

LAKE LAFCO

CALLAYOMI

COUNTY WATER DISTRICT (CCWD)

MUNICIPAL SERVICE REVIEW (MSR)

AND

**SPHERE OF INFLUENCE (SOI)
UPDATE**

Adopted

JULY 17th 2013

**Resolution 2013-0006 – Service Review
Resolution 2013-0007 – Sphere of Influence**

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1 INTRODUCTION

1.1 Local Agency Formation Commission (LAFCO) History

This report is prepared pursuant to legislation enacted in 2000 that requires LAFCO to conduct a comprehensive review of municipal service delivery and update the spheres of influence (SOIs) of all agencies under LAFCO's jurisdiction. This chapter provides an overview of LAFCO's history, powers and responsibilities. It discusses the origins and legal requirements for preparation of the municipal services review (MSR). Finally, the chapter includes the process for MSR review, MSR approval and SOI updates.

After World War II, California experienced dramatic growth in population and economic development. With this boom came a demand for housing, jobs and public services. To accommodate this demand, many new local government agencies were formed, often with little forethought as to the ultimate governance structures in a given region, and existing agencies often competed for expansion areas. The lack of coordination and adequate planning led to a multitude of overlapping, inefficient jurisdictional and service boundaries, and to the premature conversion of California's agricultural and open-space lands.

Recognizing this problem, in 1959, Governor Edmund G. Brown, Sr. appointed the Commission on Metropolitan Area Problems. The Commission's charge was to study and make recommendations on the "misuse of land resources" and the growing complexity of local governmental jurisdictions. The Commission's recommendations on local governmental reorganization were introduced in the Legislature in 1963, resulting in the creation of a Local Agency Formation Commission, or "LAFCO," operating in every county.

LAFCO was formed as a countywide agency to discourage urban sprawl and to encourage the orderly formation and development of local government agencies. LAFCO is responsible for coordinating logical and timely changes in local governmental boundaries, including annexations and detachments of territory, incorporations of cities, formations of special districts, and consolidations, mergers and dissolutions of districts; as well as for reviewing ways to reorganize, simplify, and streamline governmental structure.

The Commission's efforts are focused on ensuring that services are provided efficiently and economically while agricultural and open-space lands are protected. To comply with State law and to better inform itself and the community as it seeks to exercise its charge; LAFCO conducts service reviews to evaluate the provision of municipal services within the County.

LAFCO regulates, through approval, denial, conditions and modification, boundary changes proposed by public agencies or individuals. It also regulates the extension of public services by cities and special districts outside their boundaries. LAFCO is empowered to initiate updates to the SOIs and proposals involving the dissolution or consolidation of special districts, mergers, establishment of subsidiary districts, and any reorganization including such actions. Otherwise, LAFCO actions must originate as petitions or resolutions from affected voters, landowners, cities or special districts.

1.2 Lake LAFCO

Lake LAFCO consists of seven regular members:

Two members from the Lake County Board of Supervisors

Two city council members

Two members from special districts

One public member who is appointed by the other members of the Commission

There is an alternate in each category. All Commissioners are appointed to four-year terms.

The Lake LAFCO Commissioners are as follows:

Edward Robey	Public Member
Denise Rushing	County Member
Jim Comstock	County Member
Jeri Spittler	City Member
Stacy Mattina	City Member
Frank Gillespie	Special District Member
Gerry Mills	Special District Member
Suzanne Lyons	Public Member Alternate
Jeff Smith	County Member Alternate
Joey Luiz	City Member Alternate
Jim Abell	Special District Alternate

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires LAFCO review and update SOIs no less than every five years and to review municipal services before updating SOIs. Lake LAFCO policies state "Lake LAFCO must review and update each agency's Sphere of Influence at least once every five years, as necessary". The requirement for service reviews arises from the identified need for a more coordinated and efficient public service structure to support California's anticipated growth. The service review provides LAFCO with a tool to study existing and future public accommodating growth, preventing urban sprawl, and ensuring that critical services are provided efficiently.

1.3 Municipal Services Review Requirements

Effective January 1, 2008, Government Code §56430 requires LAFCO to conduct a review of municipal services provided in the county by region, sub-region or other designated geographic area, as appropriate, for the service or services to be reviewed, and prepare a written statement of determination with respect to the following six topics:

1. Growth and population projections for the affected area
2. The location and characteristics of any disadvantaged unincorporated communities (DUC) within or contiguous to the sphere of influence
3. Present and planned capacity of public facilities and adequacy of public services, (including infrastructure needs or deficiencies)
4. Financial ability of agencies to provide services
5. Status of, and opportunities for, shared facilities

6. Accountability for community service needs (including governmental structure and operational efficiencies)

1.4 Municipal Services Review Process

For local agencies, the MSR process involves the following steps:

- Outreach: LAFCO outreach and explanation of the project
- Data Discovery: provide documents and respond to LAFCO questions
- Map Review: review and comment on LAFCO draft map of the agency's boundary and sphere of influence
- Profile Review: internal review and comment on LAFCO draft profile of the agency
- Review Draft MSR: public reviews and comments on LAFCO draft MSR
- LAFCO Hearing: attend and provide public comments on MSR

MSRs are exempt from California Environmental Quality Act (CEQA) pursuant to §15262 (feasibility or planning studies) or §15306 (information collection) of the CEQA Guidelines. LAFCO's actions to adopt MSR determinations are not considered "projects" subject to CEQA. The MSR process does not require LAFCO to initiate changes of organization based on service review findings, only that LAFCO identify potential government structure options. Additional information on local government issues is found in Appendix A at the end of this report.

However, LAFCO, other local agencies, and the public may subsequently use the determinations to analyze prospective changes of organization or reorganization or to establish or amend SOIs. Within its legal authorization, LAFCO may act with respect to a recommended change of organization or reorganization on its own initiative (e.g., certain types of consolidations), or in response to a proposal (i.e., initiated by resolution or petition by landowners or registered voters).

Once LAFCO has adopted the MSR determinations, it must update the SOI for each jurisdiction. The LAFCO Commission determines and adopts the spheres of influence for each agency. A CEQA determination is made by LAFCO on a case-by-case basis for each sphere of influence action and each change of organization, once the proposed project characteristics are sufficiently identified to assess environmental impacts.

1.5 Sphere Of Influence Updates

The Commission is charged with developing and updating the Sphere of Influence (SOI) for each city and special district within the county.¹

An SOI is a LAFCO-approved plan that designates an agency's probable future boundary and service area. Spheres are planning tools used to provide guidance for individual boundary change proposals and are intended to encourage efficient provision of organized community services and prevent duplication of service delivery. Territory cannot be annexed by LAFCO to a city or district unless it is within that agency's sphere.

¹ The initial statutory mandate, in 1971, imposed no deadline for completing sphere designations. When most LAFCOs failed to act, 1984 legislation required all LAFCOs to establish spheres of influence by 1985.

The purposes of the SOI include the following: to ensure the efficient provision of services, to discourage urban sprawl and premature conversion of agricultural and open space lands, and to prevent overlapping jurisdictions and duplication of services.

LAFCO cannot regulate land use, dictate internal operations or administration of any local agency, or set rates. LAFCO is empowered to enact policies that indirectly affect land use decisions. On a regional level, LAFCO promotes logical and orderly development of communities as it considers and decides individual proposals. LAFCO has a role in reconciling differences between agency plans so that the most efficient urban service arrangements are created for the benefit of current and future area residents and property owners.

The Cortese-Knox-Hertzberg (CKH) Act requires LAFCO to determine the SOI of each local governmental agency within the county and to review and update the SOI every five years. LAFCOs are empowered to adopt, update and amend the SOI. They may do so with or without an application and any interested person may submit an application proposing an SOI amendment.

While SOIs are required to be updated every five years, or earlier if necessary, this practice does not in itself determine the planning horizon of the SOI. The term or horizon of the SOI is defined by each LAFCO. In the case of Lake LAFCO, the Commission's policies state that an agency's near term SOI shall generally include land that is anticipated to be annexed within the next five years, while the agency's long-term SOI shall include land that is within the probable growth boundary of an agency and therefore anticipated to be annexed in the next 20 years.

