efficient development patterns.

***E. Describe the jurisdiction's strategy for: Economic development - Depending on the needs of your jurisdiction, this analysis could include information on the ratio of jobs to dwelling units, tax revenues, demographics, census information, etc.***

Under the oversight of the CAO's office, the Office of Economic Development (OED) was created to implement the County's economic development strategy. The OED's mission is to stimulate economic growth in the following areas:

1. Attraction and Retention of Employers;
2. Developing incentives for business expansion;
3. Assist in new business formation; and
4. Workforce development

In calendar year 2013, the OED accomplished several key activities to further the County's economic development goals. These details are discussed in the Economic Development Element section of this report. The 2014 objectives to develop long long-term economic development strategies are summarized below:

1) **Policy Development and Implementation -** Revise and update Incentive Policy; Review and recommend additional policies
2) **Business Retention and Expansion (BRE) -** Industry Sector Committees Business Walks; Face-to-Face Business Visits
3) **Entrepreneurship Development -** CDBG Micro-Enterprise Assistance; SEDCorp Workshops; Outreach to Home-Based Businesses

4) **Collaboration with Workforce Investment Programs -** Identify Businesses' Hiring and Training Needs thru BRE; Create "Learning Linkages" with K-12, Community College, Workforce Investment

5) **Finance Necessary Infrastructure -** Identify State and Federal Economic Development Grant Sources**;** Replicate Master Circulation and Funding Plan (MC&FP) for Missouri Flat for business parks

6) **Business Attraction and Recruitment**

***E. Describe the jurisdiction's strategy for: Monitoring long-term growth - For example: population growth, employment growth, land use development, and the provision of adequate supporting public services and infrastructure.***

General Plan Policies 2.9.1.1 and 2.9.1.2 directs that the County shall monitor on an annual basis and every 5 years, the rate at which the land inventory is developed, the population and employment growth of the County, and other useful indicators of the County's growth. If the results of this monitoring process indicate that the distribution of growth varies significantly from the major assumptions of this Plan, the County shall make appropriate adjustments to the Plan's development potential by General Plan amendment.

***F. Outline department goals, objectives, and responsibilities, as they relate to land use planning.***

In 2013, the County formed a new Long Range Planning team which is responsible for helping the Board of Supervisors develop plans, policies, ordinances and programs. Long range planning involves highly complex and diverse land use and transportation decisions that require a careful balancing of competing economic, social and environmental interests. The Long Range Planning mission is to serve the needs of El Dorado County's current and future residents, businesses and visitors by providing accurate information, impartial analysis and forums for stakeholder discussions to support well-informed long range planning decisions, and facilitating implementation of Board-adopted plans, policies and ordinances.

***G. Review and summarize grant administration for land use planning activities.***

In July 2013, the Board approved a new Cultural and Community Development Grant Program. The purpose of the program is to provide funds to private non-profit and public organizations whose purpose is to promote cultural, historical preservation and other promotional activities, which encourage/enhance tourism, agriculture, and economic development in the County. The notice of funding availability for FY 2013-13 was released on July 19, 2013. Total funding available was $80,000 and the maximum grant amount was $5,000. Twenty-six applications were submitted and 19 were selected for grant awards totaling $79,670. Many of the applications supported General Plan community identification goals and objectives. More information on the Cultural and Community Development Grant Program is available on the County's Economic Development web page:

http://www.edcgov.us/Government/Economic/Cultural_and_Community_Development_Grant_Program.aspx

Also in July 2013, the Board approved the release of a Request for Proposal (RFP) for grant related support services to include funding needs analysis, grant research, grant proposal development, grant administration and reporting, as well as training in preparing comprehensive grant proposals. The RFP specified a broad range of grant opportunities that support funding needs and priorities in a number of areas including: History, Arts and Culture, Public Facilities and Maintenance, Economic Development, Community Planning, Identification and Design, Transportation Infrastructure and Planning, Public Health/Mental Health, Social Services, Law Enforcement, and Technology Development. Five proposals were received and evaluated by a panel of representatives from various County departments and the Community and Economic Development Advisory Committee (CEDAC). The panel interviewed two proposers and selected Grant Management Associates (GMA) and recommended a one year contract be administered by the Economic & Business Relations Manager. The contract was being processed at the end of 2013 and was anticipated to be executed in early 2014. Economic Development funding would only be used for grant related services that support

economic development and promotions programs, such as the development of Community Visioning and Implementation Plans.

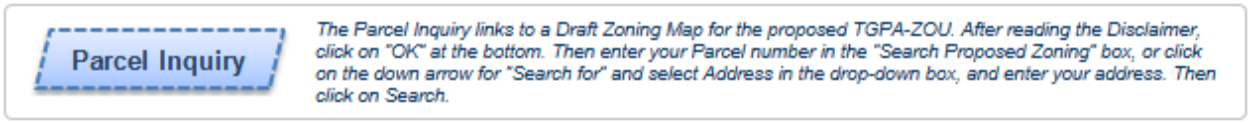
***H. Provide a technology review such as implementation of GIS or establishment of web sites.***

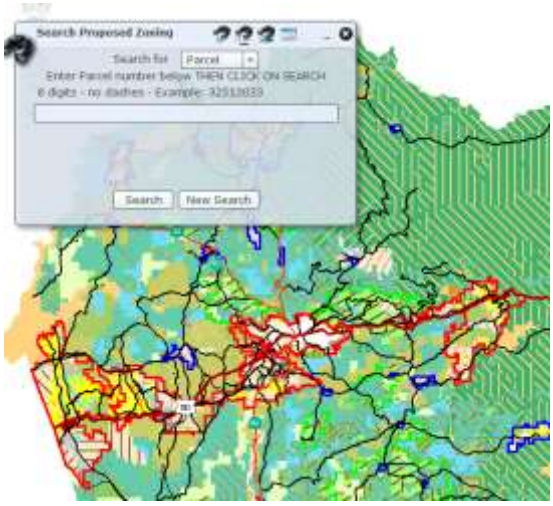
**2013 Accomplishments from the County Surveyor's Office and Information Technologies (IT) Departments**:

The Geographic Information Systems (GIS) Division of the County Surveyor's Office is responsible for developing, managing and delivering a wide variety of integrated data and GIS maps of parcels, roads and political jurisdictions that support County services and is available to the general public. The GIS Division has done an outstanding job as the interface between the plethora of County data and integrating it with geographical referenced information, and making this information readily accessible and available to County departments and the general public.

In 2013, the GIS Division completed migrating the road network from a shapefile environment to a spatial geo-database. It also completed migrating all separate jurisdiction files such as ZOB, CSA, AOB, Fire, School, Water, City, to a jurisdiction spatial geo-database. These GIS technology upgrades allows the GIS Program to manage single data sources and output multiple and custom views of the data. Some of the GIS Program's accomplishments in 2013 are highlighted below.

A Parcel Inquiry web-based tool was developed that links to a Draft Zoning Map for the Targeted General Plan Amendment-Zoning Ordinance Update (TGPA_ZOU).




The Draft Zoning Map uses a modified version of the parcel base and road data developed and maintained by the County's Surveyor's Office – GIS Division.

The interactive tool allows parcel owners to enter either their parcel number or parcel address that results in a data table which shows the current and proposed zoning for the inquired parcel adjacent to an interactive GIS map of the County that can be moved, expanded and zoomed in and out. The GIS Parcel Inquiry weblink is: http://gemp.edcgov.us/zoning_luppu/

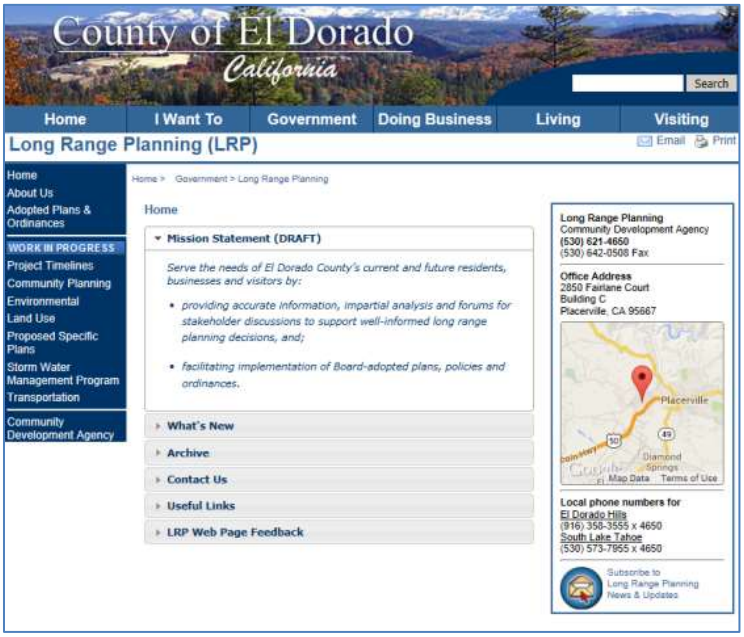
Also for the TGPA-ZOU, various web-based General Plan land use maps were developed and made available to the general public on the County's website at: http://www.edcgov.us/Government/LongRangePlanning/LandUse/TGPA-ZOU_Main.aspx

Other noteworthy GIS activities completed in 2013 include:

- Mixed-use development (MUD) / traditional neighborhood design (TND) permit report on manufacturing/commercial
- GIS layers for Phase II permits for the National Pollutant Discharge Elimination System (NPDES) storm water program for the County's West Slope area
- Development of an interactive web-based map of the County maintained bridges included in the Transportation Division's Capital Improvement Program
- Delivery of a census population density map, and a South County population map

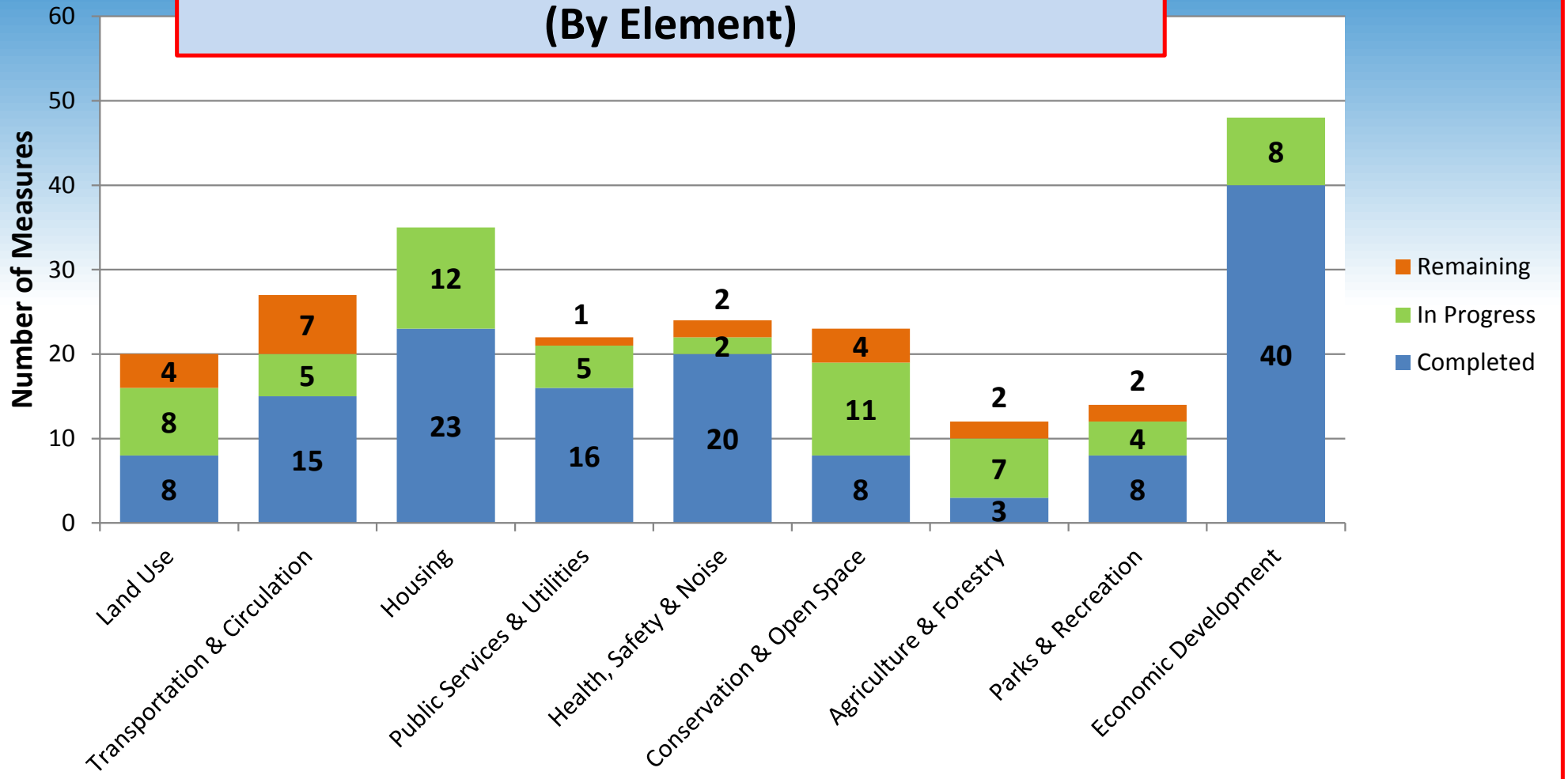
- Review of agricultural parcels
- General Plan Housing Element map of vacant land inventory and Housing Permits for 2013
- GIS verification of the County's Parks and Trail Master Plan
- Geocoding and mapping of business license addresses
- Broadband mapping support
- Special mapping requests for various departments and external agencies (i.e., Specific Plans, Sheriff zones, etc.)

Also in 2013, development of a new Long Range Planning (LRP) web page was initiated. LRP staff coordinated with the County's Information Technologies (IT) Department in designing the layout of the new LRP web pages. Given the constraints of the County's current website structure (which is planned for upgrading in one to two years), the IT staff proposed the use of an "accordion" feature. The new web page, which utilizes the "accordion" feature, was launched in January 2014. It is located on the County's main website: www.edcogov.us under Departments. The direct link to the LRP Home Page is: http://www.edcgov.us/LongRangePlanning/