LAFCO may recommend government reorganizations to particular agencies in the county, using the SOIs as the basis for those recommendations. In determining the SOI, LAFCO is required to complete an MSR and adopt the determinations previously discussed. In addition, in adopting or amending an SOI, LAFCO must make the following determinations:

- Present and planned land uses in the area, including agricultural and open-space lands
- Present and probable need for public facilities and services in the area
- Present capacity of public facilities and adequacy of public service that the agency provides or is authorized to provide
- Existence of any social or economic communities of interest in the area if the Commission determines these are relevant to the agency.
- For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing Sphere of Influence.

The CKH Act stipulates several procedural requirements in updating SOIs. It requires that special districts file written statements on the class of services provided and that LAFCO clearly establish the location, nature and extent of services provided by special districts.

By statute, LAFCO must notify affected agencies 21 days before holding the public hearing to consider the SOI and may not update the SOI until after that hearing. The LAFCO Executive

Officer must issue a report including recommendations on the SOI amendments and updates under consideration at least five days before the public hearing

2 MIDDLETOWN COMMUNITY

2.1 History

2.1.1 Early History

Rancho Collayomi (also called Rancho Callayomi) was an 8,242-acre Mexican land grant in present day Lake County California given in 1844 by Governor Manuel Micheltorena to Robert T. Ridley.² Rancho Collayomi was one of three land grants (along with Ranch Lupyomi and Rancho Guenoc) in Lake County. Lake County was formed in 1861 of land taken mainly from Napa County and the northwest portion taken from Mendocino County.

Rancho Collayomi encompassed three square leagues in the Loconoma Valley. Robert T. Ridley (1818-1851) was an English sailor who was captain of the Port of San Francisco. In 1843, Ridley traded his three league Rancho Collayomi grant to Jacob P. Leese for the two league Rancho Canada de Guadalupe la Vistacion y Rodeo Viejo near San Francisco. Jacob Primer Leese (1809 -1892), was a trader from Ohio who had married María Rosalia Vallejo (sister of General Vallejo) and was the owner of the adjacent Rancho Guenoc.³

With the cession of California to the United States following the Mexican-American War, the 1848 Treaty of Guadalupe Hidalgo provided that the land grants would be honored. As required by the Land Act of 1851, a claim for Rancho Collayomi was filed with the Public Land Commission in 1852,⁴ and the grant was patented to Archibald A. Ritchie and Paul S. Forbes in 1863.⁵

Ritchie was killed in an accident in 1856. Paul Forbes sold his share of both Rancho Guenoc and Rancho Collayomi to one of Ritchie's sons-in-law, Gen. M.D.L. Simpson, in 1867. The following year, Simpson deeded half the lands to Ritchie's wife, Martha and children. The heirs began selling portions of the properties in the early 1870s.

2.1.2 Middletown History

The first house was built at the site by J.H. Berry in 1870. The town began in 1871. The Middleton post office opened in 1871 and changed its name to Middletown in 1875.⁶ Middletown enjoyed a robust quicksilver mining industry through the end of the 19th century. By the early 1900s, cattle and sheep ranching were prominent, along with some limited pear and walnut production. A resort economy sprung up around the various natural springs, and the area around Middletown attracted vacationers from the Bay Area through the 1950s. As travel costs decreased, tourism to the resorts diminished as patrons were able use air travel to vacation in more far flung places. Many of the resorts closed in the 1960s.

In the 1970s and early 1980s, exploitation of nearby geothermal resources brought an influx of workers into the local economy. Electrical power plants powered by "steam wells" were built in the mountains above Middletown. As housing prices in the Bay Area increased in the late 20th

² Ogden Hoffman, 1862, *Reports of Land Cases Determined in the United States District Court for the Northern District of California*, Numa Hubert, San Francisco

³ Hoover, Mildred B.; Hero & Ethel Rensch, and William N. Abeloe (1966). *Historic Spots in California*. Stanford University Press. ISBN 978-0-8047-4482-9

⁴ United States, District Court, California: Northern District, Land Case 14 ND.

⁵ Report of the Surveyor General 1844-1886.

⁶ Durham, David L. (1998). *California's Geographic Names: A Gazetteer of Historic and Modern Names of the State*. Quill Driver Books. p. 106. ISBN 9781884995149.

century, Middletown and nearby Hidden Valley Lake enjoyed a population boom as commuters moved to the Middletown area looking for affordable housing; keeping their jobs 50 to 100 miles away in Santa Rosa, Napa, and San Francisco.

Middletown is currently populated primarily by commuters and retirees and enjoys a modest tourist trade based primarily on Harbin Hot Springs and the Twin Pine Casino located on the local Rancheria south of the town.

2.2 Middletown

Middletown (formerly, Middle Station and Middleton) is a census-designated place (CDP) in Lake County. Middletown is located 17 miles south of Lower Lake, at an elevation of 1,099 feet. The population was 1,323 at the 2010 census, up from 1,020 at the 2000 census. Middletown was given its name because it is halfway between Lower Lake and Calistoga to the south.

Middletown, with its tree-lined streets, is framed into the Coastal Mountain Range by beautiful views of Mt. St. Helena and Cobb Mountain. The 95461 ZIP Code also includes part of Cobb Mountain and the community of Anderson Springs. The other Middletown ZIP Code of 95467 encompasses Coyote Valley that includes the Hidden Valley Lake area.

The Middletown California Unified School District includes even more area on Cobb Mountain and Coyote Valley. The South Lake County Fire Protection District, whose headquarters is in Middletown, is bigger still, encompassing 283 square miles. Although the population of Middletown proper is small, the population of the Fire District is approximately 12,000.

Middletown sits at an elevation of 1,100 feet above sea level. It gets hot during the day in the summer but normally cools down as soon as the sun sets. There is usually only one day of snow in the winter, except on Cobb Mountain. There are a few days of fog but Middletown is insulated from the ocean fog by the mountains. The growing season normally starts two weeks later than the Napa Valley's but the harvest period arrives about the same time. There is a frost period between November 15 to May 15 and water usage by agriculture for frost protection occurs during this period. Middletown has the cleanest air in the State.⁷

2.3 Population Data

The 2010 Census reported that 1,317 people (99.5% of the population) lived in households, 6 (0.5%) lived in non-institutionalized group quarters, and none were institutionalized.

There were 508 households, out of which 189 (37.2%) had children under the age of 18 living in them, 72 (14.2%) had a female householder with no husband present, 41 (8.1%) had a male householder with no wife present. There were 140 households (27.6%) made up of individuals and 52 (10.2%) had someone living alone who was 65 years of age or older. The average household size was 2.59. There were 336 families (66.1% of all households); the average family size was 3.15.

The Middletown population was spread out in age as follows:

Under the age of 18	376 people	28.4%
Aged 18 to 24	114 people	8.6%
Aged 25 to 44	309 people	23.4%

⁷ <http://www.middletownca.com/>, May 28, 2012

Aged 45 to 64 374 people 28.3%
 65 years of age or older 150 people 11.3%

The median age was 37.4 years. For every 100 females there were 102.9 males. For every 100 females age 18 and over, there were 103.2 males.

There were 557 housing units of which 251 (49.4%) were owner-occupied, and 257 (50.6%) were occupied by renters. The homeowner vacancy rate was 3.8%; the rental vacancy rate was 4.1%. 659 people (49.8% of the population) lived in owner-occupied housing units and 658 people (49.7%) lived in rental housing units.

2.4 Population Projections

Population projections are found in the Middletown Area Plan and are shown below:⁸

Middletown CDP Population and Housing Unit Projections					
	2015	2020	2025	2030	Projected Increases (2010-2030)
Population	1464	1611	1772	1949	618
Occupied Housing Units	572	629	692	761	241
Average Annual Increase in Housing Units	10	11	13	14	

Although the population is expected to increase; the actual increase will depend on numerous factors, including water availability.

2.5 Schools

Information on schools in the Middletown area can be obtained from the following sources:

Middletown Unified School District
 20932 Big Canyon Road/P.O. Box 338, Middletown, CA 95461
 Phone: 707-987-4100, Fax: 707- 987-4105
 Korby Olson, District Superintendent, E-Mail: <http://www.middletownusd.org>

Minnie Cannon Elementary School (K-6) Students: 132
 20932 Big Canyon Road, Middletown, CA 95461
 Phone: 707- 987-4130, Fax: 707-987-4136

Cobb Mountain Elementary School (K-6) Students: 151
 20932 Big Canyon Road, Middletown, CA 95461
 Phone: 707-928-5229, Fax: 928-5414

Coyote Valley Elementary School (K-6) Students: 398
 20932 Big Canyon Road, Middletown, CA 95461
 Phone: 707-987-3357, Fax: 987-4111
 Tom Hoskins, Principal

Middletown Elementary Community Day Students: 6
 20932 Big Canyon Road, Middletown, CA 95461

⁸ Lake County Community Development Department, Middletown Area Plan, Adopted August 17, 2010, Page 2-16.

Phone: 707-987-4185, Fax: 987-4179

Middletown Middle School (7-8) Students: 265
20932 Big Canyon Road, Middletown, CA 95461
Phone: 707-987-4160 Fax: 987-4162
Thad Owens, Principal

Middletown High School (9-12) Students: 135
20932 Big Canyon Road, Middletown, CA 95461
Phone: (707) 987-4140, Fax: 987-1446
Bill Roderick, Principal

Lake County International Charter School Students: 59
P O Box 984, Middletown, CA 95461
Phone: (707) 987-3063, Fax: 987-8314
Karl Reichman, Director

Loconoma Valley High School (Continuation) (9-12) Students: 20
21256 Washington Street, Middletown, CA 95461
Phone: (707) 987-4170, Fax: 987-4171
John Phelps, Principal

Private elementary/middle schools in Middletown:

Middletown Christian School (K-11) Students: 82
20800 State Highway 29, Middletown, CA 95461

Middletown Seventh Day Adventist School (1-8) Students: 20
21640 State Highway 29, Middletown, CA 95461

2.6 Water

Like much of California, Lake County is facing water supply challenges. The Lake County General Plan 2008 includes a Water Resources element and together with the Lake County Groundwater Management Plan (GWMP)⁹, the Grading, Stormwater Management and Groundwater Export Ordinances as well as numerous state and federal regulations, there are extensive policies in place to protect the County's water supplies and quality. Water supply concerns affect all growth and development in the County, including the agricultural sector (vineyards, orchards, hay and livestock, and other agricultural activities).

Lake County has been experiencing an influx of new residents, businesses, and agricultural uses which require additional water supplies. Although the trend is slowing, from 2000 to 2004, the County's population increased over 8%, about 5,000 residents, to 63,110. The population of Lake County in 2010 was 64,665. However, the population estimate for 2011 was 64,323, a decline of 0.5%.¹⁰ The majority of agricultural production in the Middletown area as well as in the remainder of Lake County groundwater is used. Urban development in the Community of Middletown relies upon groundwater unlike the communities surrounding Clear Lake, where

⁹ Lake County Groundwater Management Plan Prepared by CDM for the Lake County Watershed Protection District, and the Department of Public Works, Water Resources Division in cooperation with the California Department of Water Resources Northern Division, March 31, 2006.

¹⁰ <http://quickfacts.census.gov/qfd/states/06/06033.html>, January 30, 2013

surface water serves most urban development. However, there are some areas near Middletown, which have a surface water supply, such as Mirabel Estates, or rely on surface water as a supplemental source.

The Lake County Board of Supervisors have approved and adopted an ordinance regulating the extraction and exportation of groundwater from Lake County. In developing this ordinance the Board recognized the principle developed in the case law of California that water may be appropriated from a groundwater basin if the groundwater supply is surplus and exceeds the reasonable and beneficial needs of overlying users. Furthermore, the Board determined the protection of health, welfare, and safety of the residents of the County, and the public benefit of the State requires that groundwater resources of Lake County be protected from harm resulting from extraction of groundwater for use on lands or for any other purpose outside the County, until such time as needed additional surface water supplies are obtained for use on lands of the County, or over-drafting of groundwater is alleviated, to the satisfaction of the Board.

The geologic setting of Lake County is dominated by basement rock that forms the majority of ridges and mountains. While there is an adequate supply of water within the water service districts of Anderson Springs, Callayomi and Hidden Valley Lake, Callayomi and Hidden Valley Lake will require additional storage capacity. Limited water availability is a significant limitation on new development and agricultural growth in many areas of the South County.

Most of the Planning Area is within the Upper Putah Creek Watershed, with a portion along the eastern boundary that is remote and sparsely developed in the Middle Putah Creek Watershed. Putah Creek is the principal watercourse of the area. All other creeks in the basin are direct or indirect tributaries of Putah Creek.

Local resources for watershed management include the Eastlake Resource Conservation District (Eastlake RCD) and Upper Putah Creek Stewardship. These groups work with property owners and grant programs to assist in erosion control, restoration and assessment. Information on these and other programs may be obtained from the Lake County Watershed Coordinator, who is an employee of the Eastlake and Westlake RCD's.

Precipitation levels and climate significantly influence surface and ground water availability and demand. Mean annual precipitation in Lake County ranges from 32 inches per year near Clear Lake to over 80 inches per year in the higher elevations of the Mayacamas Mountains along the southwest border of the County. Average annual precipitation in the Middletown Planning Area is approximately 38.5 inches. Due to the relatively mild winter conditions in Lake County, there is no appreciable storage of water in the form of snow pack. Water demand varies according to seasonal climatic changes. The most obvious demand change is the result of irrigation activities during the agricultural growing season. Domestic water demand also fluctuates in response to seasonal climatic changes. This fluctuation is related to domestic irrigation of gardens and landscaping and is not as significant as commercial agricultural demands.

Climate influences the water demand of agricultural activities in two ways. The first influence is in the length of the crop-growing season, which influences the type and location of crops. According to the Lake County Resource Management Plan, on average Lake County experiences approximately 140 to 200 days between heavy frosts that act to define the local growing season.¹¹

¹¹ Lake County Water Resource Management Plan Update, Ott Water Engineers, pg 14, January 1987

The second influence that climate has is on the evapotranspiration rate of crops, surface water bodies and exposed soils. The evapotranspiration rate of agricultural crops varies according to the crop, but ranges from 3 acre-feet per year for per acre of irrigated pasture to 1.2 acre-feet per year per acre of wine grapes. The Resource Management Plan averages domestic water demand at approximately 0.145 acre-feet per year per capita. Based on an average family size of 3.15 persons per household. Approximately 148,817 gallons per year would be consumed for the average household in Middletown. Large tracts of resource conservation areas, open space and grazing lands should be retained whenever possible because they function as water recharge areas at an annual rate of one acre foot (325,851 gallons) times the average annual rainfall for the area per acre. Within the Planning Area the average would be 1,045,439 gallons per acre annually.

Domestic water in the community of Middletown is provided by the Callayomi County Water District, in Anderson Springs by the Anderson Springs Community Services District, and in Hidden Valley Lake by the Hidden Valley Lake Community Service District. Recent rulings by the State Division of Water Rights, based on a study by the Hidden Valley Lake Community Service District, indicate the Hidden Valley and Callayomi water districts have sufficient water rights and an adequate supply of water to support further build-out and expansion of the districts, if the supporting infrastructure can be funded.

Anderson Springs obtains its water from springs located on Cobb Mountain. Surface water stored in Detert Reservoir provides most of the water for the Langtry estate agricultural operations in Guenoc Valley; although studies indicate there are additional groundwater supplies in this area.

A few parcels and small subdivisions, such as Mirabel Estates, have surface water uptake from streams or springs. In the remainder of the Planning Area, groundwater is the primary water supply, provided by public water companies, small private water companies, and individual wells.

There were plans initiated in the early 1960's for a Dry Creek water storage project to contain 6,600 acre feet of water. Although interest persists in the project, it was eventually determined to be infeasible and has since been abandoned. Domestic water quality for Anderson Springs, Hidden Valley Lake, and Callayomi County Water Districts is generally good.