# Appendix A1

## Status of General Plan Implementation Measures (By Element)



# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 1 | In Progress | LU-A | Review the Zoning Ordinance (Title 17 of the El Dorado County Code) to identify revisions that provide consistency with General Plan land use designations and updated development standards. | 5.3-1(b), 5.3-3(b) | Viewshed Protection: Protect views from Scenic Corridors, Reduce effects of nighttime outdoor lighting. | Ordinance update in process. Anticipated completion October 2014 |
| 2 | Completed | LU-B | Incorporate General Plan consistency review for all development proposals and capital improvement projects. [Also refer to Measure LU-C for consistency review of ministerial projects.] | 5.1-3(a ) | Establish a General Plan conformity review for all development projects | |
| 3 | Completed | LU-C | Establish performance standards to be included in the Zoning Ordinance to allow applicants for ministerial projects to demonstrate compliance with General Plan policies and with other applicable County ordinances, policies, and regulations. | 5.1-3(a ) | Establish a General Plan conformity review for all development projects | See LU-B. General Plan conformity reviews are included as part of in the existing Zoning Ordinance. Standards will also be included as part of the Zoning Ordinance Update. |
| 4 | In Progress | LU-D | Revise the Zoning Ordinance to ensure that all uses permitted by right in any zoning district are compatible. Allow potentially incompatible uses subject to a discretionary review process with performance standards | 5.1-3(b) | Require development projects to be located and designed in a manner that avoids adjacent incompatible land uses | To be included as part of the Zoning Ordinance Update. |
| 5 | In Progress | LU-E | Review and identify needed revisions to the County of El Dorado Design and Improvements Standards Manual. | | | The Development Services and Transportation Divisions are moving forward with the updating of the county "Design Manual" ("Land Development Manual") with the ongoing main focus of revising the Standard Plans to reflect the new General Plan and current engineering. A secondary effort is the rewriting of the text of the manual to include modifications to the format of the manual and the processes in which the revision and updating will take. Part of interim guidelines and included in proposed Onsite Wastewater Treatment System Ordinance, Complete Streets and mixed use development standards. |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 6 | In Progress | LU-F1 | Create and adopt Community Design Review standards and guidelines and identify new Community Design Review Districts. This would include working with community groups to develop standards. Identify and seat community advisory members within two years of General Plan adoption. Identify community boundaries and create and adopt standards and guidelines within five years of General Plan adoption. | | | Community Planning initiated in 2011. Framework for communities interested in creating community visions and plans under development. |
| 7 | In Progress | LU-F2 | See body of LU-F1 above. Identify community boundaries and create and adopt standards and guidelines within five years of General Plan adoption. | | | Community Planning initiated in 2011. Framework for communities interested in creating community visions and plans under development. |
| 8 | In Progress | LU-G1 | Establish a Historic Design Review Combining Zone District. Identify suitable areas for application of the district to develop design standards or guidelines for such districts. Begin identification of potential historic districts immediately upon General Plan adoption. | | | Deferred until after adoption of comprehensive Zoning Ordinance Update. |
| 9 | In Progress | LU-G2 | See body of LU-G1 above. Prepare and adopt draft ordinance and standards within three years. | | | Deferred until after adoption of comprehensive Zoning Ordinance Update. |
| 10 | Remaining | LU-H1 | Develop and implement a program that addresses preservation of community separation, as outlined in Policy 2.5.1.3. The program shall address provisions for a parcel analysis and parcel consolidation/transfer of development rights. | 5.1-2 | Create distinct community separators | Deferred until after adoption of the TGPA-ZOU. |
| 11 | Remaining | LU-H2 | See body of LU-H1 above.<br><br>Complete parcel analysis and make recommendation(s) to the Board of Supervisors within five years of General Plan adoption. | 5.1-2 | Create distinct community separators | Deferred until after adoption of the TGPA-ZOU. |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 12 | Remaining | LU-I | Inventory potential scenic corridors and prepare a Scenic Corridor Ordinance, which should include development standards, provisions for avoidance of ridgeline development, and off-premise sign amortization. | 5.3-1(b), 5.3-1 (c ) | Viewshed Protection: Protect views from Scenic Corridors, Reduce effects of nighttime outdoor lighting, Extend limitations on ridgeline development within scenic corridors or identified viewing locations to include all development. | Deferred until after adoption of comprehensive Zoning Ordinance Update. |
| 13 | Remaining | LU-J | If segments of State Route 49 are identified as appropriate for State Scenic Highway status during preparation of the Scenic Corridor Ordinance, prepare documentation in support of having those segments identified as a State Scenic Highway. | 5.3-1(d) | Nominate SR 49 for Scenic Highway designation | Deferred until after adoption of comprehensive Zoning Ordinance Update. |
| 14 | Completed | LU-K | Develop and maintain an inventory of vacant lands within each Community Region and Rural Center. This would include working with community groups to identify appropriate uses for such parcels, including residential development and establishment of communities | | | |
| 15 | Completed | LU-L1 | Develop a program to monitor development, population, and employment trends and to provide periodic updates to the Board of Supervisors. Develop program within three years of General Plan adoption. | | | Tracking system has been developed and is maintained annually. Information provide to Board with 1- and 5-year GP monitoring reports. |
| 16 | Completed | LU-L2 | See body of LU-L1 above. Give first report to the Board of Supervisors within five years of General Plan adoption. | | | General Plan Implementation and EIR Mitigation Monitoring Plan updates to be submitted as part of the 2014 annual report and annually thereafter. |
| 17 | Completed | LU-L3 | See body of Measure LU-L1 above. Present additional reports to the Board of Supervisors every five years after first report. | | | |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 18 | Completed | LU-M | Develop a program to monitor General Plan policies and programs and General Plan Environmental Impact Report mitigations. Provide periodic updates to the Board of Supervisors and Planning Commission. | | | General Plan Implementation and EIR Mitigation Monitoring Plan updates to be submitted as part of next annual report, Spring 2014 and annually thereafter. |
| 19 | Completed | LU-N | Develop procedures to be used by applicants to substantiate a request for exemption from General Plan policies due to economic viability. | | | |
| 20 | In Progress | LU-O | Coordinate the following with TRPA and other agencies having land use jurisdiction in the Tahoe Basin: 1) Preparation and adoption of a Community Plan for the Tahoma/Meeks Bay area, 2) Identification of additional affordable housing opportunities, 3) Modification of the County's Zoning Ordinance to be consistent with, or adopt as County Code, the TRPA Code of Ordinances and Plan Area Statements; and 4) Implementation of actions recommended in TRPA's periodic Threshold Evaluation Reports. | 5.14-1 | Cooperate with the TRPA in the implementation of actions recommended in the (TRPA) Threshold Evaluation Report. | Items 3 and 4 are being reviewed as part of the Zoning Ordinance Update (October 2014). |
| 21 | Completed | TC-A | Prepare and adopt a priority list of road and highway improvements for the Capital Improvement Program (CIP) based on a horizon of five years. The Board of Supervisors shall update the CIP every two years, or more frequently | | | |
| 22 | Completed | TC-B | Revise and adopt traffic impact fee program(s) for unincorporated areas of the county and adopt additional funding mechanisms necessary to ensure that improvements contained in the fee programs are fully funded and capable of being implemented concurrently | 5.4-1(e ) | | |
| 23 | In Progress | TC-C | Revise and update the Design and Improvement Standards Manual (DISM). | | | Long Range Planning, Transportation, and Planning Services are currently in process in replacing the DISM with the Land Development Manual and Standards Plans. |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 24 | Completed | TC-D | Continue to identify and pursue appropriate new funding sources for transportation improvements, road maintenance, and Transportation operations. Grant funds from regional, state, and federal agencies should be pursued and utilized | | | |
| 25 | In Progress | TC-E | Develop and adopt an ordinance to protect rights-of-way for future road improvements from encroachment by new development. | | | |
| 26 | Completed | TC-F | Develop and implement a countywide program to annually monitor county road and state highway segment and intersection conditions to ensure that acceptable Levels of Service are maintained. | 5.4-1(c ), 5.4-2 | Expand list of roadway segments allowed to operate at LOS F. | |
| 27 | Remaining | TC-G | Work with the cities of Placerville and South Lake Tahoe to establish a system of designated truck routes through urban areas. | | | |
| 28 | Completed | TC-H | Work with the El Dorado County Transportation Commission, the Tahoe Regional Planning Agency, and transit providers in the county to periodically review and update the short-range transit plans in the county. | | | |
| 29 | Completed | TC-I | Encourage transit providers, the El Dorado County Transportation Commission, the Tahoe Transportation District, and the Tahoe Regional Planning Agency, to prepare, adopt, and implement a long-range strategic transit master plan for the County or sub-areas | | | |
| 30 | Remaining | TC-J | Work with the El Dorado County Transportation Commission, Tahoe Transportation District, the Tahoe Regional Planning Agency, and other agencies to identify right-of-way needs within designated transit corridors and to acquire needed rights-of-way. | | | |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 31 | Completed | TC-K | Work with the El Dorado County Transportation Commission, Tahoe Transportation District, Tahoe Regional Planning Agency, and Sacramento Area Council of Governments Board to identify and pursue funding for transit. | | | |
| 32 | Completed | TC-L | Develop a funding mechanism that requires new development to pay for additional park-and-ride lots identified by transit providers or Caltrans. Work with transit providers to determine the need for additional or expanded park-and-ride lots | | | |
| 33 | Completed | TC-M1 | Update the Bikeway Master Plan, consistent with the Bicycle Transportation Act and in coordination with the El Dorado County Transportation Commission, Sacramento Area Council of Governments, California Transportation Division, Tahoe Regional Planning | | | The Bicycle Transpiration Plan is typically updated every 5 years. The last update was completed in 2010 and adopted by the Board of Supervisors in November 2010. The next update will be completed in 2015. (AN) |
| 34 | Completed | TC-M2 | See body of TC-M1 above. Plan Adoption: Second full fiscal year following General Plan adoption. | | | |
| 35 | Completed | TC-N | Continue to identify and pursue appropriate funding sources for bikeway construction. Grant funds from regional, state, and federal agencies should be pursued and utilized when compatible with the General Plan policies and long-term local funding capability | | | |
| 36 | Completed | TC-O | Work with other agencies to provide facilities that help link bicycles to other transportation modes, including provision of bike racks or space on buses and parking or lockers for bicycles at transportation terminals. | | | |
| 37 | Completed | TC-P | Use appropriate zoning in designated rail corridors to ensure preservation of rail facilities for future local rail use. | | | |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 38 | Remaining | TC-Q | Work with the El Dorado County Transportation Commission, the Sacramento Area Council of Governments, the City of Folsom, and Sacramento Regional Transit to support improvement, development, and expansion of rail service in El Dorado County. | | | |
| 39 | Remaining | TC-R | Participate with the El Dorado County Transportation Commission, the El Dorado County Transit Authority, the Sacramento Area Council of Governments, the City of Folsom, and Sacramento Regional Transit to support the identification of Transit Corridors. | | | |
| 40 | Completed | TC-S | Develop and implement a program to ensure that the concurrency requirements contained in this Transportation and Circulation Element are being enforced. | | | |
| 41 | Completed | TC-T | Develop and adopt a program of guidelines for reimbursement of development for costs associated with construction of regional road improvements. | | | |
| 42 | In Progress | TC-U | Revise the County Design Improvement Standards Manual to allow for narrower streets and roadways. The standards should recognize the need to minimize visual impacts, preserve rural character, and ensure neighborhood quality to the maximum extent possible | 5.3-2 | Design new streets and improvements to minimize effects on rural character to the extent possible. | Long Range Planning, Transportation, and Planning Services are currently in process in replacing the DISM with the Land Development Manual and Standards Plans. |
| 43 | In Progress | TC-V1 | Work with Sacramento County and the City of Folsom to identify potential alignments for a new arterial roadway from the west side of El Dorado Hills Business Park to U.S. Highway 50. | | | |
| 44 | Remaining | TC-V2 | Implement a growth control mechanism for all new discretionary and ministerial development (which includes approved development that has not yet been built) that would access Latrobe Road or White Rock Road. | | | A cap has been placed on the El Dorado Hills Business Park to alleviate Level of Service concerns at the Latrobe Road and White Rock Intersections. The TGPA/ZOU EIR will be analyzing existing traffic impacts that will assist in determining possible options allowing for the removal of the employment cap. |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 45 | Remaining | TC-V3 | Identify potential rights-of-way needed for establishment of a frequent transit service operating on exclusive right-of-way to the El Dorado Hills Business Park from residential communities in El Dorado County and from the City of Folsom. | 5.4-1(d) | Amend the Circulation Diagram to include a Frequent Transit Service on exclusive right-of-way to the El Dorado Hills Business Park. | A cap has been placed on the El Dorado Hills Business Park to alleviate Level of Service concerns at the Latrobe Road and White Rock Intersection. The TGPA/ZOU EIR will be analyzing existing traffic impacts that will assist in determining possible options allowing for the removal of the employment cap. |
| 46 | Remaining | TC-W | Develop a procedure to review truck routes associated with discretionary projects to ensure project-related heavy truck traffic noise impacts are minimized. | 5.10-1(b) | Establish truck routes to minimize noise at noise-sensitive land uses. | |
| 47 | In Progress | TC-X | Develop and adopt a formal program to review signalized intersections that may benefit from synchronization. Include synchronization of intersections that could benefit in the Capital Improvement Program. | 5.11-4 | Synchronize Signalized Intersections: Implement Mitigation 5.11-2(f) for the Roadway Constrained 6-Lane "Plus" Alternative. | In 2012, the County applied for and was awarded a federal grant to synchronize three intersections on Green Valley Road at Francisco Dr, El Dorado Hills Blvd and Silva Valley Pkwy. (AN) The TIM Fee program has funding reserved for future implementation for Intelligent Transportation Systems (ITS) improvements. |
| 48 | Completed | PS-A | Establish a means, either through formal agreement or through the identification of formal contacts, for various County agencies and departments to communicate with the following non-County public service and utility providers regarding planning for the provisions of services. | | | This measure is addressed as part of all discretionary and ministerial development applications. |
| 49 | Completed | PS-B | Review the County Code to identify revisions that project is consistent with the long range and capital improvement plans of County and other service providers and Require and specify the nature of findings to be made by the approving body that a proposed project meets minimum standards for the provision of emergency services, including emergency water supply and conveyance and emergency access, and emergency service facilities. | | | |
| 50 | Completed | PS-C1 | Develop and regularly update an infrastructure fee program. | | | TIM Fees recently updated consistent with measure; other infrastructure provided by outside agencies. See Measure ED-SS for more information. |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 51 | Completed | PS-C2 | See body of PS-C1 above. Adopt fees within three years of General Plan adoption. | | | The existing Transportation Impact Mitigation (TIM) fee program is routinely updated on an annual basis. |
| 52 | Completed | PS-D | Develop a program to improve and promote appropriate sewage disposal systems in areas that do no have public wastewater disposal service. | | | Implemented and Ongoing |
| 53 | Completed | PS-E | Work with the Water Agency and public water providers to establish a water resources development and management program. | | | |
| 54 | Completed | PS-F | Work with the Water Agency and water service providers to establish a process to review ministerial and discretionary project applications reliant upon surface or groundwater for the ability to be adequately served by the proposed water system. | 5.5-3, 5.5-1(b) | Increase the likelihood that groundwater supplies are conserved and physically available to meet the needs of future development. Ensure that surface water supplies are adequate and physically available before any new development occurs. | |
| 55 | Remaining | PS-G | Encourage water purveyors to design water supply and infrastructure projects in a manner that avoids or reduces significant environmental impacts to the maximum extent feasible. | 5.5-2, 5.5-4 | Encourage mitigation of the environmental impact of future water supply and infrastructure projects. Encourage mitigation of the environmental impacts related to future expansion of wastewater treatment capacity. | |
| 56 | Completed | PS-H | Develop and implement a water use efficiency program for application to existing and new residential, commercial/industrial, and agricultural water users for those areas not served by a water purveyor with an existing water use efficiency program. | 5.5-1 (c ), 5.5-7 | Support development of water conservation and recycling projects that can help reduce water demand and projected shortages. Encourage use of recycled water in new development served by public wastewater systems. | Water use efficiency is included as part of the California Energy and Plumbing Code. |



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|---|---|---|---|---|---|---|
| 57 | Completed | PS-I | Work with the Water Agency to develop and implement a program to identify areas having groundwater limitations. | | | |
| 58 | Completed | PS-J | Establish a process to review discretionary permit applications reliant upon any non-public community wastewater treatment system for the ability to be adequately served by the proposed system. Process to include development of wastewater treatment stand alone systems. | 5.5-8 | Monitor performance of septic systems annually. | An analysis of waste water systems is reviewed by the Environmental Health Unit as part of all discretionary development applications. |
| 59 | In Progress | PS-K | Develop and implement a monitoring program for septic systems. | 5.5-8 | Monitor performance of septic systems annually. | A septic monitoring program is currently under review by the Environmental Management Division. |
| 60 | In Progress | PS-L | Develop and implement a countywide drainage management program. | | | An existing drainage program has been implemented in the Tahoe Basin. West Slope drainage management is to be included as part of the West Slope NPDES Phase II Small MS4 General Permit. |
| 61 | Completed | PS-M | Prepare a Construction and Demolition Debris Diversion Ordinance for inclusion in the County Code. | 5.6-3 | Adopt a Construction and Debris Diversion Ordinance. | |
| 62 | In Progress | PS-N | Establish a means, either through formal agreement or through the identification of formal contacts, to coordinate a long-term planning process with private utility providers regarding the location and types of future utility delivery facilities. | 5.8-7 | Encourage coordination between utilities and school districts | |
| 63 | Completed | PS-O | Develop standards for energy-efficient site development and construction. | | | These standards are included as part of the California Energy Code. |
| 64 | Completed | PS-P1 | Establish a working group to develop and oversee implementation of minimum countywide standards for emergency response times, emergency access, emergency water supply and conveyance, and staffing ratios. | | | |
| 65 | Completed | PS-P2 | See body of PS-P1 above. Meet standard requirements within seven years of General Plan adoption. | | | |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 66 | Completed | PS-Q | Establish a procedure for and the conditions under which coordination of the planning efforts of the County and the school districts will take place. | | | |
| 67 | In Progress | PS-R | Develop program for attracting a four-year college or university to the county. | | | |
| 68 | In Progress | PS-S | Provide support for the development of a performing arts center. | | | |
| 69 | Completed | PS-T | Compile and make available information regarding typical water demands associated with rural residential development that is dependent upon groundwater. Post information on the County's internet web site and make available in hard copy. | | | |
| 70 | Completed | HS-A | Maintain emergency response procedures and programs, including agreements with other local, state, and federal agencies, to provide coordinated disaster response and programs to inform the public of emergency preparedness and response procedures. | | | |
| 71 | Completed | HS-B | Work with the local Fire Safe Councils, fire protection districts, U.S. Forest Service, and California Department of Forestry and Fire Protection to develop and implement a countywide Wildfire Safety Plan. | | | |
| 72 | Completed | HS-C | Develop a program to collect, maintain, and update geological, seismic, avalanche, and other geological hazard information. | | | The County Surveyor's office regularly receives natural hazard information from the State OES and related agencies. This information is routinely updated and shared with other agencies as needed. |
| 73 | Completed | HS-D | Develop and adopt standards to protect against seismic and geologic hazards. | 5.9-2(b) | Require geologic analysis in areas prone to geological or seismic hazards. | Included as part of the California Building Code |
| 74 | Completed | HS-E | Adopt a Naturally Occurring Asbestos Disclosure Ordinance that includes the provisions in the policy described in Policy 6.3.1.2. | 5.8-9(c ) | Provide disclosure of Naturally Occurring Asbestos (NOA) on properties. | COMPLETE. (1) Asbestos disclosure required per EDC Ordinance Chapter 8.44, (2) asbestos reports and records must be transferred during real estate transaction per AQMD Rule 223-2. |



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# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 75 | Completed | HS-F | Develop a program to track asbestos-related information as it pertains to El Dorado County. Report results to the Board of Supervisors annually. | 5.8-9(d) | Conduct annual reporting regarding asbestos. | |
| 76 | Completed | HS-G | Adopt California Building Code revisions. | | | |
| 77 | Completed | HS-H | Continue to participate in the Federal Flood Insurance Program, maintain flood hazard maps and other relevant floodplain data made available by other sources, and revise or update this information as new information becomes available. | 5.8-6 | Prohibit creation of new parcels and development of existing parcels that are entirely within dam failure inundation areas. | Measures have been included in the Flood Damage Prevention Ordinance, adopted September 23, 2008. |
| 78 | Remaining | HS-J | Establish a working group to address cross-jurisdictional noise issues. | | | |
| 79 | Completed | HS-L | Update airport master plans and work with appropriate Airport Land Use Commissions to update Comprehensive Land Use Plans to reflect noise levels in the year 2025. | 5.10-4 | Update Airport Master Plans and Comprehensive Land Use Plans | Completed as part of the Airport Land Use Compatibility Plan, adopted June 28, 2012 and administered by the EDCTC. |
| 80 | Completed | HS-M | Maintain and update the Hazardous Waste Management Plan for management of hazardous waste to protect the health, safety, and property of residents and visitors, and to minimize environmental degradation. | | | The Environmental Management Division operates a hazmat incident response team on a 24/7 basis. |
| 81 | Completed | HS-N | Collect and maintain information on sites known, or suspected to be contaminated by hazardous materials. The information shall include current data from the California Department of Toxic Substances Control's Hazardous Waste and Substance | 5.8-4 | Remediate contamination before construction of new development on suspected contaminated sites. | Updated continuously. Most recently, EM staff updated APN numbers in El Dorado Hills to mirror recent re-numbering. |
| 82 | Remaining | HS-O | Develop, implement, and update, as necessary, a plan for the storage, transport, and disposal of hazardous materials used at County-operated facilities. | | | |
| 83 | Completed | HS-P | Enhance and maintain the Air Quality Management District's air quality public education program. | | | |



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| 84 | Completed | HS-Q | Develop a program to encourage use of mechanisms to reduce peak hour vehicle trips consistent with Policy 6.7.2.2. | 5.4-2 | Implement 1996 General Plan Alternative Mitigation Measures 5.4-1(a), 5.4-1(b) or 5.4-1(d). | Ongoing. District developing Electric Vehicle Incentive Program (Drive Clean!) with EDCTC CMAQ and District funds to reduce emissions and peak hour congestion. |
| 85 | Completed | HS-R | Identify fleet vehicles that could successfully be replaced with more fuel efficient or alternative fuel vehicles. When those fleet vehicles are due for replacement, thoroughly investigate their replacement with such vehicles. | | | An alternate fuel vehicle replacement program is ongoing. |
| 86 | Completed | HS-S | Develop and implement an incentive program to encourage homeowners to replace high-pollution emitting non-EPA-certified wood stoves. | 5.11-2 (e ) | Develop incentive program to encourage uses of newer cleaner-burning EPA certified wood stoves. | |
| 87 | Completed | HS-T | Adopt and/or update air quality regulations regarding agricultural and fuel reduction burning, construction emissions, mobile source emissions, fugitive dust, and volatile organic emissions. | 5.11-1 | Use updated recommendations to analyze and mitigate potential air qualify impacts. | |
| 88 | Completed | HS-U | Monitor existing, ongoing studies related to effects of air pollution on vegetation. | | | |
| 89 | Completed | HS-V | Amend prescriptive standard for the Fugitive Dust Prevention and Control Plan and Contingent Asbestos Hazard Dust Mitigation Plan. | 5.8-9(b) | Strengthen Naturally Occurring Asbestos (NOA) and dust protection standards. | |
| 90 | Completed | HS-W1 | Survey and prioritize safety improvements on County roads. Develop financing programs for making necessary improvements. Complete survey within three years of General Plan adoption. | | | The Transportation Division has an annual road safety analysis and financing program in place. |
| 91 | Completed | HS-W2 | See body of Measure HS-W1 above. Develop financing programs within eight years of General Plan adoption. | | | |