The Lake County Watershed Protection District works to protect and maintain water resources within the county. There are 12 groundwater basins and one groundwater source area in Lake County. The amount of information available for each basin varies significantly; however, the basins with the most development are generally better characterized. This district includes water supplies in Callayomi and Coyote Valleys and some of the remote eastern sections of the Planning Area, but does not include the Guenoc Valley.¹²

¹² <http://www.co.lake.ca.us/Assets/CDD/Middletown+Area+Plan/Middletown+Area+Plan.pdf?method=1>, Pages 3-6 to 3-8.

3 CALLAYOMI COUNTY WATER DISTRICT (CCWD)

3.1 Callayomi County Water District Background

The Callayomi County Water District (CCWD) serves the unincorporated town of Middletown in Lake County, California. The District was formed in 1977 and includes the former Middletown County Water District and Middletown County Waterworks District No. 5. Initial facilities were built in 1971. Service was extended to the Middletown Rancheria and a second storage tank added in 1984. Additional facilities, including the treatment plant, were built in 1989.¹³

Contact information for the District is as follows:

Callayomi County Water District
P. O. Box 623, Middletown, CA 95461
Phone: (707) 987-2180 Fax: (707) 987-0779

Location: 21282 Stewart Street, Middletown
Office Hours: Monday-Friday, 9 a.m.-1 p.m., excluding holidays

Board of Directors:

President:	Stephen Bishop	PO Box 1272, Middletown CA 95461
Vice President:	Kelly Gavazza	PO Box 162, Middletown CA 95461
Director:	Kimberly Haynie	PO Box 1129 Middletown CA 95461
Director:	Pat Giacomini	15429 Lake Street Middletown CA 95461
Director:	Robert Brennen	PO Box 325 Middletown, CA 95461

Staff:

General Manager:	John Hamner
Administrative Assistant:	Janet Mondragón
Water Operator:	August Santana

The Board of Directors meetings are held on the second Thursday of each month at 6:00 pm at the District office.

3.2 Callayomi County Water District Water System

3.2.1 Water System Overview

The Callayomi County Water District provides the primary source of potable water consumed by the community of Middletown in Lake County. It owns, operates and maintains the water system facilities, which include a water treatment plant, three water supply wells, two storage tanks, and a booster station with two pumps, transmission and distribution mains, 70 fire hydrants,¹⁴ and 450 metered water services both inside and outside the District boundary (366 active accounts and 84 inactive accounts).¹⁵

¹³ <http://ccwd.home.mchsi.com/>, May 11, 2012.

¹⁴ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 1-1.

¹⁵ Callayomi County Water District, General Manager/ Board members, June 13, 2013.

The District is doing a good job at this time; however, the District has potential problems with water supply and water storage, and some problems with low water pressure in a few distribution lines and a few fire hydrants.

3.2.2 Water Supply Wells

The main water well, called the Diamond-D well, is located on private property (the Diamond-D Ranch, which borders Putah Creek off Big Canyon Road north of the town) and is capable of producing around 480 gallons per minute. It is pumped by a District-owned pump and motor. The Diamond-D well, was placed in service in 1989. The well site is located outside the District boundaries.

The Diamond-D well provides the main source of water for the District. It draws percolating groundwater from Putah Creek and thus it is not subject to the SWRCB appropriative water rights rules. Diamond-D operates during off-peak hours (9:00 pm to 9:00 am) during which time it replenishes the storage tanks. Operation during off-peak hours serves to minimize energy costs.

The Diamond-D well is subject to a 50-year water lease agreement between the well owner and the District, which will expire on September 13, 2038. The terms of the lease agreement allow 48 million gallons to be pumped from the well at a predetermined cost rate. If additional water is pumped a higher fee is charged. The District did not exceed the lease agreement base amount between 2000 and 2012.¹⁶

Two additional wells are located at the District-owned well site, outside the District boundaries on Big Canyon Road between Putah Creek and Middletown. The original District-owned well (Well No. 1) was drilled in 1971. This well pumped directly into the distribution system without filtration and was removed from service in 1989 due to the bad taste and odor of the water (sulfur). This well can be connected to the District plant, if necessary, but it is not adequate in quality or quantity. Well No. 1 is classified as a stand-by source by the California Department of Public Health (CDPH), with use restricted to short-term emergencies of five or less consecutive days and fifteen or less total days per year.¹⁷

Drilled in 2002, Well No. 3 is owned by the District and is located off Big Canyon Road near Putah Creek, about 1000 yards north of the original well site. It is capable of producing 320 GPM. Well No. 3 was brought on-line in 2004. This well contains traces of iron and manganese. Although element concentrations are at levels below the secondary Maximum Contaminant Level (MCL), quarterly monitoring is required and this well is used only in conjunction with the Diamond-D well.¹⁸ The Consumer Confidence Report on water quality is found in Appendix B at the end of this report.

Additional information regarding the wells is shown in the two tables below:

¹⁶ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-1.

¹⁷ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-2.

¹⁸ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-2.

Wells	Year Installed	Description	Source	Capacity GPM*	Use
Diamond-D	1989	Main source of water for the District.	Putah Creek underflow	400	44.5 M gal/year (Dec. 2006)
Original District Well (Well No. 1)	1971	Functions as a standby well for Diamond-D.	Putah Creek underflow	79-270	Standby Diamond-D
Well No. 3	2002	Only used when in conjunction with Diamond-D.	Putah Creek underflow	320	Standby Diamond-D

* Well capacity is based on DHS (DPH) Water Supply Permit dated 03-22-06.

Although all three wells are listed in the above table, the Diamond-D well is the primary source of water for the District.

Wells	Combined Capacity GPM
Well No. 1 and Well No. 3	420
Well No. 1 and Diamond-D	610
Well No. 3 and Diamond-D	780
All wells combined	850

The above information on water well capacity is evaluated below in comparison to water demand.

3.2.3 Comparison of Water Sources to Demand Requirements

The following table from the Water System Master Plan lists the required and available water supply during average daily use and during maximum daily use for 447 active and inactive connections, with District wells pumping at off peak hours:

Demand Type	Daily Demands Per Connection (gpd)	Total Supply Required (gal)	Existing Daily Supply Diamond-D (gal)	Excess Or Shortage (gal)	Existing Daily Supply Diamond-D + Well #3 (gal)	Excess Or Shortage (gal)	Combined 3 Wells Capacity (gal)	Excess Or Shortage (gal)
Average Daily Demand	369 gpd	164,943	230,400	65,457	374,400	209,457	408,000	243,057
Maximum Daily Demand	1015 gpd	453,705	230,400	-223,305	374,400	-79,305	408,000	-45,705

¹⁹ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-2.

²⁰ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-2.

²¹ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 4-1.

The Water System Master Plan states that “there appears to be enough water to handle average daily use with Diamond-D pumping alone, [but] all three wells combined will not supply enough water to handle maximum daily use unless some pumping occurs during partial peak electrical service hours.” The following table lists the pumping hours required if Diamond-D were to pump alone:

Callayomi County Water District Diamond-D Well Pumping Time Requirements²²			
Demand Type	Daily Demands Per Connection (gpd)	Total Supply Required (gal)	Required pumping time Diamond-D (hours)
Average Daily Demands	369	164,943	6
Maximum Daily Demands	1015	453,705	16

The Water System Master Plan was prepared in 2007 and shows that there is not sufficient water to supply the maximum daily use without pumping during the times that electrical service costs the most. The customers need to be made aware of this extra cost and urged to conserve water. Also, the District could investigate additional sources of electrical power such as solar or wind energy and could increase water storage capacity.

3.2.4 Well Pumps

The Diamond-D well pump is a 7-stage, 50 hp submersible Floway pump, model 10LKM. The Well No. 3 pump is a 40hp submersible Crown pump, model 6H-300. The well No. 1 pump is a 20hp submersible Ingersoll-Rand.

3.2.5 Water Storage

Water is stored in two welded steel tanks located in Middletown on “Rabbit Hill.” They are filled from the plant and feed the distribution system through a 10-inch line going west to Santa Clara Road.

The smaller tank (125,000 gallons) was built as part of the original district project in 1971. The larger tank (500,000 gallons) was installed with the Rancheria extension in 1984 and has been in service continuously. The current aggregate tank storage capacity is 625,000 gallons.

Valves were installed between the tanks in 1991 so that each tank could be isolated from the system, either tank could be filled independently of the other, and either tank could be connected to the system as a supply while the other was being filled. Thus, each tank may be separately maintained and serviced without affecting the other. Normally, both tanks float on the system meaning maintaining a static level providing both flow and pressure when the well(s) and plant are off.

In 1999 a solid state tank level sensor was installed on the small tank and a tank level readout and pump controller were added to the plant controls so that either tank can be used to control the Diamond-D pump. A toggle switch at the plant selects which tank controls the pump. The controls on the large tank are conventional float switches.

²² Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 4-1.

The main storage tanks have a base elevation of 1210 feet (rim elevation 1230 feet), which provides at least 30 psi static pressure to ground elevations as high as 1140. The Rancheria booster station is approximately at elevation 1160 feet. The storage tank data is summarized below:

Tank	Description	Size	Capacity	Year Installed	Additional Information*
Small Tank	Welded Steel	30 feet diameter 24 feet high	125,000 gallons	1972	cathodic protection
Large Tank	Welded Steel	60 feet diameter 24 feet high	500,000 gallons	1985	cathodic protection

*Tank level sensor controls levels of both tanks.

The following table from the Water System Master Plan shows the storage volumes required for various functions and the excess storage, which could be used to serve new connections:

Fire Storage gal	Operational Storage gal	Equalizational Storage gal	Total Storage Required gal	Tank Capacity gal	Excess Storage gal
240,000	164,943	113,426	518,369	625,000	106,631

The Water System Master Plan states that “Based on these figures, there is enough additional storage for about 289 new EDU connections to the system, for a total of 736 EDUs.” Water storage capacity is not the only consideration in allowing addition connections. There are other issues to be considered such as water supply and water pressure and the District may not have any additional capacity at all. However, pumping capacity is limited in that in order to increase the number of connections additional pumping or the installation of a larger pump may be necessary which could increase energy costs.

3.2.6 Water Treatment Plant

The water treatment plant was constructed in 1989 and is located at the District headquarters on Stewart Street in Middletown. The Department of Health Services does not require the District to filter the water although the plant uses two filtering processes for taste, color and odor control. Chlorine treatment is required for disinfection. The treatment methods are listed as follows:

1. One, 4-cell pressurized dual media (gravel/sand and anthracite) filter for moving suspended particles and for controlling odor and color.
2. One, 2-cell charcoal filter for taste, odor and color control.
3. Sodium hypochlorite (bleach) for disinfection.

²³ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-3.

²⁴ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 4-2.

The plant's filtration system is powered by the flow from the supply well(s) and pumping is required only for chlorination purposes. The filters are manually back washed with treated water into a backwash tank in the plant parking area. This tank can be either manually drained to a sump or drained by being pumped into the raw water supply. The original 1989 plant design included a flow control valve on the plant discharge line, going to the storage tanks.

The location of this valve caused high pressures within the plant and prevented the backwash recovery pump (the pump which drains the backwash tank) from overcoming the high static head in the raw water supplying the plant. In the mid 1990s this valve was relocated to the Diamond-D well site so as to reduce the raw water pressure at the plant.

The plant discharge is metered as it goes directly to the storage tanks. The plant's rated filtering capacity is 400 gpm (210 million gallons per year), which exceeds yearly well production as is shown in the following table:

Callayomi County Water District Diamond-D Well Production vs. Treatment Plant Capacity²⁵		
Year	Well Production Mgal/year	% of Treatment Plant Capacity
2000	28.7 Mgal/year	13.7%
2001	38.2 Mgal/year	18.2%
2002	44.0 Mgal/year	21.0%
2003	43.6 Mgal/year	20.8%
2004	46.5 Mgal/year	22.1%
2005	45.0 Mgal/year	21.4%
2006	44.5 Mgal/year	21.2%

The additional treatment plant capacity is good but it does not mean that the District has additional capacity to serve new connections. New connections will require additional water supply, storage and water pressure as discussed below.

3.2.7 Water Transmission Mains

The original well (1971) pumped directly into the distribution system and no transmission lines were employed. When the Diamond-D well and treatment plant were added (1989) a 10-inch diameter PVC transmission line was installed between the well and the plant, and there is an 8-inch spur line from the 10-inch line to the old well site, connecting to the 8-inch line from the well that originally connected into the distribution system. There is also a 10-inch line between the plant and the storage tanks on Rabbit Hill.²⁶

There is no provision for the treatment plant to pump directly into the distribution system without using the transmission line between the plan and the tanks. A direct connection could be added on Stewart Street, if desired.

²⁵ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-4.

²⁶ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-4.

3.2.8 **Booster Station**

The District operates and maintains the booster station located on land owned by the Middletown Rancheria, south of Middletown along State Highway 29. The booster station facilities include two 3hp pumps with a combined capacity of 230 gpm, a water meter, backflow preventer, pressure gages, electrical services and appurtenances. The station provides District water to the Rancheria based on provisions outlined in an outside service agreement.²⁷

3.2.9 **Water Distribution System Water Mains**

The majority of the distribution system constructed in 1971 consists of ACP piping. PVC piping has been used for new construction since the mid 1980s. Pipes are listed in the following table according to material and size:

Callayomi County Water District Pipe Lengths by Material²⁸							
Pipe Material/ Length (feet)	Pipe Diameter (inches)						Total Length by Material Type (feet)
	1	2	4	6	8	10	
Asbestos Cement (ACP)			1,178	19,412	9,390	1,020	31,000
Polyvinyl Chloride (PVC)	60	574	398	10,055	2,487	3,227	16,801
Total length by diameter (feet)	60	574	1,576	29,467	11,877	4,247	

Total Length of Pipe in water system: 47,801 feet (~9 miles)

Since the majority of the distribution system consists of ACP piping which was installed over 40 years ago, the District should have a program to upgrade or replace these pipelines.

3.3 **Water Services**

3.3.1 **Customers**

As of January 2013, the District had 450 customers. There are 366 active metered connections. 84 services are inactive but pay a Water Availability Fee (WAF) allowing them to be connected to the system at any time.²⁹ The District has installed radio-read meters on all services, which has decreased operating costs. There are 98 service connections, which contain backflow prevention assemblies that are tested yearly for compliance with cross-connection regulations.

²⁷ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-5.

²⁸ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-5.

²⁹ Callayomi County Water District, General Manager/ Board members, June 13, 2013.

3.3.2 Out-of-District Service

The District serves a few customers that are not within the District boundaries, most notably the Middletown Rancheria (and Twin Pine Casino) located south of town on State Highway 29. The Rancheria owns two elevated storage tanks and the distribution system fed from the tanks. A District-owned booster pump supplies water from the District system to the Rancheria tanks. Due to rising terrain, the available District static supply pressure at the Rancheria boost pump intake is not adequate to serve the Rancheria directly. The Assessor's Parcel Numbers for the Out-of-District accounts are shown below:

Callayomi County Water District Parcel Numbers for Active Out-of-District Accounts³⁰

- | | | |
|-----|------------|-------|
| 1. | 014-490-02 | |
| 2. | 014-380-11 | |
| 3. | 014-005-62 | |
| 4. | 014-131-37 | |
| 5. | 014-131-24 | |
| 6. | 014-131-34 | |
| 7. | 014-131-29 | |
| 8. | 014-131-36 | |
| 9. | 014-131-35 | |
| 10. | 014-131-07 | (2) |
| 11. | 014-160-10 | (4) |
| 12. | 014-160-09 | (2) |
| 13. | 014-005-08 | (23)* |
| 14. | 014-121-36 | |
| 15. | 014-121-35 | |
| 16. | 014-002-32 | |
| 17. | 014-002-31 | |
| 18. | 014-005-50 | |
| 19. | 014-490-09 | |
| 20. | 014-490-05 | |

*23 Accounts are listed under one parcel number because they are all located on the Middletown Rancheria property.