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| 92 | In Progress | HS-I | To provide a comprehensive approach to noise control, adopt a Noise Ordinance. | 5.10-1(a ), 5.10-3 | Limit noise-generating construction activities. Protect noise-sensitive land uses from unacceptable noise levels caused by stationary noise sources. | This measure is to be completed as part of the TGPA-ZOU project. |
| 93 | In Progress | HS-K | Review the Zoning Ordinance and identify changes that would accomplish the following: an airport combining zone district for each of the Safety Zones as defined in the comprehensive land use plans for each of the County's public airports; | | | To be included as part of the Zoning Ordinance Update. |
| 94 | In Progress | CO-A | Review the Zoning Ordinance to identify revisions that: (A) incorporate tree canopy coverage and preservation standards outlined in Policy 7.4.4.4; (B) identify standards for use of native plants in landscaping; (C) Establish a Historic Design Control Combining Zone District; (D) Develop Buffer standards for new nonmining uses adjacent to existing mining operations; (E) Develop standards for minimizing erosion and sedimentation associated with earthwork and grading. | 5.9-4(b), 5.9-6(b), 5.9-6 (c ), 5.12-1(b), 5.12-1(g), 5.13-1(d), 5.13-1(e ) | Restrict development or disturbance on steep slopes. Establish buffers between new development and mining operations. Require 20-acre minimum parcel sizes. Minimize erosion and maximize retention of natural vegetation. Develop and implement an oak tree preservation ordinance. Define Historic Design Control Districts. Prohibit significant alteration or destruction of NRHP/CRHR-listed properties. | Items B-E have been incorporated into the TGPA-ZOU project. Item A will be under review as part of the 2014 Biological Resource Policy Updates. |
| 95 | In Progress | CO-C | In coordination with the Resource Conservation Districts, develop a roadside maintenance program that addresses roadside drainage, the protection of adjacent surface waters, and vegetation control. | | | |
| 96 | Completed | CO-D | Develop an agricultural permit program that includes standards for agricultural operations comparable to those in the Grading Ordinance and that considers other issues important to the protection of agricultural lands. | 5.9-4(b) | Apply erosion control measures to agricultural grading. | The Agriculture Department has implemented the Ag Grading Permit process and has required the use of the adopted Best Management Practices (BMPs). The program is working as intended. |



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| 97 | Completed | CO-E1 | Request that the California Geological Survey conduct a non-metallic mineral survey for the County. Manage resources appropriately given the results of the survey. Request survey by state within two years of General Plan adoption. | | | Study was completed in 2005 |
| 98 | Complete | CO-E2 | See body of Measure CO-E1 above. Amend General Plan upon completion of survey by state. | | | |
| 99 | Completed | CO-G | Create guidelines for development projects that may affect surface water resources. The guidelines should include: definition(s) of surface water resources; criteria for determining the presence of surface water resources; buffer standards; and mitigation | | | |
| 100 | Completed | CO-H | Prepare and adopt an ordinance revision to permit the use of domestic gray water for irrigation purposes. | 5.5-8 | Monitor performance of septic systems annually. | This measure is addressed in the 2013 Plumbing Code. |
| 101 | Completed | CO-I | Evaluate alternatives to the use of salt for snow removal on County roads. | | | Research for various alternatives to salt for snow removal is ongoing. |
| 102 | Completed | CO-J | Develop and implement a program to perform water quality analysis and monitoring of the County's recreational waters. | | | |
| 103 | In Progress | CO-K | Work cooperatively with the State Department of Fish and Game and U.S. Fish and Wildlife Service to implement the gabbro soils rare plant ecological preserve and recovery program and to develop a long-term preserve strategy. | 5.12-2(b) | Establish and manage ecological preserves | Ongoing cooperative effort with Pine Hill Preserve Management Team (local, state & federal). |
| 104 | In Progress | CO-L | Develop guidelines for the preparation of biological study reports. | | | Measure will be under review through the Biological Resources Policy Updates - 2014 |
| 105 | In Progress | CO-M1 | Develop and implement an Integrated Natural Resources Management Program (INRMP) consistent with Policy 7.4.2.8 | | | Measure will be under review through the Biological Resources Policy updates; contract to Board of Supervisors March, 2014 |
| 106 | In Progress | CO-M2 | See body of Measure CO-M1 above. Within three years of General Plan adoption, develop framework for acquisition strategy and monitoring program and begin acquisition. | | | Measure will be under review through the Biological Resources Policy updates; contract to Board of Supervisors March, 2014 |



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| 107 | In Progress | CO-N | Review and update the Important Biological Corridor (-IBC) land use Overlay District. | 5.12-3(b) | Apply -IBC Overlay to lands identified as having high wildlife habitat values. | Measure will be under review through the Biological Resources Policy updates; contract to Board of Supervisors March, 2014. |
| 108 | In Progress | CO-O | Prepare and adopt a riparian setback ordinance. | | | Interim guidelines adopted by PC. To be incorporated into Zoning Ordinance Update. |
| 109 | In Progress | CO-P | Develop and adopt an Oak Resources Management Plan. | 5.12-1(f) | Require mitigation for loss of woodland habitat. | Existing OWMP Rescinded September 4, 2012. New OWMP to be considered as part of the 2014 Biological Resources Policy updates. |
| 110 | Remaining | CO-Q | Develop and adopt a Cultural Resources Preservation Ordinance. | 5.3-1(c ) | Adopt a Cultural Resources Ordinance. | Deferred until after adoption of comprehensive Zoning Ordinance Update. |
| 111 | In Progress | CO-R | Maintain a confidential cultural resources database of prehistoric and historic resources, including the location and condition of pioneer cemetery sites. Information may be made available consistent with state and federal law. | 5.12-1(d) | Develop and implement an Integrated Natural Resources Management Plan. | An existing cultural resources database is in place. However, an Integrated Natural Resources Management Plan (INRMP) has not yet been developed. Creation of an INRMP will be under review as part of the 2014 Biological Resources Policy updates. |
| 112 | Remaining | CO-S | Investigate becoming a Certified Local Government through the State Office of Historic Preservation. | | | |
| 113 | Remaining | CO-T1 | Work with the State Department of Parks and Recreation to identify the view shed of Marshall Gold State Historic Park (Coloma) and establish guidelines for development within that view shed. Identify view shed within four years of General Plan adoption. | | | |
| 114 | Remaining | CO-T2 | See body of Measure CO-T1 above. Adopt standards within six years of General Plan adoption. | | | |
| 115 | Completed | CO-B | Coordinate with the Resource Conservation Districts to address erosion control issues. | | | |
| 116 | In Progress | CO-U | Fully develop requirements for Biological Studies to be prepared in support of Policy 7.4.1.6. Fully develop guidelines for Important Habitat mitigation. Mitigation proposals are to be included in biological resources studies. | 5.12-1(e ) | Adopt a No-Net-Loss Policy and Mitigation Program for important habitat. | Included as part of the INRMP. See Measures CO-L and CO-M. Measure will be under review through the 2014 Biological Resources Policy Updates |



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| 117 | In Progress | AF-A | Review the Zoning Ordinance (Title 17 of the El Dorado County Code) to identify revisions that accomplish items A-F | 5.2-1 (a - f) | Reduce potential conversion of important farmland, grazing land, land currently in agricultural production or from conflict that may result in cancellation of a Williamson Act Contract. | To be included as part of the Zoning Ordinance Update (ZOU) |
| 118 | Completed | AF-B | Develop and implement a procedure for processing requests to apply the Agricultural District (-A) overlay. | | | Dept. of Agriculture staff utilize a formal procedure for applying the Agricultural District (-A) Overlay to development projects. |
| 119 | In Progress | AF-C | Develop and implement a procedure for evaluating the suitability of land for forest production uses, a process to review and update The Procedure for Evaluating the Suitability of Land for Agricultural Use (1993); and to implement recommendations. | | | Agricultural Department staff is in the process to expand soils of local importance for vineyards used to evaluate parcels. Completion of the process is anticipated by January 2015. |
| 120 | In Progress | AF-D | Develop and implement new programs to ensure the long-term conservation, enhancement, and use of viable agricultural lands, including grazing lands. | 5.2-2 | Limit extent of ranch marketing activities, wineries and other nonagricultural uses within agricultural designations. | The Board adopted one aspect of long term conservation, enhancement and use - the Winery Ordinance. (AF-D to be implemented through the TGPA & ZOU) |
| 121 | In Progress | AF-E | Develop and implement a method to identify and officially recognize rangelands currently used for grazing or suitable for sustained grazing of domestic livestock. | | | Staff have identified 4 criteria to use for analysis - Soil type, slope, current use, parcel size (Through the ZOU, grazing WACs are being rezoned Agricultural Grazing) |
| 122 | In Progress | AF-F1 | Establish a threshold of significance for the loss of agricultural land, a procedure for evaluating a project's contribution to the loss, and means to mitigate losses so that the established threshold is not exceeded. Establish threshold within five years. | 5.2-1 (c ) | Identify Acceptable Mitigation for Loss of Agricultural Land. | Measure will be under review through the Biological Resources Policy Updates - 2014 |
| 123 | Remaining | AF-F2 | See body of Measure AF-F1 above. Establish procedure for review and mitigation within eight years of General Plan adoption. | 5.2-1 (c ) | Identify Acceptable Mitigation for Loss of Agricultural Land. | |
| 124 | Completed | AF-G | Develop a procedure for the Agricultural Commission to review and provide recommendations regarding discretionary and capital improvement projects that may affect agricultural, grazing, and forestry lands. | | | |



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| 125 | Remaining | AF-H | Develop a program to coordinate with the Water Agency and water purveyors to develop and secure a long-term supply of agricultural water and allocate water from increased efficiencies to agricultural use. | | | |
| 126 | Completed | AF-I | Develop a program to enhance long-term fiscal stability of agricultural operations, including use of conservation easements, Williamson Act contracts, land trusts, and transfer of development rights. | 5.2-2 | Limit extent of ranch marketing activities, wineries and other nonagricultural uses within agricultural designations. | The County has developed several programs to enhance the long term fiscal stability of agricultural operations, including Williamson Act Contracts. The County is reviewing additional activities and programs for economic enhancement of agricultural operations including conservation easements, land trusts and development right transfers. |
| 127 | In Progress | AF-J | Complete an inventory of agricultural lands in active production and/or lands determined by the Agricultural Commission to be suitable for agricultural production. Following inventory, perform suitability review and amend Agricultural District boundaries. | 5.2-3 | Incorporate productive and suitable agricultural land into Agricultural Districts. | The Agricultural District analysis and expansion is part of the TGPA-ZOU project. |
| 128 | In Progress | AF-K | Develop Agricultural Best Management Practices (BMPs) for adoption by the Board of Supervisors and use by agricultural operations in complying with General Plan policies 7.1.2.1, 7.1.2.7, 7.3.3.4, and 7.4.2.2. | 5.9-4(c ), 5.12-4(b) | Apply erosion control measures to agricultural grading. Implement multiple Policies to reduce impacts on sensitive habitats. | Agricultural Best Management Practices (BMP's) have been completed with approximately 20 BMP's posted on the Agricultural Department website. |
| 129 | Completed | PR-A | Prepare and implement a Parks Master Plan and Parks and Recreation Capital Improvement Program. | | | A final Parks and Trails Master Plan and CIP was approved on March 27, 2012 |
| 130 | In Progress | PR-B | Develop and implement a program to identify and pursue alternative methods to fund and/or support the acquisition and operation of parks and recreation facilities, including raw land. | | | Alternate funding programs for park acquisition and operations are being developed. |
| 131 | Completed | PR-C | Update the Bikeway Master Plan and Hiking and Equestrian Trails Master Plan. Both plans shall contain provisions for regular plan monitoring and updating. | | | A hiking and equestrian trails plan was approved as part of the completed Parks and Trails Master Plan, approved on March 27, 2012. |
| 132 | Remaining | PR-D | Plan for and develop interpretive centers for historical trails and sites. | | | |



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| 133 | Completed | PR-E | Maintain and implement the El Dorado County River Management Plan (Environmental Stewardship & Planning 2001) for management of recreational activities on the South Fork of the American River. | | | A River Management Plan has been developed for the South Fork American River. |
| 134 | Completed | PR-F | Develop a program to facilitate the formation of independent recreation districts. | | | |
| 135 | Completed | PR-G | Work with independent recreation districts to support efforts to provide parks and recreation facilities. | | | Coordination between EDHSCD, CPCSD & GDRD on going as part of subdivision review process |
| 136 | In Progress | PR-H | Develop and implement a parks and recreation fee program that addresses the following: A. For projects subject to Quimby Act requirements; B. For projects not subject to Quimby Act; C. Coordination with local parks and recreation providers | 5.7-5 | Provide funding mechanisms for new park development. | This is included in the Master Plan. A Nexus study has been included in the current budget but a contract has not been executed. |
| 137 | Completed | PR-I | Develop and implement a program to encourage major recreational event sponsors to hold events in El Dorado County. | | | El Dorado County Board of Supervisors created the Economic Development/Parks Division of the Chief Administrative Office in 2013. The Park Division is working with Economic Development to increase recreational tourism to the County. The County has partnered with the City of South Lake Tahoe to develop a Master Plan for the East Slope of El Dorado County which is also focused on tourism. |
| 138 | In Progress | PR-J1 | Establish a working group or formal contacts to coordinate the actions of resource-based recreation providers in the county, including the Airports, Parks and Grounds of the County General Services Department. | | | The County is in the process of establishing a working group of resource-based recreation providers to address planning and project review issues. |
| 139 | In Progress | PR-J2 | See body of PR-J1 above. Develop plan to address planning and project review within three years thereafter. Coordination will be ongoing. | | | The County is in the process of establishing a working group of resource-based recreation providers to address planning and project review issues. |
| 140 | Completed | PR-K | Identify federal and state lands that could be transferred to County ownership and develop a program to facilitate said transfer. | | | County accepted an easement from the US Forest Service on the Rubicon Trail August 14, 2012 |



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| 141 | Completed | PR-L | Accept private sector donations of land, easements, structures, materials, and funds for the development and maintenance of parks and recreation facilities. | | | |
| 142 | Remaining | PR-M | Identify a suitable location and work with the El Dorado County Fair to move the fairgrounds from its existing site. | | | |
| 143 | Completed | ED- A | Economic Development Providers Network Annual Report: Prepare an action plan to implement the objectives of the Economic Development Element. Prepare an annual report on the status of accomplishment toward the objectives for the past year. | | | |
| 144 | Completed | ED- B | Actively participate in the Economic Development Providers Network. | | | |
| 145 | Completed | ED- C | Sponsor, via the Economic Development Providers Network, seminars and workshops for El Dorado County's businesses, targeted industry organizations, and government decision makers. | | | |
| 146 | Completed | ED- D | Establish and maintain liaison with local and regional business organizations to improve coordination of efforts relating to business issues. | | | |
| 147 | Completed | ED- E | Convene periodic broadly based community forums to discuss El Dorado County's economic issues and concerns in conjunction with business, educational, agricultural, environmental, and other interested organizations. | | | |
| 148 | Completed | ED- F | Work with local businesses to gather feedback from problem solving activities for immediate action and/or inclusion in Annual Economic Plans. | | | |
| 149 | Completed | ED- G | Support County business and local government efforts to develop regional, State, National, and international markets for the County's products, services, and attractors. | | | |



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| 150 | Completed | ED- H | Through the Economic Development Providers Network, provide periodic training workshops for business and public agency participants to develop understanding of business owners' needs. | | | |
| 151 | Completed | ED- I | Establish regulatory assistance services for the public, including businesses, to clarify government regulatory processes, to assist in coordinating regulatory functions, and to provide information regarding vacant land and facilitate locational assistance | | | A variety of regulatory assistance services are provided to the public by the Office of Economic Development. |
| 152 | Completed | ED- J | As part of the annual budget review process, County departments shall identify potential changes in fees, improved regulatory processes, and appropriate staffing allocations and organization to match forecasted work load which minimize delays | | | |
| 153 | Completed | ED- K | Assess the impact on large and small businesses of regulatory issues and recommend cost saving changes to permit processing procedures. | | | |
| 154 | Completed | ED- L | Provide the Economic Development Providers Network [or subsequent organization] with an opportunity to review, on a periodic basis, County government structure for consistency with efficient and cost effective regulation of business. | | | |
| 155 | Completed | ED- M | Expedite permitting services as an incentive to encourage upgrading of unoccupied developed and underutilized commercial and industrial sites and/or structures. The County should encourage the use of unoccupied developed and/or underutilized County owned | | | In 2012, the Chief Administrative Office began a program to allowing applicant businesses the opportunity to meet with County permitting agencies in a single time and location, with those agencies expediting permits in significantly shorter time. In February 2014, the BOS adopted policy J-7 making economic development incentives available for businesses expanding in the County. |



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| 156 | Completed | ED- N | Review existing County regulations and procedures to eliminate unneeded, inconsistent, and redundant legal requirements. | | | |
| 157 | Completed | ED- O | Use the final Environmental Impact Report (EIR) for the General Plan as a first tier EIR. Future environmental documents for site specific projects, development code regulations, and specific zoning may rely upon and tier off of this EIR. | | | |
| 158 | In Progress | ED- P | Revise the Zoning Ordinance so that classes of permitted uses for commercial, industrial, and research and development uses on lands so designated on the General Plan Land Use Maps, and/or that have been pre-planned through planned developments, specific | | | To be included as part of the Zoning Ordinance Update. |
| 159 | Completed | ED- Q | Regulations shall include a means to accomplish regulatory needs with the least interference and/or barriers to business. Interested parties should be invited to participate in the development and review of new regulations. | | | |
| 160 | In Progress | ED- R | Prepare an overview statement for proposed laws or administrative regulations including: (a) the purpose of the law and/or regulation; and (b) the relationship between stated purposes and other adopted laws and/or regulations of the County. | | | To be included as part of the Zoning Ordinance Update. |
| 161 | Completed | ED- S | All proposed development regulations or ordinances shall demonstrate a public benefit where proposed regulations or ordinances will result in private or public costs. | | | |
| 162 | Completed | ED- T | Assemble and maintain a library of economic data to be available for use in economic impact studies and/or industry case studies. | | | The Office of Economic Development maintains various sources of economic data available for use in economic impact and/or industry case studies. |