Lake LAFCO may want to consider a Sphere of Influence, which would include these parcels so they could be annexed to the District in the future. However, due to pumping and storage limitations additional improvements would be needed prior to allowing an expansion of the Sphere, additional connections or annexations.

3.3.3 Working Service Water Pressures

The pressure differential in the pipes must remain in a range between 40 psi to 100 psi, or from 92.4 feet to 231 feet of pressure head. Pressures below this range are not sufficient for use. Pressures above this range could cause long-term damage to the pipes. The following pressure criteria are based on the California Plumbing Code and National Fire Codes:

³⁰ Callayomi County Water District, [General Manager/ Board members, June 13, 2013](#).

Callayomi County Water District Water Pressure Standards³¹	
Desired Maximum Service Pressure with tanks full and no demand	100 psi
Desired Minimum Service Pressure at Peak Hour Demand with tanks half full	40 psi

Hydraulic modeling was performed by the Coastland Civil Engineering firm to determine areas where the pipes failed to meet these constraints. Based on the tests there were no areas where service pressures exceeded 100 psi. There were low service pressures in the 6-inch water main south of Central Park Avenue that range between 25 and 40 psi. The remaining system achieved working service pressures between 40 and 58 psi.³²

3.3.4 Fire Hydrants

The original 1971 system included a number of fire hydrants, mostly wharf hydrants, with a few dry barrel hydrants. Only dry barrel hydrants have been added since that time. There are 70 hydrants in the system.³³

3.3.5 Fire Flows

In February 2007, field fire flows were performed at 19 wharf and dry barrel hydrants located throughout the system. Results indicated flows ranging from 600 GPM to 900 GPM, with residual pressures ranging from 43 psi to 53 psi. An analysis performed using the hydraulic modeling software produced results that were consistent with the field fire flows listed above.

Fire flow requirements are set based on the current edition of the National Fire Codes as published by the National Fire Protection Association, as amended by the Department of Health Services report (2006). These codes establish a required municipal water supply for fire protection. The following table shows minimum flows and durations of flows for fire protection, based on state and national codes and on land use zoning designations:

Minimum Water Flows for Fire Protection Requirements³⁴			
Land Use	Minimum Flow (gpm)	Duration (hrs)	Minimum Residual Pressure (psi)
Residential	1000	2	20
Commercial	2000	2	20

Hydraulic modeling was performed to determine which hydrants failed to achieve 20-psi residual pressure given the demands stated above. The model indicates seventeen hydrants that produce demands of 2000 GPM or more. Twenty-six hydrants produced between 1500 to 2000 GPM. Eighteen hydrants produced between 1000 and 1500 GPM.

The fire flow model revealed hydrants with inadequate flows at residual pressures of 20 psi. Many of the hydrants with inadequate pressures are clustered in locations near the terminus of primary water mains. The following table indicates the locations of these hydrants:

³¹ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 4-4.

³² Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-6.

³³ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-6.

³⁴ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-6.

Callayomi County Water District Fire Hydrants with Flows below Standards ³⁵		
Fire Hydrant Location	Land Use Designation	Fire flow at 20 Psi Residual
Central Park Road between Valley Oak and Pine Street	commercial	1980 gpm
Central Park Road between Valley Oak and Pine Street	commercial	1910 gpm
Armstrong St. between Bush St. and State Highway 29	commercial	1904 gpm
Young St. btwn. Washington St. and State Highway 29	commercial	1595 gpm
State Highway 29 btwn. Central Park Rd. and Lake St.	commercial	1820 gpm
Washington Street-end of line	commercial	1066 gpm
Park Avenue-end of line	residential	863 gpm
State Highway 175-end of six-inch line	residential	901 gpm
State Highway 29-south of Central Park Rd.	residential	690 gpm
State Highway 29- at six-inch extension	residential	388 gpm
Off of State Highway 29-end of six-inch extension	residential	293 gpm
State Highway 29- at Dry Creek Cutoff	residential	258 gpm
State Highway 29- at Sheveland Rd.	residential	209 gpm
State Highway 29-at Rancheria	residential	131 gpm

To remedy these insufficient fire flows, water mains would have to be looped or upsized. Plans for improvement are discussed below in this report.

3.4 Water System Recommended Improvements

3.4.1 Water Supply Improvements

The Diamond D well is adequate and available for a long time into the future (2038) (Water System Master Plan). There is a need for a backup well of similar capacity. The District is pursuing purchasing a well site of equal or better quality to enhance the community's water supply and the ability to add new connections when needed.

The District has made application for a loan/grant from the California Department of Health Safe Drinking Water State Revolving Fund for the purchase of a new well site.³⁶

3.4.2 Distribution Pipeline Improvements

The Water System Master Plan notes that the desired minimum pressure at the service connection is 40 psi during peak hour demands and with tank levels half full. There are areas in the existing system where service pressures fail to meet this standard. In addition, there are fourteen fire hydrants that failed to achieve required flows at residual pressures of 20psi when modeled at flows during maximum daily demands.

According to the Water System Master Plan,

Most of the fire hydrants with low fire flows can be remedied by upgrades. There are areas where upgrades to the existing system are not functionally practical or should be delayed for future expansion outside of the District. The hydrant at the

³⁵ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Pages4-2 and 4-3.

³⁶ Callayomi County Water District, LAFCO Questionnaire, November 1, 2012.

southern end of Washington Street is located too close to a terminus in the system to draw proper demands. Upsizing the pipe proves to be ineffective and looping the system to the main in State Highway 29 may prove too costly to benefit only one fire hydrant.

The fire hydrants on State Highway 29 south of Central Park Avenue are located outside of the District boundary. These hydrants would benefit from upsizing the existing 6-inch main to a 12-inch main; however, it would behoove the District to share the costs of these upgrades with future developments and with the Rancheria. This area also experiences low service pressures ranging between 25 psi and 40 psi. Upsizing this water main will not have a noticeable effect on the service pressures.

The following table lists the distribution main construction and replacement required to boost residual pressures in the system. Projects are listed in the order of priority. Generally, higher priority projects will provide the benefits to the larger areas of the community.

Callayomi County Water District Prioritized Recommended Water Distribution Main Improvements³⁷		
Improvements to serve existing connections		
Priority	Location	Description
1	Between Park Avenue and Santa Clara Avenue	Install a 6-inch PVC main to loop the existing 6-inch mains in park Avenue and Central Park Road
2	Young Street Between State Highway 29 and Washington St.	Replace existing 6-inch ACP main with 8-inch PVC main.
3	Armstrong Street Between State Highway 29 and Bush Street	Replace existing 6-inch ACP main with 8-inch PVC main.
4	Pine Street between Central Park Road and Lake Street	Replace existing 6-inch ACP main with 10-inch PVC main.
Improvements to serve additional connections (at Build-out)		
5	Lake Street to Stewart Street to Hill Avenue to State Highway 29 to Washington Street	Install an 8-inch PVC main from the corner of Lake Street to the main at the end of Washington Street.
6	Young Street Between State Highway 29 and Washington St.	Install 8-inch main on Young Street to loop Washington Street to Bush Street.
7	Armstrong Street Between State Highway 29 and Bush Street	Install 8-inch main on Armstrong Street to loop Washington Street to Bush Street.

None of the improvements listed in the table above has been started. The list of proposed improvements is important to the District and will be prioritized and budgeted for with other high priority work.³⁸

3.4.3 Water Storage Capacity Improvements

The District is in the process of locating and acquiring a new tank site to add a 500,000-gallon tank.³⁹ The additional water storage capacity needed is shown in the following table:

³⁷ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Pages 5-2 and 5-3.

³⁸ Callayomi County Water District, General Manager/Board members, June 13, 2013.

³⁹ Callayomi County Water District, General Manager/Board members, June 13, 2013.