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| 163 | Completed | ED- U | Make available to the business community and other community interest groups including individuals, publications on economic and demographic information for El Dorado County's incorporated and unincorporated areas. | | | The County has developed economic and demographic reports and data for use by local businesses and other interested community groups. |
| 164 | Completed | ED- V | Create a Target Industry Committee representing a cross-section of community interests including local business interests to develop selection criteria for determining desirable target industries that are harmonious with the local custom, culture, and over | | | |
| 165 | Completed | ED- W | Prepare a report once every two years which describes the El Dorado County economy, identifies important demographic and industry trends, identifies leading economic indicators, and identifies and ranks targeted industries to help guide business recruitment | | | |
| 166 | Completed | ED- X | Provide information to educate the business community on environmental issues and to educate the environmental community on the local and regional economy. | | | |
| 167 | Completed | ED- Y | Identify environmental issues to be considered by the Economic Development Providers Network. | | | |
| 168 | Completed | ED- Z | Identify and attract selected targeted industries that are consistent with the County's goal of balancing economic vitality and environmental protection. | | | |
| 169 | Completed | ED-AA | Develop an action plan for each targeted industry to encourage retention and expansion of businesses including special needs of each targeted industry and location assistance for expansion or relocation. | | | The State Employment Development Department (EDD), in partnership with the Office of Economic Development, is developing an updated strategic plan to address special needs of targeted industries within El Dorado County. |



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| 170 | Completed | ED-BB | The Economic Development Providers Network shall establish a system for annually inventorying existing industries and businesses in order to provide early warning of businesses that are at risk and are considering moving or expanding out of the County. | | | The State Employment Development Department (EDD), in partnership with the Office of Economic Development, will meet with private sector employers to identify business climate issues and solutions and assist at-risk businesses. |
| 171 | Completed | ED-CC | Annually dedicate and budget County staff to implement programs under General Plan Objective 10.1.5 and/or coordinate County efforts with the private sector and Economic Development Providers Network. | | | |
| 172 | Completed | ED-DD | The County shall monitor land availability through five-year reviews of the General Plan to assure a sufficient supply of commercial and industrial designated lands. | | | A five-year review was completed in 2011. The next 5-year review is scheduled for completion in 2016. |
| 173 | Completed | ED-EE | Develop a comprehensive regional economic development program to attract industry to the County at a rate higher than the Sacramento Area Council of Governments (SACOG) and/or County employment forecasts. | | | The County has developed a program for business attraction activities including a partnership with the State Employment Development Department (EDD). |
| 174 | Completed | ED-FF | The Economic Development Providers Network shall conduct meetings and interviews with existing companies in each of the identified growth industries focusing on service needs and local government's ability to address those needs. | | | In February, 2014, the Board of Supervisors adopted Policy J-7, outlining several new and existing financial incentives for business expansion in the County, and EDD staff will be scheduling regular meetings with private sector employers to identify business climate issues and solutions. |
| 175 | Completed | ED-GG | The Economic Development Providers Network shall conduct economic base studies to identify trends in industry and to identify those industries which are well positioned in the local, regional, State, National, or international markets | | | The Office of Economic Development oversees a program to conduct economic base studies and identify industry trends. |
| 176 | In Progress | ED-HH | Develop an information system on significant potential vacancies in office, commercial, and industrial space to facilitate the movement of business from one facility to another. | | | Relevant enhancements to the County Economic Development webpage have been planned and budgeted for 2014-2015 fiscal year. |



*This is a summary for reference purposes only. The full text of the Implementation measures and mitigation measures can be found in the orignal documents referenced in this report.

# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 177 | In Progress | ED-II | The Zoning Ordinance shall provide for agriculture dependent commercial and industrial uses on lands within Rural Regions. | | | To be completed as part of the Zoning Ordinance Update. |
| 178 | In Progress | ED-JJ | The Zoning Ordinance shall allow the sales and marketing of products grown in El Dorado County and crafts made in El Dorado County in areas designated for agricultural use. | | | To be completed as part of the TGPA-ZOU. |
| 179 | In Progress | ED-KK | Designate sufficient lands of a size and at locations to accommodate needed retail and commercial development. | | | To be completed as part of the TGPA-ZOU. |
| 180 | Completed | ED-LL | Annually assign and budget County staff to implement Policy 10.1.6.1 and/or coordinate efforts with the Economic Development Providers Network. | | | |
| 181 | Completed | ED-MM | Work with the cities of Placerville and South Lake Tahoe to establish a uniform small business licensing application, forms, and instructions for all cities and the County. | | | |
| 182 | Completed | ED-NN | Work with the cities of Placerville and South Lake Tahoe to review the business license fees in the cities and County to provide an equitable structure for business with ten or less employees. [Should be completed concurrently with Measure ED-J.] | | | |
| 183 | Completed | ED-OO | Provide information on small business assistance programs, the agencies regulating small businesses, and distribute small business resources directories. | | | The Office of Economic Development provides a variety of informational tools to assist small businesses. |
| 184 | In Progress | ED-PP | Establish land use regulations that permit by right satellite work centers, home work place alternatives, and home occupations as a means of reducing commutes on U.S. Highway 50. | | | Part of the TGPA-ZOU Project 2014 |
| 185 | In Progress | ED-QQ | Establish standards in the Zoning Ordinance that provide compatible home businesses that complement residential uses in the Community Regions, Rural Centers, and Rural Regions. | | | Part of the TGPA-ZOU Project 2014 |



*This is a summary for reference purposes only. The full text of the Implementation measures and mitigation measures can be found in the orignal documents referenced in this report.

# Appendix A2 - 2013 General Plan Implementation Measures Progress Report

| No. | Status | Implementation Measure | Measure Text* | EIR Mitigation Impact Number(s) | Associated Mitigation Requirement(s)* (If any) | Notes |
|---|---|---|---|---|---|---|
| 186 | Completed | ED-RR | Work with developers of Conditions, Covenants, and Restrictions (CC&Rs) to prevent the creation of CC&Rs that preclude home occupations or work-at-home activities. | | | |
| 187 | Completed | ED-SS | Review existing County impact fees and consider adopting fees necessary to assure that new development pays its fair share of public facility and services costs. | | | |
| 188 | Completed | ED-TT | When a project directly or indirectly affects existing public services and/or infrastructure, it shall provide for and finance improvements consistent with the degree of impact to public services and/or infrastructure directly or indirectly | | | |
| 189 | Completed | ED-UU | As part of its annual review of its Capital Improvement Programs, the County should include a Section 65401 review which lists all capital projects sponsored by other jurisdictions during the following year and makes a finding relative to the consistency | | | |
| 190 | Completed | ED-VV | As part of an effort to maintain high quality services and implement the General Plan, the County should maintain an effective liaison and improve cooperation with the cities and special districts serving the County. | | | |



*This is a summary for reference purposes only. The full text of the Implementation measures and mitigation measures can be found in the orignal documents referenced in this report.

# Appendix B

## ANNUAL ELEMENT PROGRESS REPORT

## *Housing Element Implementation*

(CCR Title 25 §6202 )

**Jurisdiction** County of El Dorado

**Reporting Period** 1/1/2013 - 12/31/2013

### Table A

### Annual Building Activity Report Summary - New Construction
### Very Low-, Low-, and Mixed-Income Multifamily Projects

| Housing Development Information | | | | | | | | | Housing with Financial Assistance and/or Deed Restrictions | | Housing without Financial Assistance or Deed Restrictions |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | | | | 5 | 5a | 6 | 7 | 8 |
| Project Identifier (may be APN No., project name or address) | Unit Category | Tenure R=Renter O=Owner | Affordability by Household Incomes | | | | Total Units per Project | Est. # Infill Units* | Assistance Programs for Each Development | Deed Restricted Units | Note below the number of units determined to be affordable without financial or deed restrictions and attach an explanation how the jurisdiction determined the units were affordable. Refer to instructions. |
| | | | Very Low-Income | Low-Income | Moderate-Income | Above Moderate-Income | | | See Instructions | See Instructions | |
| Chrisman | SU | O | | 1 | | | 1 | | Fee Offset | 1 | Fee Waivers - Deed Restriction |
| White | SU | O | | 1 | | | 1 | | Fee Offset | 1 | Fee Waivers - Deed Restriction |
| DeCantillon | SU | O | | 1 | | | 1 | | Fee Offset | 1 | Fee Waivers - Deed Restriction |
| Tomblin Butler | SF | O | | 1 | | | 1 | | HOME | 1 | First Time Homebuyer |
| Stefan | SF | O | 1 | | | | 1 | | HOME | 1 | First Time Homebuyer |
| Laird | SF | O | 1 | | | | 1 | | HOME | 1 | First Time Homebuyer |
| Polte | SF | O | | 1 | | | 1 | | HOME | 1 | First Time Homebuyer |
| Moyer | SF | O | | 1 | | | 1 | | HOME | 1 | First Time Homebuyer |
| Lang | SF | O | 1 | | | | 1 | | HOME | 1 | First Time Homebuyer |
| LaCalle | SF | O | | 1 | | | 1 | | HOME | 1 | First Time Homebuyer |
| Browning | SF | O | | 1 | | | 1 | | CDBG | 1 | Housing Rehabilitation |
| Trailside Terrace | MF | R | 39 | | 1 | | 40 | 40 | HOME | 39 | HOME / TCAC |
| | | | | | | | | | | | |
| Second Dwelling Units | SU | R | | 5 | | | 5 | 5 | Other | 5 | Deed Restricted//NOR |
| CHF Homebuyer Assistance Programs | SF | O | | | 4 | | 4 | | Other | | Income Restricted Program |
| Hardship Mobile Homes | MH | O | | 16 | | | 16 | | Other | 16 | Deed Restricted//NOR |
| | | | | | | | | | | | |
| (9) Total **of Moderate and Above Moderate** from Table A3 ► ► | | | | | 2 | | | | | | |
| (10) Total by income Table A/A3 ► ► | | | 42 | 29 | 7 | | 76 | 45 | | | |
| (11) Total **Extremely Low-Income** Units* | | | | | | | | | | | |

* Note: These fields are voluntary

# Appendix B

## ANNUAL ELEMENT PROGRESS REPORT
## *Housing Element Implementation*

(CCR Title 25 §6202 )

**Jurisdiction** County of El Dorado

**Reporting Period** 1/1/2013 - 12/31/2013

### Table A2
### Annual Building Activity Report Summary - Units Rehabilitated, Preserved and Acquired pursuant to GC Section 65583.1(c)(1)

Please note: Units may only be credited to the table below when a jurisdiction has included a program it its housing element to rehabilitate, preserve or acquire units to accommodate a portion of its RHNA which meet the specific criteria as outlined in GC Section 65583.1(c)(1)

| Activity Type | Affordability by Household Incomes | | | | (4) The Description should adequately document how each unit complies with subsection (c )(7) of Government Code Section 65583.1 |
|---|---|---|---|---|---|
| | Extremely Low-Income* | Very Low-Income | Low-Income | TOTAL UNITS | |
| (1) Rehabilitation Activity | | | | 0 | 20 year affordability |
| (2) Preservation of Units At-Risk | | | | 0 | 55 year affordability - Multifamily |
| (3) Acquisition of Units | | | | 0 | 40 year affordability |
| (5) Total Units by Income | 0 | 0 | 0 | 0 | |

* Note: This field is voluntary

### Table A3
### Annual building Activity Report Summary for Above Moderate-Income Units (not including those units reported on Table A)

| | 1. Single Family | 2. 2 - 4 Units | 3. 5+ Units | 4. Second Unit | 5. Mobile Homes | 6. Total | 7. Number of infill units* |
|---|---|---|---|---|---|---|---|
| No. of Units Permitted for **Moderate** | | | | | **2** | 2 | **County does not meet Urban definition** |
| No. of Units Permitted for **Above Moderate** | 685 | | | | 0 | 685 | |

* Note: This field is voluntary

# Appendix B

## ANNUAL ELEMENT PROGRESS REPORT
## *Housing Element Implementation*

(CCR Title 25 §6202 )

**Jurisdiction** County of El Dorado

**Reporting Period** 1/1/2013 - 12/31/2013

### Table B

### Regional Housing Needs Allocation Progress

**Permitted Units Issued by Affordability**

| Enter Calendar Year starting with the first year of the RHNA allocation period. See Example. | | | | 2006-07 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | | Total Units to Date (all years) | Total Remaining RHNA by Income Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Income Level** | | RHNA Allocation by Income Level | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | | | |
| Very Low | Deed Restricted | 2,413 | | 103 | | 39 | 9 | 1 | 5 | 12 | | 169 | 2,243 |
| | Non-deed restricted | | | | 1 | | | | | | | 1 | |
| Low | Deed Restricted | 1,596 | | | 2 | 21 | 32 | 26 | 103 | 60 | | 244 | 1,347 |
| | Non-deed restricted | | | | | | | | 5 | | | 5 | |
| Moderate | Deed Restricted | 1,512 | | 2 | 1 | | 2 | 36 | | | | 41 | 1,466 |
| | Non-deed restricted | | | | | 1 | | | 2 | 2 | | 5 | |
| Above Moderate | | 2,523 | | 1297 | 351 | 178 | 126 | 117 | 124 | 685 | | 2,878 | -355 |
| Total RHNA by COG. Enter allocation number: | | 8,044 | | 1,402 | 355 | 239 | 169 | 180 | 239 | 759 | | 3,343 | 4,701 |
| Total Units ► ► ► | | | | | | | | | | | | | |
| Remaining Need for RHNA Period ► ► ► ► ► | | | | | | | | | | | | | |

Note: units serving extremely low-income households are included in the very low-income permitted units totals.

# Appendix B

## ANNUAL ELEMENT PROGRESS REPORT
## *Housing Element Implementation*

(CCR Title 25 §6202 )

**Jurisdiction** County of El Dorado

**Reporting Period** 1/1/2013 - 12/31/2013

### Table C

### Program Implementation Status

| Program Description (By Housing Element Program Names) | | **Housing Programs Progress Report - Government Code Section 65583.** Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element. | | |
|---|---|---|---|---|
| **Name of Program** | | **Objective** | **Timeframe in H.E.** | **Status of Program Implementation** |
| 1 | Review land use patterns | Identify areas for future housing | Ongoing | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 2 | Review adequate sites for affordable Housing | Identify areas for future affordable housing without need to fund major infrastructure | One Year | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 3 | Review and update Capital Improvement Program | Revised facility plans; extension of services to underserved areas of the County | Annually | Completed and ongoing. Reviewed annually with update of Capital Improvement Program. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 4 | Develop incentive based policy for affordable housing development | Provide incentives to encourage development of affordable housing | Two Years | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 5 | Track and record second dwelling units and hardship mobile homes | Ensure opportunities to access affordable housing | One Year | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 6 | Amend Zoning Ordinance and Design and Improvement Standards Manual | Provide more flexibility for affordable housing | One Year | In Progress. Carried forward as Measure in 2013-2021 Housing Element Update. County has undertaken a Comprehensive Zoning Ordinance Update to address greater flexibility as incentives for the development of housing affordable to very-low to moderate income households. |
| 7 | Adopt Density Bonus Ordinance for Affordable Housing | Promote benefits of program to development community | One Year | Completed March 2009 |
| 8 | Work with Tahoe Regional Planning Agency (TRPA) on Tahoe Regional Plan | Facilitate the construction of more affordable and workforce housing | Ongoing | MOU adopted and County is working to work cooperatively with TRPA and the Meyers Community Advisory Counsel (MCAC), formerly known as the Meyers Roundtable. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 9 | Establish a Housing Trust Fund | Establish flexible, locally controlled source of funds dedicated to meeting local affordable housing needs for low income households | Two Years | The County administers a dedicated Predevelopment revolving loan fund for affordable projects with Board approval and also administers a CalHFA Housing Enabled by Local Partnerships (HELP) revolving loan program to assist in the acquisition and construction of affordable housing development. Carried forward as Measure in 2013-2021 Housing Element Update. |

# Appendix B

## ANNUAL ELEMENT PROGRESS REPORT

## *Housing Element Implementation*

(CCR Title 25 §6202 )

**Jurisdiction** County of El Dorado

**Reporting Period** 1/1/2013 - 12/31/2013

| | | | | |
|---|---|---|---|---|
| 10 | Review residential development processing procedures annually | Identify additional opportunities to further streamline the procedures for affordable housing projects while maintaining adequate levels of public review | One Year | Board-appointed Advisory Committee has established a Regulatory Reform Team who meet weekly and report to the Board of Supervisors with recommendations to reduce constraints to affordable housing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 11 | Adopt infill ordinance | Assist developers with incentives to addressing barriers to infill development | Two Years | In progress. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 12 | Investigate land banking | Land banking as method to provide sites for affordable housing | Two Years | In progress. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 13 | Support a legislative platform for affordable housing | To facilitate the development of affordable housing, especially in the Tahoe Basin | Ongoing | In progress. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 14 | Interdepartmental working group | Ensure cooperation between departments, CAO and Board of Supervisors in the implementation of Housing Element | Ongoing | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 15 | Track workforce housing | Track the approval and status of employee housing, including farm worker housing | Three Years | Program to track workforce housing in place. Developing method to study agricultural worker housing needs. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 16 | Amend the Planned Development combining zone district | Provide adequate developer incentives to encourage inclusion of affordable housing | One Year | Included in Comprehensive Zoning Ordinance Update scheduled for adoption in 2013. |
| 17 | Implement First Time Homebuyer program | Continue to apply for funding in support of a first-time homebuyers program | Ongoing | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 18 | Implement Housing Rehabilitation program through CDBG | Apply for funds in support of housing rehab and weatherization programs for low income households | Ongoing | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 19 | Housing Choice Voucher Program | Continue to administer HCV program (Section 8) | Ongoing | Ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 20 | Adopt Mobile Home Park Conversion ordinance | Adopt measures to encourage retention of mobile home and manufactured home housing, aid in relocation and provide compensation to owners and residents | Two Years | Draft policy complete and under review. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 21 | Continue Code Enforcement efforts | Work with property owners to preserve the existing housing stock | Ongoing | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |

# Appendix B

## ANNUAL ELEMENT PROGRESS REPORT

## *Housing Element Implementation*

(CCR Title 25 §6202 )

**Jurisdiction** County of El Dorado

**Reporting Period** 1/1/2013 - 12/31/2013

| | | | | |
|---|---|---|---|---|
| 22 | Update list of subsidized dwellings | Track units subsidized by government funding or affordable housing developed through local regulations or incentives by income category as identified in the regional housing allocation | Annually | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 23 | Review the Zoning Ordinance, policies, practices, and building codes to identify provisions that could pose constraints to the development of housing for persons with disabilities | Adopt an ordinance, pursuant to the Fair Housing Amendments Act of 1988, to establish a process for making requests for reasonable accommodations to land use and zoning decisions and procedures regulating the siting, funding, development and use of housing for people with disabilities | Three Years | Included in Comprehensive Zoning Ordinance Update. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 24 | Community education on homelessness | Continue working with community and local organizations to build upon Continuum of Care Strategy and develop 10-year plan to end homelessness | Ongoing | Continue to meeting with Continuum of Care (CoC) stakeholders to address long-term homeless and transitional housing needs in the community. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 25 | Define zoning for emergency shelters, transitional housing, etc. by right | As part of the Zoning Ordinance update, clearly define zone districts within which emergency shelters or transitional housing may be established by right | One Year | Completed. County currently considers shelters as Community Care Facilities allowed by right in three of four Commercial zones. SRO housing is currently allowed by right on parcels zoned for residential multi-family (RM). Carried forward as Measure in 2013-2021 Housing Element Update. |
| 26 | Improve energy and water use efficiency in existing homes and new construction | Support of the Environmental Vision for El Dorado County, Resolution 29-2008 for positive environmental change | One Year | Energy & Home Weatherization Program ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 27 | Permit Mixed Use Development | Amend Zoning Ordinance to permit mixed use development within Commercial zones by right, subject to standards that encourages compact urban form, access to non-auto transit, and energy efficiency | One Year | Phase I approved. Phase II in progress. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 28 | Agricultural employee housing | As part of the Zoning Ordinance update, comply with Health and Safety Code Section 17021.6 and encourage agricultural employee housing | One Year | Completed and additional measures in progress as part of the Comprehensive Zoning Ordinance Update. Carried forward as Measure in 2013-2021 Housing Element Update. |

# Appendix B

## ANNUAL ELEMENT PROGRESS REPORT

## *Housing Element Implementation*

(CCR Title 25 §6202 )

**Jurisdiction** County of El Dorado

**Reporting Period** 1/1/2013 - 12/31/2013

| | | | | |
|---|---|---|---|---|
| 29 | Continue Housing Rehab Loan program | Continue to make rehabilitation loans to qualifying very low and low income households | Ongoing | Complete and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 30 | Economic analysis for all 50+ unit residential developments | Ensure that appropriate public services and facilities fees are levied to provide public facilities and services to the project | One Year | Model study for analysis of potential fiscal impacts has been initiated. Evaluation of a funding program for economic analysis of affordable housing projects in progress. Analysis of individual projects is ongoing as needed. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 31 | Update TIM Fee Program | Analyze anticipated lower trip generation and traffic benefits of a variety of housing types | Annually | In progress. Continue to offer fee offset program for qualified affordable housing units. Age Restricted Unit incentives approved and effective in April 2012. The Board of Supervisors authorized an update of the County's travel demand model to help guide the County through updating Traffic Impact Mitigation Fees and future land use planning, among other uses. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 32 | Retain and rehab existing rental housing stock | Explore options including a proactive rental inspection enforcement program to address maintenance and Code Enforcement issues related to multifamily and single family rental residences | Two Years | In progress. CDBG funded exterior housing conditions study completed. Code Enforcement activity is ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 33 | Fair Housing | Continue to refer people who suspect discrimination in housing to the appropriate agency or organization for help. Continue to distribute fair housing information as a part of its housing programs | Two Years | Completed and ongoing. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 34 | Work with owners to preserve subsidized housing units | Identify funding sources to preserve at-risk units and identify qualified entities who are interested in purchasing government-subsidized multifamily housing projects | Ongoing | Ongoing. Strategy developed by HUD and USDA Rural Development is in place and administered by County to assist organizations in preserving subsidized housing units. Carried forward as Measure in 2013-2021 Housing Element Update. |
| 35 | Housing Conditions Study | Survey of housing conditions to determine the amount of housing in need of rehabilitation or replacement within older, established unincorporated neighborhoods | Two Years | Completed. CDBG funded exterior housing conditions study completed. Code Enforcement activity is ongoing. |

# Appendix B

## ANNUAL ELEMENT PROGRESS REPORT

## *Housing Element Implementation*

(CCR Title 25 §6202 )

| | |
|---|---|
| **Jurisdiction** | County of El Dorado |
| **Reporting Period** | 1/1/2013 - 12/31/2013 |

**General Comments:**

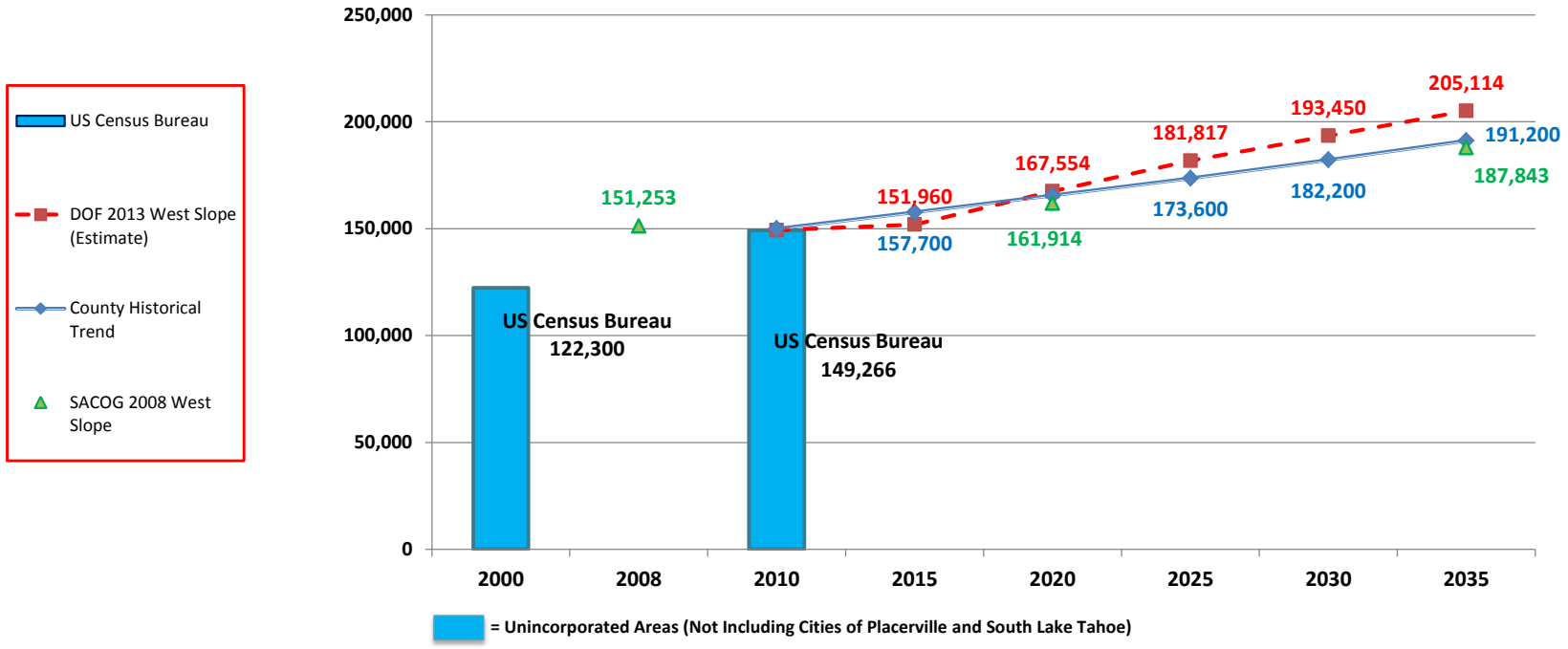
El Dorado County's Housing Element Update for planning period 2013-2021 has been certified by the California Department of Housing and Community Development (HCD).

State Housing and Community Development Assistant Deputy Director Glen Campora confirmed state approval in a November 13 letter noting, "The Department is pleased to find the adopted housing element in full compliance with State housing element law (Government Code, Article 1 0.6)."

# Appendix C - Growth Indicators

## El Dorado County Population Data and Forecasts Through 2035

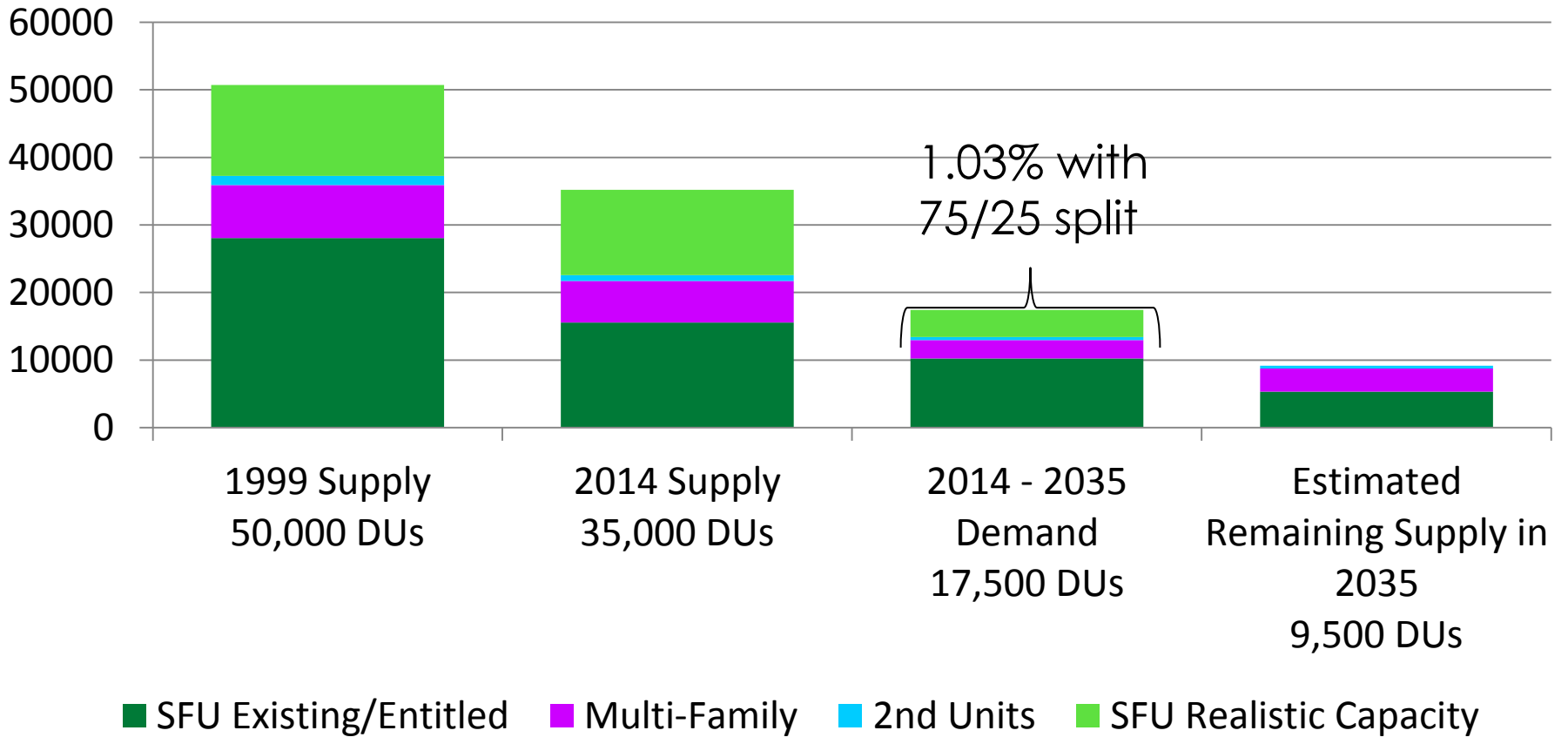
**(Excluding Tahoe Basin and City of Placerville)**




Sources:

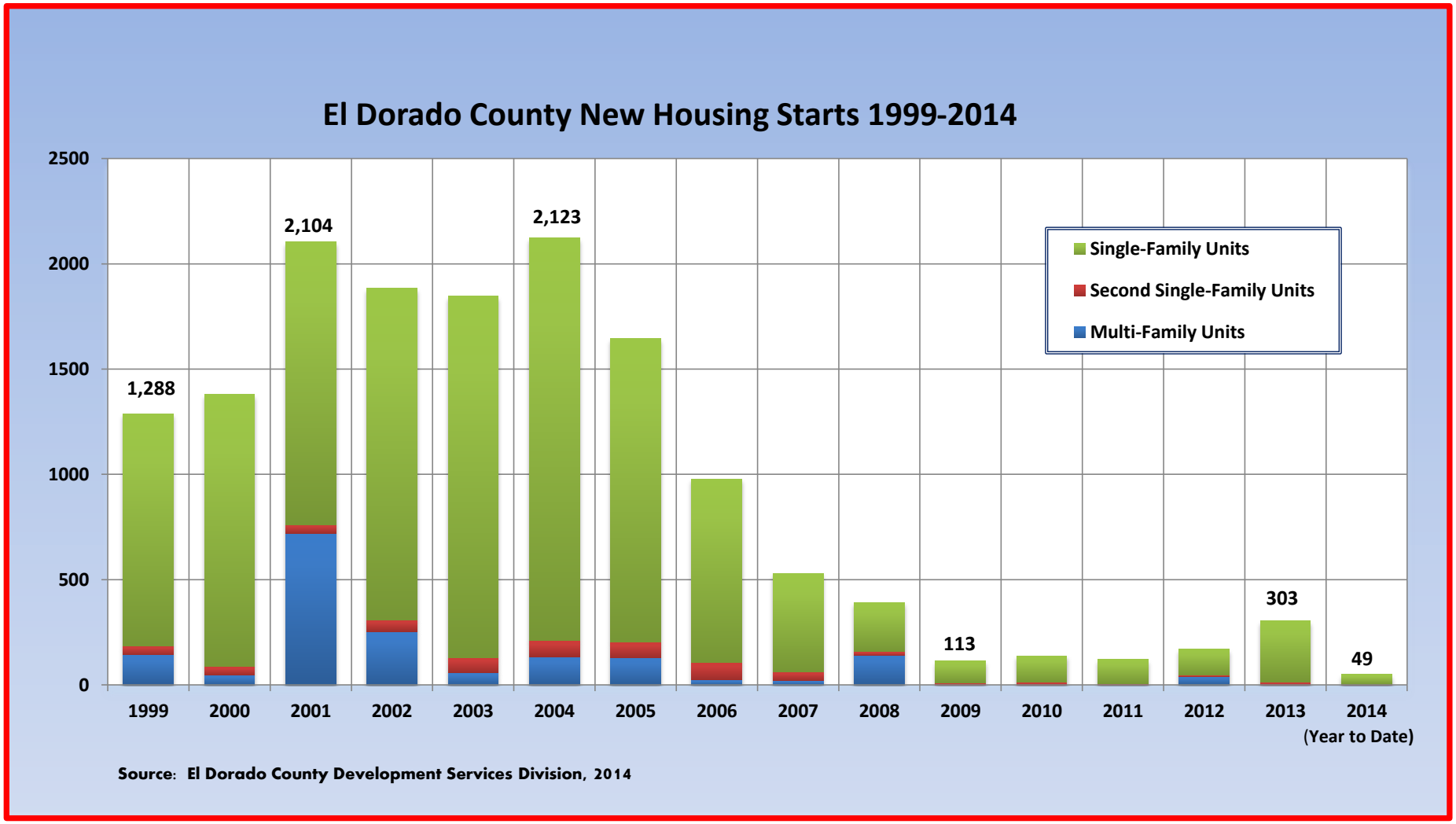
1. CA Department of Finance (DOF) 2013. Population data From the cities of South Lake Tahoe and Placerville was manually deducted.
2. SACOG 2008 Regional Forecast
3. US Census Bureau- Dicennial Census 2000, 2010