Callayomi County Water District Build-out Storage Capacities ⁴⁰						
Description	Incremental EDUs	Total EDUs	Incremental Storage Requirement (gal)**	Total Storage Requirement (gal)	Storage Capacity 500K and 125 K Tank (gal)	Storage Excess or Shortage (gal)
Current Active and Inactive Connections	447*	447	518,369	518,369	625,000	106,631

* The number of active and inactive accounts as of January 10, 2013 is 450; however, the number in the table was left at 447 to keep the rest of the numbers in the table consistent.

** Incremental storage = operational + equalizational + fire flow storage

According to the Water System Master Plan,

It has been proposed to obtain a tank site on a hill east of town, across St. Helena Creek, on the Helen Behn property. This property is recognized as the preferred location for a new tank, and could provide the needed capacity for build-out demands. The site is ideal because it is within close proximity to the District and to future growth in the District, it is at a proper elevation corresponding to the existing tank site elevations, the existing site is relatively flat, and it is close to an existing maintenance access road. The District is pursuing means to purchase this site.⁴¹

⁴⁰ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 5-4.

⁴¹ Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 5-4.

3.5 Water Quality

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of Americans' drinking water. The law requires many actions to protect drinking water and its sources—rivers, lakes, reservoirs, springs and groundwater wells—and applies to public water systems serving 25 or more people. National Primary Drinking Water Regulations (NPDWRs or primary standards) are legally enforceable standards that limit the levels of contaminants in drinking water supplied by public water systems. To meet water quality standards and comply with regulations, a water system with a contaminant exceeding a maximum contaminant limit (MCL) must notify the public and remove the source from service or initiate a process and schedule to install treatment for removing the contaminant. Health violations occur when the contaminant amount exceeds the safety standard (MCL) or when water is not treated properly. Monitoring violations involve failure to conduct or to report in a timely fashion the results of required monitoring.

The Callayomi County Water District is required to issue a Consumer Confidence Report each year to show the water quality testing that has been done. The 2012 Consumer Confidence Report is shown in Appendix B at the end of this report. The 2012 Consumer Confidence Report states that “The Water District is providing a 4 Log Virus Inactivation as required by Federal Law to deal with the elevated E. coli levels in the raw water.”

3.6 Water Rates

Compared with other municipal services, there are relatively few financing constraints for water enterprises. Generally, agencies may establish service charges on a cost-of service basis. In the past, water providers have not been required to obtain voter approval for rate increases or restructuring; however, based on recent court findings, water purveyors have been required to complete a Proposition 218 voter protest process when updating rates.

The boards of each of the public sector water providers are responsible for establishing service charges. Service charges are restricted to the amount needed to recover the costs of providing water service. The water rates and rate structures are not subject to regulation by other agencies. Service providers can and often do increase rates annually.

Water service providers often increase rates annually; the Callayomi County Water District increased rates in 2010, and the rates increase annually in line with the Cost-Price Index, which averages 3% per year. These water service rates are shown below in this report.

3.7 Callayomi County Water District Budget

The Callayomi County Water District maintains a checking account at WESTAMERICA Bank in Middletown for the deposit of customer payments and the monthly check to the County Treasurer. The District submits a general budget to the County Auditor as follows:

<u>Callayomi County Water District 2012-2013 Budget⁴²</u>	
Salaries and Employee Benefits	\$300,000
Services and Supplies	\$137,050
Other	0
Fixed Assets	0
Sub-Total	\$437,050
Contingencies	\$354,321
Total Appropriation for budget expenditures	\$472,471

Since the major expense in the Budget is for the employees, it might be worth it for the District to contact the Lake County Special Districts Department and determine if any of the administration and operation of the District could be contracted for a reduced cost.

3.8 Capital Improvement Plan

The Callayomi County Water District has a Capital Improvement Plan to ensure that funds will be available to replace the infrastructure of the District. However, this Capital Improvement Plan is based on 449 service connections and the District has 450 connections as of January 2013. This means that the Capital Improvement Plan does not provide for additional development. The Simplified Capital Improvement Plan is shown below:

Callayomi County Water District Part 1 of 2									
Simplified Capital Improvement Plan 9-25-12 for 449 Service Connections⁴³									
Quantity	Component			Unit Cost	Installed Cost	Average Life Years	Annual Reserve	Monthly Reserve	Monthly Reserve Per Customer
1	Drilled Well, Standby	Depth:	150 feet	96.02	14,403	50	288.06	24.01	0.05
1	Drilled Well, Diamond D	Depth:	200 feet	119.01	23,802	50	476.04	39.67	0.09
1	Drilled Well, New	Depth:	200 feet	222.47	44,494	50	889.88	74.16	0.17
1	Wellhead Electrical Controls			27,818.00	27,818.00	50	556.36	46.36	0.10
1	Sand Filtration Tank			37,339.50	37,339.50	25	1,493.58	124.47	0.28
1	Carbon Filtration Tank			20,717.40	20,717.40	25	828.70	69.06	0.15
1	Water Treatment Control System			25,696.00	25,696.00	25	1,027.84	85.65	0.19

⁴² Callayomi County Water District, Adopted Budget Fiscal Year 2012-2013, August 31, 2012.

⁴³ Callayomi County Water District Simplified Capital Improvement Plan 9-25-12 for 449 Service Connections, Prepared by Stephen Bishop.

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 Resolutions 2013-0006 and Resolution 2013-0007 Adopted July 17, 2013

1	Storage Tank, Steel	Gallons : :	125,000	0.3	37,500	50	750.00	62.50	0.17
1	Storage Tank, Steel	Gallons : :	500,000	0.4	200,500	50	4,010.00	334.17	0.74
1	Storage Tank, Steel	Gallons : :	40,000	0.9	34,080	50	681.60	56.80	0.13

Callayomi County Water District Part 2 of 2 Simplified Capital Improvement Plan 9-25-12 for 449 Service Connections ⁴⁴							
Quantity	Component	Unit Cost	Installed Cost	Average Life Years	Annual Reserve	Monthly Reserve	Monthly Reserve Per Customer
3,400	Pipe w sand bedding, 6" C900	26.77	91,018.00	75	1,213.57	101.13	0.23
1,779	Pipe w sand bedding, 8" C900	37.66	66,997.14	75	893.30	74.44	0.17
755	Pipe w sand bedding, 10" AC	19.5	14,722.50	75	196.30	16.36	0.04
10,140	Pipe w sand bedding, 8" AC	11.75	119,145.00	75	1,588.60	132.38	0.29
24,885	Pipe w sand bedding, 6" AC	10.65	265,025.25	75	3,533.97	294.47	0.66
755	Pipe w sand bedding, 4" AC	9.54	7,202.70	75	96.04	8.00	0.02
3,122	Pipe w sand bedding, 10" C900	39.42	123,069.24	75	1,640.92	136.74	0.30
	Standpipe Hydrant, 1-1/2"	700	0	20	0	0	0
55	Standpipe Hydrant, 2-1/2"	5,000	275,000.00	20	13,750.00	1,145.83	2.55
356	Customer Meter w Box & Shutoff, Complete	275	97,900.00	20	4,895.00	407.92	0.91
4	Distribution Valve, 2"	150	600	10	60.00	5.00	0.01
	Distribution Valve, 3"	250	0	10	0	0	0
	Distribution Valve, 4"	600	0	20	0	0	0
88	Distribution Valve, 6"	850	74,800	20	3,740.00	311.67	0.69
	Air & Vacuum Relief Valve, Typical	375	0	20	0	0	0
1	Nissan Pickup	0	0	1	0	0	0
1	¾ ton Pickup	1,000	1,000	8	125.00	10.42	0.02
1	Portable generator	32,325	32,325	15	2,155.00	179.58	0.40
1	Propane generator	18,743.11	18,743.11	15	1,249.54	104.13	0.23
	TOTAL		\$1,653,897.84		\$46,138.99	\$3,844.92	\$8.56

The Callayomi County Water District may need to revise the Capital Improvement Plan to allow more funds for new facilities or the District may need to use the information in the plan to prepare a fee schedule for new developments or other new connections.

⁴⁴ Callayomi County Water District Simplified Capital Improvement Plan 9-25-12 for 449 Service Connections, Prepared by Stephen Bishop.