# WEST SLOPE HOUSING SUPPLY (1999, 2014 & 2035)
# *WITH 20-YEAR DEMAND FORECAST (2014-2035)*
# WITHOUT LAND USE CHANGES

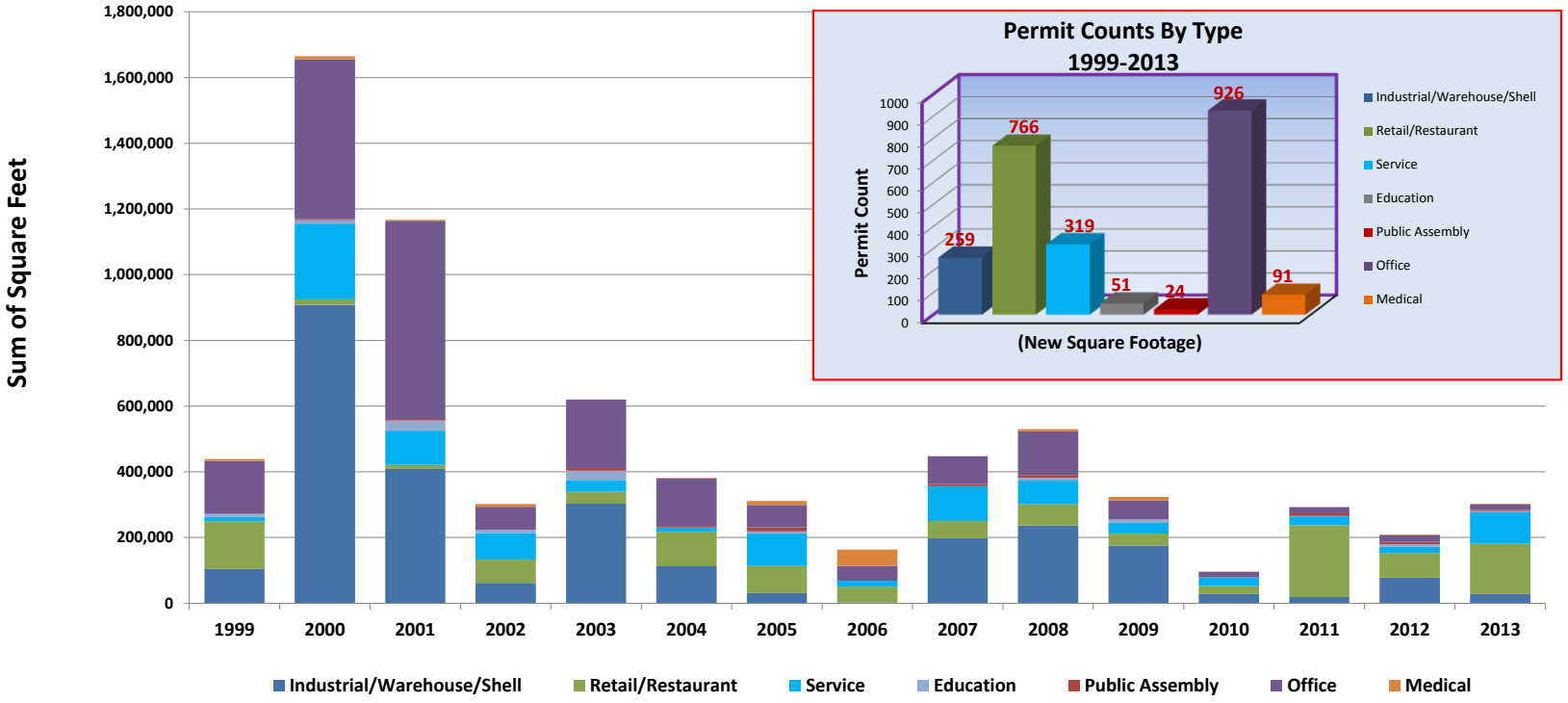



DU = Dwelling Units, SFU = Single Family Unit

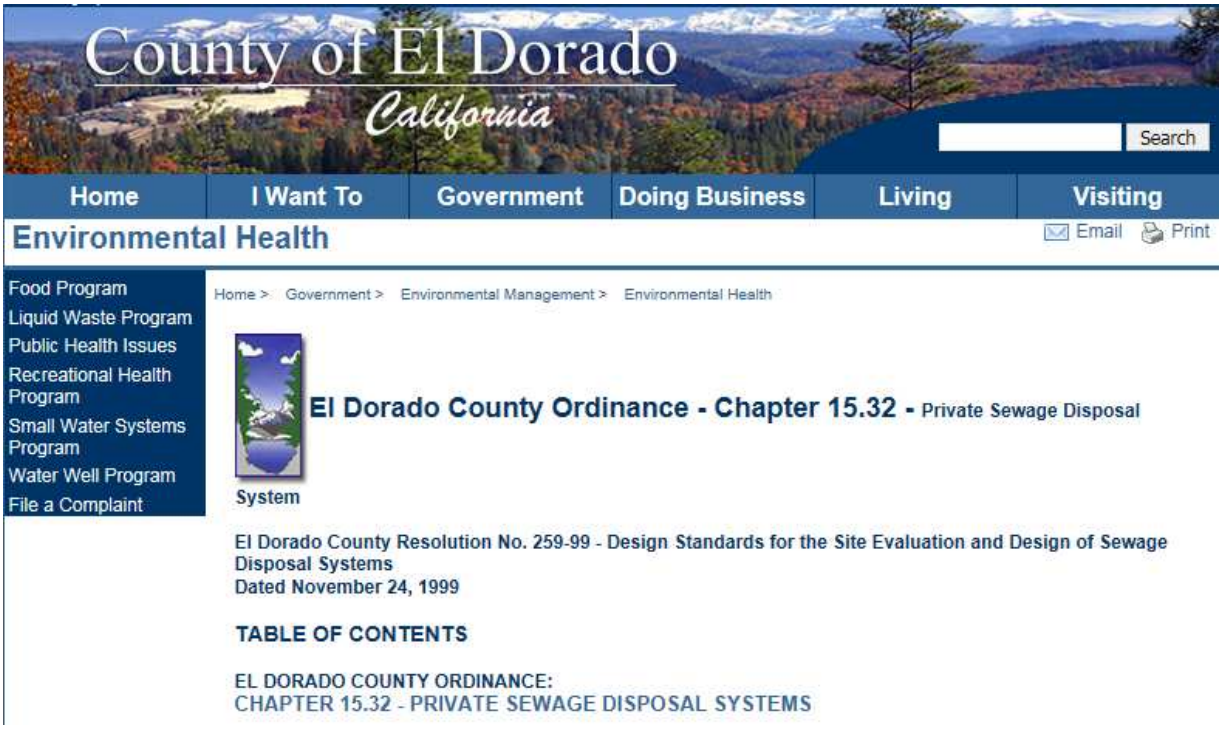
# Appendix C - Growth Indicators



# Appendix C - Growth Indicators




Source: El Dorado County Buiilding Safety Services Unit, 2013




Section 2 - Design Procedures

A. GENERAL REQUIREMENTS

1. Soil and Groundwater Determination (Test Pits)

(a) Soil depth must be four (4) feet below the bottom of the trench.

(b) **Groundwater must be a minimum of four (4) feet below the bottom of the trench.** Unless mitigated by an approved special design system (as per section C-L).

2. Test Data Report - Test data report shall include the following:

Current assessors parcel number of property.
•(b) The person who performed the test, his address, zip code, phone number, title, registration number, and signature.
•(c) Weather conditions, time, and temperature at time of test.
•(d) The number of bedrooms in the existing or proposed structure(s), or number of fixture units if other than single family dwelling.
•(e) The location of test holes on a plot map. Include the contours or direction of slope of the land; location of lakes or streams, outcrops, existing or proposed structures or wells; location and approximate height of road cuts, if any, and location and type of surface vegetation.
•(f) Depth and soil profiles of each hole.

•(g) All percolation rate measurements taken and stabilized percolation rate. Report the percolation measurements and rates as minutes per inch (the minutes required for the water to drop one (1) inch in a six (6) inch hole).
•(h) **Percolation rates in excess of sixty (60) minutes per inch for standard leach lines and thirty (30) minutes per inch for non-standard leach lines shall require "Special Design".**
•(i) Describe soil profile in the leach field area - including roots, clay lenses, rock type and amount, texture, moisture, depth to groundwater, and other unusual aspects.
•(j) Soil description as per the soil survey of El Dorado County area, USDA.

. STANDARD SYSTEMS

1. Criteria for standard systems:

(a) Percolation rates between 5 and 30 min./in. with any depth of leach lines.

(b) Percolation rates between 30 and 60 min./in. for 3' x 3' leach lines.

Site evaluation criteria, design (including sizing), installation, and construction shall be in accordance with Section 1: General Provisions; Section 2-1: General Requirements; and Section 3: Construction and Materials.

C. SPECIAL DESIGN SYSTEM REQUIREMENTS

1. A special design system is any Department approved system that is not a standard system.

Conditions requiring special design include:

(**a) Percolation rates greater than 60 min./in.** for standard leach lines, greater than 30 min./in. for non-standard leach lines, or rates less than 5 min./in.
(b) Systems requiring a subsurface drain
(c) Off site systems requiring legal easement
(d) Capping Fill Systems
(e) Pressurized Distribution Systems
(f) Pump Systems
(g) Steep Slope Systems
(h) Sand Filter Systems
(i) Mound Systems
0) Package or Plant Systems
(k) All alternative or experimental systems

**G. STEEP SLOPE SYSTEMS**

**1. A steep slope system is a system installed on sites with slopes greater than thirty (30) percent.**

2. A steep slope system shall meet the following requirements:

(a) Steep slope systems are always special design systems.

(b) The designer must address distance from trench side wall to soil surface (side wall break out distance) and it must be a minimum of twenty four (24) inches to flow line as measured on the downhill side.

(c) Steep slope systems will not be approved on unstable land forms.

G. LEACH LINE CONSTRUCTION

1. Design Requirements

**(a) Leach lines shall not be installed on a slope greater than thirty (30) percent without special engineering.**
(b) Leach lines may be used under asphalt or concrete paving with special engineering.
(c) Gravel-less trench construction may be utilized instead of drain rock in the disposal trench. The design, manufacturing, and materials used shall be durable and acceptable to the Department. Sizing for gravel-less disposal trenches shall be done using one of the following options:
(1) Absorption area calculated using side wall and bottom area.
(2) Absorption area calculated using side wall area with a 25% reduction. NOTE: Side wall area for gravel-less chambers shall be calculated from the top of the ribs to the bottom of the trench.

**Definition of Public Water System:**

EL DORADO COUNTY
ENVIRONMENTAL MANAGEMENT
ENVIRONMENTAL HEALTH DIVISION
2850 Fairlane Ct., Bldg. C, Placerville, CA 95667 - (530) 621-5300
3368 Lake Tahoe Blvd., #303, So. Lake Tahoe, CA 96150 - (530)573-3450

**DECLARATION of Small Water System status**

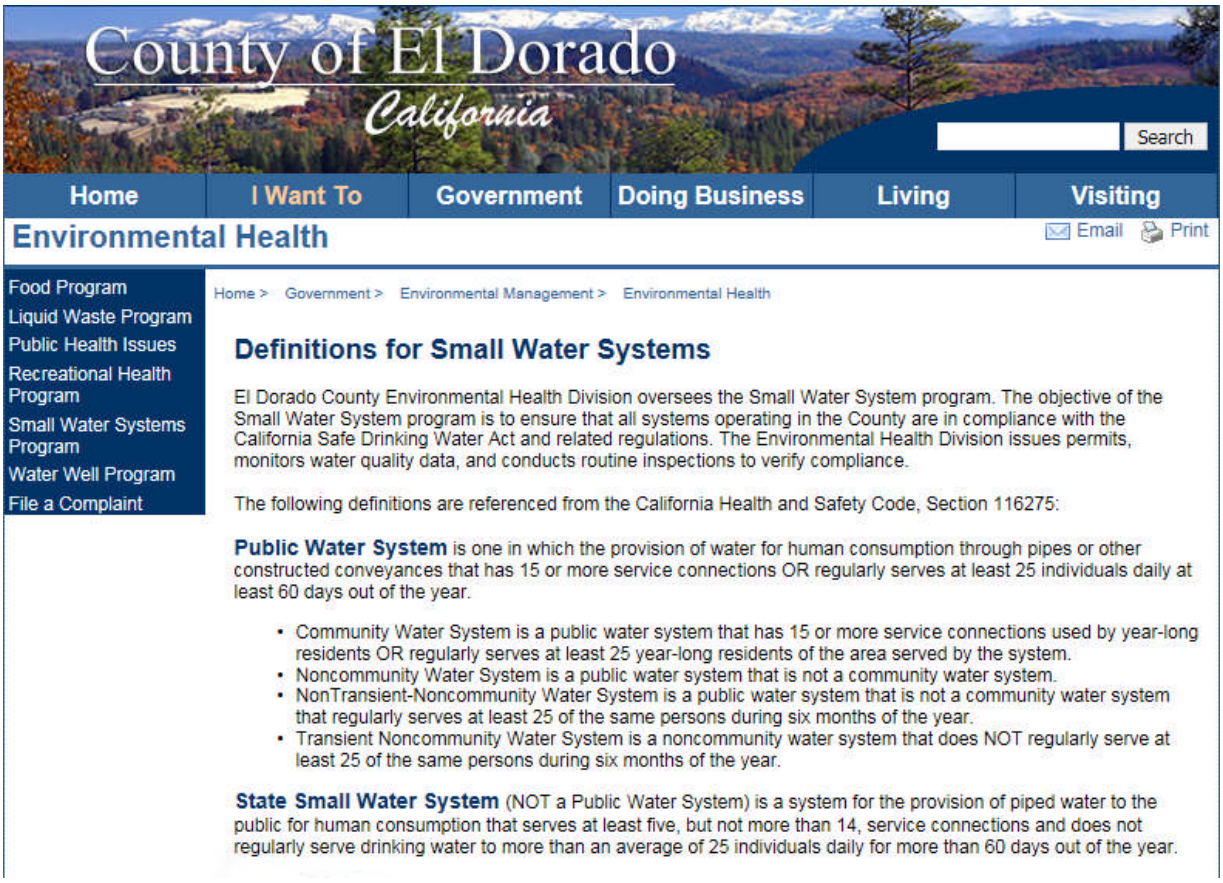
Definitions of Small Water Systems, as defined in the California Health and Safety Code (CH&SC), Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Article 1:

Section 116275(h), a **Public** water system is "a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections; or regularly serves at least 25 individuals daily at least 60 days out of the year";

**Definition of Community Water System:**

## Definitions for Public & Community Water Systems

**Available at:**
http://www.edcgov.us/Government/EMD/EnvironmentalHealth/Definitions_for_Small_Water_Systems.aspx

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### DECLARATION of Small Water System status

Definitions of Small Water Systems, as defined in the California Health and Safety Code (CH&SC), Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Article 1:

Section 116275(h), a **Public** water system is "a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections; or regularly serves at least 25 individuals daily at least 60 days out of the year";




## Septic System Minimum Setback Requirements

To protect water supply sources, surface water, and the proper function of a septic system, it is important to meet certain setbacks. Please refer to the following tables.

### Leach Lines

| | |
|---|---|
| From ephemeral (seasonal) stream/swale | 50 feet |
| From flowing stream | 100 feet |
| From well, spring, lake, or pond | 100 feet |
| From lake or reservoir used for drinking water | 200 feet |
| From trees | 5 feet |
| From lot lines, roads, driveways, or buildings | 10 feet |
| From a cut or fill (e.g., pool) | Four (4) times the cut or fill height |
| Shall not be placed under asphalt, concrete, or under areas subject to vehicular traffic | |
| Shall not be placed in fill material | |

### Septic Tank

| | |
|---|---|
| From house | 5 feet |
| From any building | 5 feet |
| From trees | 5 feet |
| From lot lines, roads, or driveways | 5 feet |
| From streams, springs, lakes, or reservoirs | 50 feet |
| From well or spring used for domestic purposes | 100 feet |
| Shall not be installed in areas subject to high groundwater tables | |

**Well**

| | |
|---|---|
| Minimum horizontal separation distance between well and: | |
| Any sewer line (sanitary, industrial, or storm; main or lateral) | 50 feet |
| Watertight septic tank or subsurface sewage leaching field | 100 feet |
| Cesspool or seepage pit | 150 feet |
| Animal or fowl enclosure | 100 feet |
| The above horizontal separation distances are generally considered adequate. Wells should be located outside areas of flooding. The top of the well casing shall terminate above grade and above known levels of flooding caused by drainage or runoff from surrounding land. Area drainage should be directed away from the well, and if necessary, the area around the well shall be built up so that the drainage moves away from the well. | |




# Procedure for New Sewage Disposal System Approval:

**The following general procedure will apply to all sewage disposal systems, both standard and special design:**

**I. Application for building permit will be taken at the Building Division - Permit Center.**

**II. The application will be sent to the Planning Division for approval.**

**III. The application will then be sent to the Environmental Health Division for approval.**

**IV. Prior to approval by the Environmental Health Division, all of the following data must be provided:**

A. If the dwelling is served by an individual well or spring, the ORIGINAL well production report is required, accompanied by a plot plan signed by a licensed well driller.

- If the well was drilled after May 10, 1990, a separate well permit is required and must be finaled before this office can approve the Building Permit Application.

B. The percolation rate must be established by a percolation test performed on the parcel either by an individual percolation test, an accepted subdivision percolation rate, or by a percolation test performed for a parcel map. A registered civil engineer, geologist or registered environmental health specialist must do this test.

- If the percolation rate is less than 5 min./in., greater than 30 min./in., for deep trenches or greater than 60 min. /in., a special design sewage disposal system is required.
- **Ground slopes in the sewage disposal and replacement area shall not be greater than 30 percent**

# WELL CONSTRUCTION AND WATER SUPPLY STANDARDS ORDINANCE [Chapter 8.39]


| Ordinance # | Description | Page Number |
|---|---|---|
| | | |
| 8.39.010 | Purpose. | 3 |
| 8.39.020 | Definitions. | 3 |
| | | |
| | PERMITS | 7 |
| | | |
| 8.39.030 | Permits Required. | 7 |
| 8.39.040 | Penalty for Failure to Obtain Permit. | 7 |
| 8.39.050 | Emergency Work. | 7 |
| 8.39.060 | Application Procedure. | 7 |
| 8.39.070 | Fees. | 8 |
| 8.39.080 | Development Eligibility. | 8 |
| 8.39.090 | Parcel Size. | 8 |
| 8.39.100 | Setbacks. | 9 |
| 8.39.110 | Permit Conditions. | 9 |
| 8.39.120 | Persons Permitted to Work on Wells. | 9 |
| 8.39.130 | Proper Disposal of Drilling Fluids. | 10 |
| 8.39.140 | Classification of Wells. | 10 |
| 8.39.150 | Active Well. | 10 |
| 8.39.160 | Inactive Well. | 10 |
| 8.39.170 | Abandoned Well. | 10 |
| 8.39.180 | Permit Denial. | 11 |
| 8.39.190 | Permit Expiration. | 11 |
| 8.39.200 | Voiding Of Permit Application. | 11 |
| 8.39.210 | Refund Of Permit Fees. | 11 |
| 8.39.220 | Permit Revisions. | 11 |
| 8.39.230 | Permit Suspension and Revocation. | 12 |
| 8.39.240 | Ordered Additional Work. | 12 |
| 8.39.250 | Well Standards. | 12 |
| 8.39.260 | Variances. | 12 |
| 8.39.270 | Special Ground Water Protection. | 12 |
| 8.39.280 | Other Agency's Requirements. | 13 |
| 8.39.290 | Appeals. | 13 |
| 8.39.300 | Violation a Misdemeanor. | 13 |
| 8.39.310 | Notice of Violation. | 13 |
| 8.39.320 | Decision by Board. | 14 |
| 8.39.330 | Removal of Violation Notice. | 14 |
| 8.39.340 | Civil Enforcement. | 14 |
| 8.39.350 | Remedies Cumulative. | 14 |

| Ordinance # | Description | Page Number |
|---|---|---|
| | | |
| 8.39.360 | Severability. | 14 |
| 8.39.370 | Regulations. | 14 |
| 8.39.380 | Right of Entry and Inspection. | 15 |
| 8.39.390 | Submittal of State "Well Completion Report". | 15 |
| 8.39.400 | Confidentiality of State "Well Completion Report". | 15 |
| | | |
| | **WATER WELLS** | 15 |
| | | |
| 8.39.410 | Inspections. | 15 |
| 8.39.420 | Re-inspection fees. | 15 |
| 8.39.430 | Required Notices. | 16 |
| 8.39.440 | Should Division Fail to be Present. | 16 |
| 8.39.450 | Finished Construction Specifications for Public Water Wells. | 16 |
| | | |
| | **WATER SUPPLIES FOR BUILDING PERMITS (existing parcels)** | 17 |
| | | |
| 8.39.460 | Water Well Construction and Production Requirement. | 17 |
| 8.39.470 | Water Well Production Test Procedures. | 17 |
| 8.39.480 | Spring Construction and Production Requirement. | 18 |
| 8.39.490 | Production Test Report Requirements. | 19 |
| 8.39.500 | Water Storage Requirement. | 19 |
| 8.39.510 | Water Quality. | 19 |
| | | |
| | **GEOTHERMAL HEAT EXCHANGE WELLS** | 20 |
| | | |
| 8.39.520 | Geothermal Heat Exchange Well Standards. | 20 |
| | | |
| | **MONITORING WELLS** | 20 |
| | | |
| 8.39.700 | Permits Required. | 20 |
| 8.39.710 | Persons Permitted to Work on Wells. | 20 |
| 8.39.720 | Monitoring Well Standards. | 20 |
| 8.39.730 | Pre Drilling Requirements. | 20 |
| 8.39.740 | Temporary Containment Prior to Lab Analysis. | 20 |
| 8.39.750 | Finished Construction Features. | 20 |
| 8.39.760 | Equipment Cleaning Before and Between Uses. | 21 |
| 8.39.770 | Prohibited Materials. | 21 |
| 8.39.780 | Re-inspection Fees. | 21 |

| Ordinance # | Description | Page Number |
|---|---|---|
| **8.39.790** | **Annual Permits and Inspections.** | **21** |
| **8.39.800** | **Additional Requirements.** | **21** |
| **8.39.810** | **Final Inspection.** | **21** |
| **8.39.820** | **Initial Investigation and Report for Destructions.** | 21 |
| **8.39.830** | **Removal and Disposal of Obstructions and Contaminants.** | **22** |
| **8.39.840** | **Destruction of Approved Monitoring Wells.** | **22** |
| **8.39.850** | **Destruction of Unapproved Monitoring Wells.** | **22** |
| **8.39.860** | **Acceptable Sealing Materials.** | **22** |
| **8.39.870** | **Placement of Sealing Material by "Tremmie" Pipe.** | **23** |
| **8.39.880** | **Placement of Sealing Material by Free Fall Method.** | **23** |
| **8.39.890** | **Destruction of Soil Borings.** | **23** |
| **8.39.900** | **Permit Expiration-Monitoring Wells.** | **23** |
| **8.39.999** | **Conflicts** | **23** |


## 8.39.010 Purpose.

It is the purpose of this chapter to protect the health, safety, and general welfare of the people of the County of El Dorado by ensuring that groundwater of the County will not be polluted or contaminated. To this end, minimum requirements are contained in this chapter for construction, reconstruction, repair, and destruction of water wells, cathodic protection wells, soil borings, monitoring wells, and geothermal heat exchange wells. Further, reliable and safe water supplies for new construction and land developments are defined.

## 8.39.020 Definitions.

A. As Defined in Other Documents. Except as otherwise required by the context of this chapter, the terms used in this chapter shall have the same meaning as in Chapter 10 of Division 7 of the California Water Code and the California Division of Water Resources Bulletins 74-81, 74-90, and subsequent supplements or revisions.

B. Tense or Gender. Words used in the present tense include the future as well as the present. Words used in the masculine gender include the feminine and neuter. The singular number includes the plural, and the plural the singular.

C. Section headings, when contained in this chapter, shall not be deemed to govern, limit, modify, or in any manner affect the scope, meaning, or intent of the provisions of any section.

1. "Abandoned well" means a well that has not been used for a period of one (1) year unless the owner demonstrates intention to use the well again by obtaining an inactive well permit.

2. “Active well” means a well that has a pump installed and is in use.

3. "Annular space" means the space between two well casings or between the casing and the wall of the drilled hole.

4. “Approved water supply” means any of the following: (a) a Public water system operating under permit issued by California State Division of Health Services or County of El Dorado Division of Environmental Management; (b) a State Small water system operating under permit issued by the Division; (c) drilled water wells that meet the requirements of this ordinance; or (c) springs constructed by approved methods to exclude surface water contamination and meet the requirements of this ordinance.

5. "Board" means the County of El Dorado Building Appeals Board.

6. “BOS” means the County of El Dorado Board of Supervisors.

7. "Cathodic protection well" means any artificial excavation in excess of fifty feet (50') deep constructed by any method for the purpose of installing equipment or facilities for the protection electrically of metallic equipment in contact with the ground, commonly referred to as cathodic protection.

8. "Contamination" means an impairment of the quality of the waters of the State such that it creates a hazard to the public health through poisoning, the spread of disease, hazardous materials, or other substances. "Contamination" includes any equivalent effect resulting from the release of contaminants, whether or not waters of the State are affected.

9. “Destroyed well” means a well that has been properly filled so that it cannot produce water and eliminates potential physical hazards that may exist. Destruction of wells ensures that the groundwater supply is protected and preserved for future use.

10. “Director” means County of El Dorado Division Director of Environmental Management or their authorized representative.

11. “Division” means the Environmental Management Division of the County of El Dorado Community Development Agency.

12. “Domestic water supply” is water used for indoor and outdoor household purposes— all the things you do at home: drinking, preparing food, bathing, washing clothes and dishes, brushing your teeth, watering the yard and garden, and even washing the dog.

13. "Enforcement agency" means the County of El Dorado Environmental Management Division.

14. “Geothermal heat exchange well” means any uncased artificial excavation, by any method, that uses the heat exchange capacity of the earth for heating and cooling, in which excavation the ambient ground temperature is 30 degrees Celsius (86 degrees Fahrenheit) or less, and which excavation uses a closed loop fluid system to prevent the discharge or escape of its fluid into surrounding aquifers or other geologic formations. Geothermal heat exchange wells include ground source heat pump wells.

15. “Inactive well” means a well that has not been used for a period of one (1) year but that owner demonstrates intention to use in the future by obtaining an inactive well permit and maintaining the well as required in Section 8.39.160.

16. “Irrigation Well” means a well that is used to water crops. Irrigation wells are not used for drinking water collection.

17. "Monitoring well" (also called observation well) means any artificial excavation by any method for the purpose of monitoring fluctuations in groundwater levels, quality of underground waters, or the concentration of contaminants in underground water.

18. “Onsite wastewater treatment system" means a system of septic tank and subsurface dispersal system handling the waste from any structure not served by a community sewerage system.

19. “Person” means any individual, organization, partnership, business, association, corporation, or governmental agency to the extent authorized by law.

20. "Pollution" means an alteration of the quality of the waters of the State by waste to a degree which unreasonably affects (1) the waters for beneficial uses, or (2) facilities which serve these beneficial uses. "Pollution" may include contamination.

21. “Potable or safe water” means water that complies with maximum contaminant levels for primary drinking water standards of the constituents listed in Section 8.39.510.

22. "Property line" means the surveyed line separating one piece of property from another or separating public rights-of-way from private properties.

23. “Public water system” means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. Public water systems can be either Community (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); Non-community (a public water system that is not a community water system);

or Non-transient non-community (a public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year). (This includes systems regulated under Cal Code (California Health and Safety Code).

24. "Repair" or "reconstruction" means deepening or cleaning out of the well shaft, and can include the replacement and/or resealing of a well casing.

25. “Reliable water supply” means a water supply that has had an approved well production test to verify that the supply can meet minimum production requirements.

26. "Sewer" means a pipe carrying waste from any structure or a pipe that is a part of any community sewerage system.

27. “Slope” means the rise or fall of land as shown on a topographic map.

28. “Soil boring” (also called exploratory or test well) means an uncased artificial excavation constructed by any method for the purpose of obtaining information on subsurface conditions or for the purpose of determining the presence or extent of contamination in subsurface soils or groundwater and for seismic information.

29. “Source" means surface water, groundwater well, or spring.

30. “Spring” means a subsurface stream of flowing water that emerges naturally from rock or soil, and can be an approved source if constructed by approved methods to exclude surface water contamination.

31. “Stabilized water level during pumping” means that level of water in the well that remains constant after a period of pumping at a specific rate in gallons per minute. The required period of time for such pumping varies depending on the purpose of the well while the minimum period of time required is 4 hours for an existing parcel with a single family dwelling.

32. “State small water system” means 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.

33. “"Well" or "water well" means any artificial excavation constructed by any method for the purpose of extracting water from, or injecting water into, the underground. This definition shall not include: (a) oil and gas wells, or geothermal wells constructed under the jurisdiction of the Department of Conservation, except those wells converted to use as water wells; or (b) wells used for the purpose of (1) dewatering excavations during construction, or (2) stabilizing hillsides or earth embankments.

## PERMITS

### 8.39.030 Permits Required.

No person shall dig, bore, drill, deepen, modify, repair, or destroy a water well, cathodic protection well, soil boring, monitoring well, geothermal heat exchange well, or any other type of well excavation that may intersect ground water without first applying for and receiving a permit from the Division unless exempted by law.

### 8.39.040 Penalty for Failure to Obtain Permit.

Any person who shall commence any work for which a permit is required by this chapter without having obtained a permit shall be required, if subsequently granted a permit for this work, to pay additional fees as set by BOS resolution in Section 8.39.070.

### 8.39.050 Emergency Work.

The provisions of Section 8.39.030 shall not apply to emergency work required on short notice to maintain drinking water or agricultural supply systems. In such cases, the person responsible for the emergency work shall:

1. Apply for a permit within three (3) working days after commencement of emergency work;
2. Satisfy the Division that such work was urgently needed; and
3. Demonstrate that all work performed was in conformance with the technical standards.

### 8.39.060 Application Procedure.

Applications for permits shall be made to the Division on approved forms and shall contain all such information the enforcement agency requires to accomplish the purpose of this chapter. Applications shall include all of the following:

1. A vicinity map and clear driving directions to the property and well site.
2. Two (2) copies of an accurate site plan drawn to scale showing the proposed well location and the location of other significant features within 200 feet of the well location such as distances to property lines, septic tanks, leach lines, sewer lines, existing wells, streams or ponds, adjacent parcel development, structures, roads, driveways, easements, etc.
3. North arrow.
4. The scale used for the site plan.

5. Location and availability of alternative water source (i.e. Public water or existing well).

Note: Small parcels to be developed with an onsite wastewater treatment system may be required to provide additional design information prior to permit approval.

The signed application shall be submitted by the property owner or his representative, and will be accompanied by the required filing fee. If the Division finds that the application contains all necessary information and meets requirements for development eligibility, parcel size, and setbacks, a permit containing such conditions as are necessary to fulfill the purpose of this chapter shall be issued by the Division.

## 8.39.070 Fees.

Fees shall be collected by the Division for a permit to dig, bore, drill, deepen, modify, repair, or destroy a water well, cathodic protection well, soil boring, monitoring well, or geothermal heat exchange well. In addition, fees may be collected for revisions, inactivation permits, penalties, re-inspections, and appeals. The BOS sets fees by resolution.

## 8.39.080 Development Eligibility.

Water well Permits cannot be issued on a parcel unless both development eligibility (and parcel size) requirements are met. Parcels created by parcel map or subdivision shall be developed as designated for a domestic water supply.

Development Eligibility is also subject to County Ordinance Section 16.76.

## 8.39.090 Parcel Size.

Parcels are required to be a minimum of 5.0 acres to be approved for a water well permit. If parcel is less than 5.0 acres, the following exceptions may apply:

1. If parcel map or subdivision map does not designate the water supply, and parcel was created prior to May 26, 1977, a water well permit may be issued.
2. If not created by parcel map or subdivison, and parcel was in existence prior to May 26, 1977, a water well permit may be issued.
3. If parcel created by a gift deed recorded on or before October 10, 1983, a water well permit may be issued.

4. If parcel was created after May 26, 1977 and before 2004 and the parcel is 4.5 acres a water well permit may be issued.
5.

**8.39.100 Setbacks.**

Consideration should be given to adequate separation from sites or areas with known or suspected soil or water pollution or contamination.

General separation guidelines are as follows:

| Potential contamination source | Minimum setback distance to well (in feet)* |
|---|---|
| Sewer line (main or lateral) | 50 |
| Public drinking water main | 50 |
| Onsite wastewater treatment system (both septic tank and leach lines) | 100 |
| Animal or fowl enclosure ** | 100 |
| Abandoned dump site | 1000 |
| Flooded areas and drainages | Avoid or divert away from well |

*Lesser or greater separation distances may be approved by the Division based on specific site conditions.

** In cases where animal wastes constituting a nuisance as defined in County of El Dorado Solid Waste Management Ordinance, Section 8.42.020.

Notes:

- It is recommended that a well be placed 100 feet from a property line to protect the well from development of an adjacent parcel.
- If drill site is located within County of El Dorado zoning setbacks, no structure over 30” high can be constructed over the wellhead.

**8.39.110 Permit Conditions.**

When the Division issues a permit pursuant to this chapter, it may condition the permit in any manner necessary to carry out the purpose of this chapter. Conditions may include, but are not limited to, water quantity and quality testing methods as the Division finds necessary.

**8.39.120 Persons Permitted to Work on Wells.**

All construction, reconstruction, or destruction work on wells shall be by a person who possesses an active C-57 contractor's license in accordance with the provisions of the Business and Professions Code, section 7000, et seq.

**8.39.130 Proper Disposal of Drilling Fluids.**

The permit shall contain a clause requiring the safe and appropriate handling and disposal of drilling fluids and other drilling materials used in connection with the permitted work. Approved site specific best management practices (BMP's) shall be implemented so that drilling fluids and soil cuttings remain on the permitted parcel unless another disposal method is approved for the site by the Division. Excavated pits dug for the disposal of drilling fluids shall be backfilled upon completion of the job. Wells drilled in the Tahoe Basin shall follow Tahoe Regional Planning Agency's BMP's for proper disposal of drilling fluids.

**8.39.140 Classification of Wells.**

Wells shall be classified as active, inactive, or abandoned.

**8.39.150 Active well.**

An active well is one that has a pump installed and is in use.

**8.39.160 Inactive Well.**

An inactive well is one that has not been used for a period of one (1) year but that the owner demonstrates intention to use in the future by obtaining an inactive well permit and shall meet the following criteria:

1. The well shall not allow impairment of the quality of water within the well and groundwater encountered by the well;
2. The well shall be maintained with a tamperproof watertight cover that cannot be removed without the use of equipment or tools in order to prevent unauthorized access, a safety hazard to humans and animals, and illegal disposal of wastes into the well;
3. The well shall be kept marked so as to be easily visible and located, and labeled so as to be easily identified as a well;
4. The area surrounding the well shall be kept clear of brush, debris, and waste materials.

Wells that are determined by the Division to be unsafe, improperly constructed or maintained, or pose a threat to groundwater shall be required to be destroyed.

**8.39.170 Abandoned Well.**

An abandoned well is required to be properly destroyed and an approved destruction permit shall be issued prior to the destruction.

As a condition of a construction or reconstruction permit, any abandoned wells on a parcel shall be destroyed in accordance with standards provided in this chapter.

## 8.39.180 Permit Denial.

The Division shall deny an application for a permit if, in its judgment, issuance of a permit is not in the public interest.

## 8.39.190 Permit Expiration.

The permittee shall complete the work authorized by the permit within one year of permit issuance. If there have been exceptional circumstances, and the permittee submits a written request prior to expiration of the permit, the Division may grant the applicant a one (1) year extension. Upon the expiration of the permit, no further work shall be done unless and until the applicant has received a new permit.

## 8.39.200 Voiding of Permit Application.

Permit applications that are submitted but not issued shall be voided if permit cannot be issued within one (1) year of permit submittal date.

## 8.39.210 Refund of Permit Fees.

Refunds for submitted permit applications may be made to the payor when requested in writing prior to the date of expiration or voiding of a permit application. Staff time spent reviewing and processing the permit may be deducted from the amount of the refund. If permit expires or is voided prior to requesting a refund, no refund shall be paid.

## 8.39.220 Permit Revisions.

Permit application revisions shall be submitted for review and approval as follows:

1. Change of driller: Requires an amended permit application specifying the new driller and a new site plan.
2. Change of drill site: Requires new site plan.
3. Permit extension: Requires written request explaining the exceptional circumstances as to why the well was not drilled within the initial permit period.

## 8.39.230 Permit Suspension and Revocation.

The Division may suspend or revoke any permit issued pursuant to this chapter; whenever it finds that the permittee has violated any of the provisions of this chapter, or has misrepresented any material fact in his application or any supporting documents for such a permit. Prior to ordering any such suspension or revocation, the Division shall give the permittee an opportunity for a hearing thereon, after reasonable notice. The hearing shall be before the Director or their authorized representative. An appeal may be made as set forth in section 8.39.290.

No person whose permit has been suspended or revoked shall continue to perform the work for which the permit was granted until, in the case of suspension, the Director has reinstated such permit.

## 8.39.240 Ordered Additional Work.

Upon suspending or revoking any permit, if any work already done by the permittee has left a well in such a condition as to constitute a hazard to the quality of groundwater, the Division may order the permittee to perform any work reasonably necessary to protect groundwater from pollution or contamination. No permittee or person who has held any permit issued pursuant to this chapter shall fail to comply with any such order.

## 8.39.250 Well Standards.

Except as otherwise specified, the minimum standards for the construction, repair, or reconstruction, or destruction of wells shall be as set forth in State Department of Water Resources "Water Well Standards " Bulletins 74-81, 74-90, and subsequent supplements or revisions.

## 8.39.260 Variances.

The Director shall have the power under the following specified conditions to grant a variance from any provision of the standards referenced in Section 8.39.250 and to prescribe alternative requirements in their place if:

1. A special circumstance exists where practical difficulties or unnecessary hardship would result from the strict interpretation and enforcement of any such standard.
2. The granting of such a variance is consistent with the purposes of this chapter.

## 8.39.270 Special Ground Water Protection.

The Director may designate areas where groundwater quality problems are known to exist and where a well will penetrate more than one water bearing zone. The Director may require in these designated areas special well seal(s) to prevent mixing of water from several zones. Where an applicant proposes well construction, reconstruction, or destruction work in such an area, the Division may require the applicant to provide a report with the permit application prepared by a California Registered Professional Geologist, or a California Registered Professional Engineer (as defined in the California Business and Professions Code) that identifies all strata containing poor quality water and recommends the location and specifications of the seal or seals needed to prevent the entrance of poor quality water or its migration into other water bearing zones.

## 8.39.280 Other Agency's Requirement.

Nothing in this chapter shall be deemed to excuse any person from compliance with the provisions of California Water Code section 13752 relating to notices and reports of completion or any other federal, state, or local reporting regulations.

## 8.39.290 Appeals.

Any person whose application for a permit has been denied, granted conditionally, been suspended or revoked, or whose variance request has been denied, may appeal to the County of El Dorado Building Appeals Board.

## 8.39.300 Violation a Misdemeanor.

Any person who violates any of the provisions of this ordinance is guilty of a misdemeanor, and upon conviction thereof is punishable by such penalties as set forth in Section 1.24.020 of this code.

## 8.39.310 Notice of Violation.

A notice of violation shall be issued and shall be recorded with the County Recorder whenever the Division determines that:

1. A well has not been completed in accordance with a well permit or the plans and specifications relating thereto;
2. A well has been constructed or destroyed without a required permit; or
3. An abandoned well has not been destroyed in accordance with the standards.

The owner(s) of the property, as revealed by the assessment roll, on which the violation is situated, and any other person responsible for the violation shall be notified of the recordation, if their address is available.

If the property owner(s) or authorized agent disagrees with the determination, he may submit evidence to the Division and shall have a right to appeal an adverse decision of the Director to the Board in accordance with the provisions of section 8.39.290.

**8.39.320 Decision by Board.**

The Board may reverse, affirm, or modify, wholly or in part, the decision or the notice of violation; and may make such order as should be made. Such action shall be final.

**8.39.330 Removal of Violation Notice.**

The Division shall submit a removal of notice of violation to the County Recorder when:

1. It is determined by the Division or the Board, after review, that no violation of this chapter exists; or
2. All required and corrective work has been completed and approved by the Division.

**8.39.340 Civil Enforcement.**

Violations of this chapter may also be redressed in the manner hereinafter set forth by civil action. In addition to being subject to prosecution, any person who violates any of the provisions of this chapter may be made the subject of a civil action. Appropriate civil action includes, but is not limited to, injunctive relief and cost recovery.

**8.39.350 Remedies Cumulative.**

The remedies available to the Board to enforce this chapter are in addition to any other remedies available under ordinance or statute, and do not replace or supplant any other remedy but are cumulative thereto.

**8.39.360 Severability.**

If any section, subsection, paragraph, sentence, clause, or phrase of the ordinance codified in this chapter is for any reason held to be invalid or unconstitutional by a decision of a court of competent jurisdiction, it shall not affect the remaining portions of this ordinance, including any other section, subsection, sentence, clause, or phrase therein.

**8.39.370 Regulations.**

The Director is authorized to make such regulations for the protection of groundwater against pollution and contamination, and for protection of public health.

### 8.39.380 Right of Entry and Inspection.

Representatives of the Division shall have the right to enter upon any premises at all reasonable times to make inspections and tests for the purpose of such enforcement and administration. If any such premises are occupied, he shall first present proper credentials and demand entry. If the same is unoccupied, he shall first make a reasonable effort to locate the owner or any person having charge or control of the same and demand entry. If such entry is refused, he shall have recourse to such remedies as are provided by law to secure entry.

### 8.39.390 Submittal of State "Well Completion Report".

The driller shall provide the Division and the State Department of Water Resources a well completion report within sixty (60) days of the completion of any well construction, reconstruction, or destruction. This report shall document that the work was completed in accordance with the standards and all additional permit conditions.

### 8.39.400 Confidentiality of State "Well Completion Report".

Reports made in accordance with 8.39.390 shall not be made available for inspection by the public, but shall be made available to governmental agencies for use in making studies, or to any person who obtains a written authorization from the owner of the well.

## WATER WELLS

### 8.39.410 Inspections.

1. Upon receipt of an application, the Division may inspect the drilling site prior to issuance of a well permit. The purpose of this inspection is to determine whether site conditions exist that would preclude approval of the proposed site.
2. The Division may inspect the annular seal depth prior to sealing and at any other time that the well is under construction.
3. The Division may make a final inspection after completion of the well to determine whether the well was completed in accordance with this chapter.

### 8.39.420 Re-inspection Fees.

If site is not ready for a scheduled inspection and inspection cannot be completed, additional fees may be assessed in accordance with the Division's fee schedule and payable prior to a re-inspection.

## 8.39.430 Required Notices.

Move on notice: The well driller shall notify the Division twenty-four (24) hours prior to commencement of drilling.

Seal inspections - Self Certification:

1. Each well driller or consultant must register in order to conduct inspection of well seal or destruction by filling out the Water Well Inspector Registration Form with the Division.
2. When seal or destruction is to take place the Division will be notified of the date and time, and then registered inspector can inspect seal or destruction as appropriate.
3. To finalize the permit the well seal record must be filed with the Division. The **well permit will not be finalized if this form is not received.**

## 8.39.440 Should Division Fail to be Present.

If the Division grants approval to allow a seal to be poured without inspection and there is not a registered inspector available, the driller shall seal the well in accordance with the standards of this ordinance and any permit conditions. No seal shall be poured until permission to proceed has been received by scheduling seal time as required in Section 8.39.410 and waiting a minimum of 30 minutes past the scheduled seal time unless other arrangements are made with Division staff.

## 8.39.450 Finished Construction Specifications for Public Water Wells.

1. Provide a concrete base around the well casing that extends at least 2 feet in all directions, 4 inches thick, with the upper surface sloping away from the casing unless other construction methods are approved by the Division.

2. Wellhead shall be fitted with a sampling tap, located on the discharge line between the wellhead and the check valve.

3. Wellhead shall be fitted with a vent, either a downturned screened elbow, or other approved venting method.

4. Wellhead shall be equipped to be easily accessible for spot chlorinating.

5. Wellhead shall be protected by a locking structure, or other method of

security.

6. Public water well construction and operation shall comply with Title 22, California Code of Regulations, Chapter 16, and the California Waterworks Standards.

## WATER SUPPLIES FOR BUILDING PERMITS (existing parcels)

### 8.39.460 Water Well Construction and Production Requirement.

Acceptable water wells are those which are constructed to the standards specified in "Water Well Standards", State of California, Department of Water Resources, Bulletins 74-81, 74-90, and subsequent supplements or revisions; and which are capable of providing to each connection a minimum of five (5) gallons per minute, either from the well itself or a combination of well and storage. Wells producing less than one (1) gallon per minute shall not be accepted as an adequate water supply.

The production capacity of a well for a single family dwelling shall be determined from a four (4) hour well production test as defined in 8.39.470. The production capacity is valid for two years from the date of testing and shall be certified with an original signature by a licensed well driller, licensed pump contractor, or other professional person approved by the Division.

### 8.39.470 Water Well Production Test Procedures.

The capacity of a well drilled in hard rock on existing parcels shall be determined from a well production test. For a single family dwelling, the test shall be conducted for a minimum 4 hours and until there is a stable rate of pumping for 4 hours. The test shall meet one of the following approved test methods as defined by the California Groundwater Association or by another approved method acceptable to the Division:

1. Constant Yield and Drawdown - Test-pump installed

   The Constant Yield and Drawdown Test requires that the water in storage in the well be removed until a stable pumping level is established. The duration of the test period. The yield that maintains this constant pumping level at the end of the test period is the constant yield. The test period shall continue as long as necessary to achieve a 4-hour constant yield.

2. Water Recovery - Test-pump installed

   The Water Recovery Test is performed by pumping all of the water out of the well or at least until the pump breaks suction, then waiting a specific

amount of time (often determined during testing) and again pumping the well down to the level of the pump. A flow meter (or other approved test starts at this point, and a constant pumping level is maintained for the method) is installed to record the amount of water pumped out and by measuring the time between pump-downs and the amount of water pumped, a recovery rate is computed. The recovery test yield is the stable yield that is sustained for 4 hours. The test period shall continue as long as necessary to achieve a 4-hour stable recovery rate. This test is based on the assumption that the test pump is capable of over-pumping the well.

3. Air lift Test - During Drilling

   The airlift test is performed before or after the completion of the well, with the open end of the drill stem inserted into the borehole and the contained water blown out using the rig's compressor system. The compressed air lifts the water in the well to the surface where the volume of water produced is measured per unit of time in order to establish a sustained yield in gallons per minute. The 4-hour test period shall begin after the last water fracture is encountered.

For wells used for other than a single family dwelling, the Division shall determine the length of the pump testing required.

Public Water System wells are required to be pump tested for a minimum of 72 hours following criteria specified by the Division and the California State Department of Health Services, Division of Drinking Water.

Pumping discharges shall be managed in compliance with approved site specific Best Management Practices and shall not be allowed to enter a storm drain system or a watercourse.

## 8.39.480 Spring Construction and Production Requirement.

Springs which are constructed to the standards specified by the Division following guidelines developed by the California State Division of Health Services; and which are capable of providing to each connection a minimum of five (5) gallons per minute, either from the spring itself or a combination of spring and storage. Springs producing less than one (1) gallon per minute shall not be accepted as an adequate water supply.

The production capacity of a spring shall be determined by measuring the discharge flow rate during the driest months of the year (primarily during the Fall season). The production capacity of a spring is valid for two years from the date of testing and shall be certified by a licensed well driller, licensed pump contractor, or other professional person approved by the Division.

Springs that contribute to a flowing stream, either by surface or subterranean means, are required to obtain a permit for diversion and use from the State Water Resources Control Board.

## 8.39.490 Production Test Report Requirements.

Well production test reports shall include the start and end time of the test period.

Test reports shall be submitted on company letterhead and signed by the person performing the test.

## 8.39.500 Water Storage Requirement.

For wells or springs producing less than five (5) gallons per minute, a minimum 1000-gallon storage tank shall be installed. Additional structures on a parcel may increase the storage tank size requirement.

## 8.39.510 Water Quality.

A report of water quality, analyzed by a California State certified laboratory, shall be submitted to the Division on the proposed water supply prior to final of a building permit. Water quality testing conducted as part of the land development process satisfies this requirement except for current coliform testing (analyzed within one year of permit submittal).

Water supplies that do not meet State primary drinking water standards for acute health risks shall not be approved for use without installation of a certified treatment system that reduces the contaminant level to safe health standards. Initial results that exceed standards may be re-sampled by an approved third party to determine compliance.

Primary acute health risks, such as:

| | |
|---|---|
| Total and fecal coliform | Nitrate (as NO3) |
| Nitrite (as nitrogen) | Nitrate plus Nitrite (sum as nitrogen) |
| Arsenic | |

Water supplies that exceed State primary drinking water health standards (Title 22) for chronic contaminants shall have a deed restriction recorded on the parcel that the water supply is not potable without installation of a certified treatment system that reduces the contaminant level to safe health standards.

Additional water quality parameters may be required depending on the location of the parcel, susceptibility to other contaminants, and future drinking water standards.

## GEOTHERMAL HEAT EXCHANGE WELLS

### 8.39.520 Geothermal Heat Exchange Well Standards.

All geothermal heat exchange well installations or destructions shall conform with State Department of Water Resources "Water Well Standards" Bulletins 74-81, 74-90, and subsequent supplements or revisions for construction methods and materials.

## MONITORING WELLS

### 8.39.700 Permits Required.

No person shall dig, bore, drill, deepen, modify, repair, or destroy a soil boring, monitoring well, or other exploratory boring without first applying for and receiving a permit from the Division unless exempted by law.

### 8.39.710 Persons Permitted to Work on Wells.

All construction, reconstruction, or destruction work on soil borings, monitoring wells, or other exploratory borings shall be by a person who possesses an active C-57 contractor's license in accordance with the provisions of the Business and Professions Code, section 7000, et seq.

### 8.39.720 Monitoring Well Standards.

All monitoring wells/soil boring/exploratory boring installations or destructions shall conform with State Department of Water Resources "Water Well Standards" Bulletins 74-81, 74-90, and subsequent supplements or revisions for construction methods and materials.

### 8.39.730 Pre Drilling Requirements.

Prior to drilling, a line-locating service shall be used to identify any potential drilling obstructions.

### 8.39.740 Temporary Containment Prior to Lab Analysis.

All equipment, drill cuttings, and well development water shall be temporarily contained in United States Department of Transportation (DOT) approved drums on site until lab analysis is complete. Drums shall be properly labeled and dated. Temporary storage time shall not exceed 90 days.

### 8.39.750 Finished Construction Features.

Monitoring wells shall be completed in one of two ways: 1) flush or slightly above existing grade with an in-ground type vault box with protective cover, or 2) above grade with a protective, oversized riser and lockable cover set in a 2' by 2' concrete base or pad with the surface sloping away from the well casing. Protective traffic bollards may also be required with this type of completion.

Each well shall be locked, numbered, and notched or marked on the north side for surveying and well measurements.

### 8.39.760 Equipment Cleaning Before and Between Uses.

All equipment used in drilling and sampling activities must be properly cleaned before and between each uses.

### 8.39.770 Prohibited Materials.

Chemicals, glues, and solvents shall not be used in the construction of monitoring wells/soil borings.

### 8.39.780 Re-inspection Fees.

If site is not ready for a scheduled inspection and inspection cannot be completed, additional fees may be assessed in accordance with the Division's fee schedule and payable prior to a re-inspection.

### 8.39.790 Annual Permits and Inspections.

An annual permit fee may be charged and an annual inspection may be conducted to confirm the status of the monitoring well.

### 8.39.800 Additional Requirements.

Other requirements may apply at the discretion of the Division.

### 8.39.810 Final Inspection.

A final inspection shall be scheduled with the Division at a minimum of 48 hours advance notification. If the final inspection is conducted by a certified inspector, 48 hours advanced notice to the Division is still required.

### 8.39.820 Initial Investigation and Report for Destructions.

Prior to destroying a monitoring well, it shall be investigated to determine the construction details, maintenance history, and current condition. A work plan including the investigation findings and destruction method shall accompany the permit application.

### 8.39.830 Removal and Disposal of Obstructions and Contaminants.

Wells shall be sounded immediately prior to destruction to ensure they are free of obstructions. If any chemical contaminants are observed, the Division shall be immediately notified in writing. Wells shall be cleaned to remove and properly dispose of all obstructions and contaminants.

### 8.39.840 Destruction of Approved Monitoring Wells.

An authorized Division representative shall determine the appropriate destruction method for a monitoring well based on the well construction and /or other administrative issues. The typically accepted monitoring well destruction methods are 1) the well may be drilled out to the true depth of the original boring and the resultant boring backfilled with approved sealing material; or 2) the well may be pressure grouted in place. During the pressure grouting procedure, a minimum of 25 pounds per square inch shall be maintained for five minutes or until pumping refusal.

In some cases, additional sealing requirements will be stipulated on the permit. Division requirements may be more stringent than California well standards.

All waste generated during destruction activities shall be properly managed: this includes, but is not limited to, all waters generated during debris removal or seal placement.

For wells constructed and maintained in accordance with California Well Standards, casing that is more than 5 feet below ground surface may be left in place. The casing shall be filled with sealing material up to 5 feet below ground surface. After sealing material has set, a 5-foot deep hole shall be excavated around the casing and the casing cut off at the bottom of the hole. The excavation shall then be filled with clean native soil.

### 8.39.850 Destruction of Unapproved Monitoring Wells.

For wells not constructed and maintained in accordance with California Well Standards, all material within the original borehole (casing, screen, filter pack, etc.) shall be removed. The borehole shall be completely filled with impervious sealing material.

### 8.39.860 Acceptable Sealing Materials.

Pressure grouting shall be completed using neat cement grout. No aggregate sealing materials may be used.

Boreholes resulting from well drill-outs may be backfilled with neat cement grout, 10-sack sand cement grout, or hydrated high solids 20 percent bentonite slurry. No bentonite chips or pellets are allowed.

Up to 5 percent bentonite clay may be added to a cement mixture.

### 8.39.870 Placement Of Sealing Material By "Tremmie" Pipe.

Sealing material shall be placed by "tremmie" pipe or equivalent method in one continuous operation. A tremmie pipe must be used to place the cement sealing material if a well or boring is more than 30 feet deep or if more than 3 feet of water is present in the annular space to be sealed.

### 8.39.880 Placement Of Sealing Material By Free Fall Method.

Sealing material may be placed by free fall method only if the well is dry, less than 30 feet deep, and does not result in bridging or voids. Volume/fill calculation shall be completed to document successful destruction.

### 8.39.890 Destruction of Soil Borings.

Soil borings shall be completely filled with sealing material. Sealing material may be placed by free fall method only if the boring is dry, less than 30 feet deep, and does not result in bridging or voids. Volume/fill calculation shall be completed to document successful destruction.

### 8.39.900 Permit Expiration-Monitoring Wells.

The permittee shall complete the work authorized by the permit within one (1) year of permit issuance. Upon the expiration of the permit, no further work shall be done unless and until the applicant has received a new permit.

### 8.39.999 Conflicts

The operation of this chapter shall in no way change or diminish the application of other ordinances, County plan, policy or regulation already disallows a water well.
In any case where a provision of this chapter is found to be in conflict with a provision of any zoning, building, fire safety or health ordinance or section of the Code, the provision which establishes the higher standard for the promotion and protection of the health and safety of the people shall prevail.


# Sampling Requirements for Community Water Systems using a Groundwater Source

**Definition of Community: Serves at least 15 service connections used by yearlong residents OR regularly serves at least 25 yearlong residents.**
ref. 64400.10

## General monitoring requirements for each source:

### 1. Secondary standards (due every three years)

- aluminum
- bicarbonate, carbonate, and hydroxide alkalinity
- calcium
- chloride
- color
- copper
- corrosivity
- foaming agents (MBAS)
- iron
- magnesium
- manganese
- odor--threshold
- pH
- silver
- sodium
- sulfate
- specific conductance or total dissolved solids
- thiobencarb
- total hardness
- turbidity
- zinc ref 64449

### 2. Inorganic Chemical analyses (due every three years)

- aluminum
- antimony
- arsenic
- asbestos
- barium
- beryllium
- cadmium
- chromium
- cyanide
- mercury
- nickel
- selenium
- thallium
- fluoride

- nitrite (as nitrogen)
- nitrate and nitrite (sum as nitrogen)
- nitrate (as NO3) due every year
  ref. 64432

### 3. Radiological analyses (due every four years)

Gross alpha from four consecutive quarterly samples (samples can be held by the Laboratory and composited to hold costs down) ref. 64441

### 4. Organic Chemical analyses (due every six years)

VOC's using approved EPA methods, and including Methyl tertiary butyl ether (MTBE). Synthetic organic chemical analyses are waived unless vulnerable.
ref. 64445

### 5. Unregulated Chemicals

- boron and vanadium
- Additionally, if vulnerable, sampling required for chromium 6, dichlorodifluoromethane, ETBE, perchlorate, TAME, TBA, TCP ref. 64450

## General Bacteriological sampling requirements:

Sampling for total coliforms is based on the known population served or the total number of service connections, whichever results in the greater number of samples (minimum is one sample per month).ref. 64423

Repeat sampling for a total coliform present sample consists of 4 repeat samples following the Sample Siting Plan.

Submission and approval of a Sample Siting Plan that follows the County guidelines is required.ref. 64422

Submission and approval of a Sample Siting Plan that follows the County guidelines is required.ref. 64422

## Other requirements:

Permit application packet

Annual water quality report to consumers

Public notification as required for quality or procedural failures

Lead notice to consumers

Annual emergency notification plan

Certified Distribution System Operator for all community water systems

Certified Treatment Plant Operator for all community water systems providing treatment

****All analyses must be done by a State approved laboratory.**

Please note: the above requirements are subject to change as the State of California modifies and/or clarifies their regulations.