3.9 Callayomi County Water District Independent Audit

The Callayomi County Water District had an independent Auditor's Report prepared for the year ending June 30, 2011. Many special districts do not want to pay the expense of an independent audit each year but it is important to do so, especially when the District uses a commercial bank in addition to the County to maintain funds.

3.9.1 *Assets and Liabilities*

The Independent Audit showed the following Assets and Liabilities for the Callayomi County Water District:

Callayomi County Water District Statement of Assets June 30, 2011⁴⁵	
Assets	
Cash and Investments	\$249,848
Total unrestricted current assets	\$249,848
Restricted Cash	362,657
Total current assets	612,505
Noncurrent Assets	
Capital assets	
Nondepreciable capital assets	
Land	192,999
Construction in progress	2,303
Depreciable capital assets	
Buildings	128,000
Machinery and equipment	178,979
Infrastructure	1,300,028
Less accumulated depreciation	(881,879)
Total capital assets (net of accumulated depreciation)	920,430
Total noncurrent assets	920,430
Total assets	1,532,935

Callayomi County Water District Statement of Liabilities and Net Assets June 30, 2011⁴⁶	
Liabilities and Net Assets	
Current Liabilities Bonds Payable	4,500
Total current Liabilities	4,500
Long-Term Liabilities	
Bonds payable	110,500
Compensated absences	19,342
Total Long-term liabilities	129,842
Total Liabilities	134,342
Net Assets	
Invested in capital assets net of related Debt	805,430
Unrestricted	593,163
Total Net Assets	1,398,593
Total liabilities and Net Assets	1,532,935

The District appears to have adequate cash and reasonable liabilities (debt). The District may be able to take on more debt to improve the facilities; however, the District should ensure that all new connections are charged a fair amount to pay for the existing infrastructure in the District.

⁴⁵ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 2.

⁴⁶ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 2.

3.9.2 Revenue and Expenses

The independent audit shows the following Revenue and Expenses for the Fiscal Year ended on June 30, 2011. The audit shows actual expenses instead of planned expenses, which are shown in a budget.

Callayomi County Water District Statement of Revenue, Expenses, and Changes in Net Assets for the Fiscal Year Ended June 30, 2011⁴⁷	
Operating Revenue	
Water sales	388,275
Water hookups	5,280
Total Operating Revenues	393,555
Operating Expenses	
Salaries and benefits	266,424
Communications	3,812
Insurance	12,432
Maintenance	17,297
Rents and leases	25,190
Office supplies	6,771
Professional services	21,924
Special Departmental Expense	9,023
Transportation and travel	7,364
Utilities	16,621
Clothing	56
Household	403
Memberships	1,804
Books and periodicals	139
Miscellaneous	768
Depreciation	32,590
Total operating expenses	422,618
Operating income (loss)	(29,063)
Non-Operating Revenue (Expenses)	
Interest	4,602
Property taxes	9,614
Bond interest expense	(5,850)
Homeowner property tax relief	90
Total non-operating revenues (expenses)	8,456
Decrease in net assets	(20,607)
Net assets, July 1, 2010	1,419,200
Net assets June 30, 2011	1,398,593

The above table shows that the fees paid for the water do not entirely cover the operating expenses. However, if depreciation were not considered the expenses would be \$390,028 and the fees would be greater than the expenses.

⁴⁷ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 3.

3.9.3 Long-Term Liabilities

The District issued 1988 General Obligation Issue Series 1989-1 and 1989-2. The bonds issue was to finance improvements to the water system. The bonds are serial bonds with stated interest of 5% and they mature on August 2027. The annual requirements to amortize the General Obligation Bonds as of June 30, 2011, are as follows:

Callayomi County Water District Long-Term Liabilities⁴⁸			
Fiscal Year June 30	Principal	Interest	Total
2012	4,500	6,238	107,368
2013	4,500	5,913	10,413
2014	5,000	5,675	10,675
2015	5,000	5,425	10,425
2016	5,500	5,163	10,663
2017-2021	31,500	21,364	52,864
2022-2026	40,500	12,390	52,890
2027-2028	18,500	1,687	20,187
Total	115,000	63,855	178,855

3.9.4 Defined Benefit Pension Plan⁴⁹

The District's defined benefit pension plan, the California Public Employees' Retirement System (CalPERS), provides retirement and disability benefits, annual cost of living adjustments, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public employers within the State of California. A menu of benefit provisions (as well as other requirements) is established by State statutes within the Public Employees' Retirement Law. The District selects optional benefit provisions from the benefit menu by contract with CalPERS and adopts those benefits through local ordinance. CalPERS issues a separate comprehensive annual financial report. Copies of the CalPERS' annual financial report may be obtained from the CalPERS Executive Office, 400 P Street, Sacramento, CA 95814.

Active plan members are required to contribute 8% of their annual covered salary. The member contribution is paid by the District as a benefit to the plan member. However, beginning January 1, 2013 all new employees will be paying for their member contribution. The District is required to contribute the actuarially determined remaining amounts necessary to fund the benefits for its members. The actuarial methods and assumptions used are those adopted by the CalPERS Board of Administration. The required employer contribution rate for fiscal 2010-2011 was 17.29%. The contribution requirements of the plan members are established by State statute and the employer contribution rate is established and may be amended by CalPERS.

For fiscal year 2012-2011, the District's annual pension cost was \$39,358 and the District actually contributed \$39,358. In 2008, the District changed the contract with CalPERS to change the percentage of final compensation to be provided for each year of service. The District formerly had a retirement plan of 2.5% for each year of service but changed it to 2.7% at age 55 for local miscellaneous members in employment on or after January 1, 2005. However,

⁴⁸ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 11.

⁴⁹ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 11.

beginning January 1, 2013 all new employees' percentage of final compensation has been set at 2% for each year at age 62. The District made these changes to be consistent with changed state laws and regulations.

The actuarial value of the plan's assets was determined using a technique that smoothes the effect of short-term volatility in the market value of investments over a three-year period (smoothed market value). The plan's unfunded actuarial accrued liability (or excess assets) is being amortized as a level percentage of projected payroll costs on a closed basis. The remaining amortization period at June 30, 2008 was 15 years. The following table shows the costs of the pension program for the Callayomi County Water District:

Callayomi County Water District Three-Year Trend Information for Pension Costs⁵⁰			
Fiscal Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation
06/30/09	\$36,920	100%	-
06/30/10	\$44,131	100%	-
06/30/11	\$39,358	100%	-

3.9.5 Operating Lease

The District has a 50-year cancelable lease with Middletown Farm and Cattle Co. to purchase water ending September 13, 2038. The District must purchase a minimum of 48 million gallons annually at a cost of \$23,170, adjusted annually for inflation, with additional payments for any overage of water leased.

3.9.6 Revenue Limitations Imposed by California Proposition 218

Proposition 218, approved by the voters in November 1996, regulates the District's ability to impose, increase and extend taxes and assessments. Any new increase or extended taxes and assessments subject to the provisions of Proposition 218, requires voter approval before they can be implemented. Additionally, Proposition 218 provides that these taxes and assessments are subject to voter initiative and may be rescinded in the future years by the voters.⁵¹

⁵⁰ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 12.

⁵¹ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 12.

3.9.7 Report on Internal Control

While the report from the independent auditor includes some suggestions for the District which are “intended solely for the information and use of the Board of Directors, management, and the Lake County Auditor Controller’s Office and the Controller’s Office of the State of California” these recommendations are public record and therefore public information. The independent auditor notes the following “significant deficiencies-not considered material weaknesses” within the Callayomi County Water District:⁵²

1) Compensated Absence Payout

During our testing of payroll we noted one employee was paid 50 hours of accrued vacation in March 2011. The District policy indicates that an employee will be paid out vacation hours over 240 at the end of the fiscal year. This employee did not have over 240 hours vacation accumulated during or at the end of the fiscal year. We also did not observe management authorization for these payouts.

Recommendation: We recommend that the District have controls in place to review vacation payouts to ensure that the payouts are in accordance with District policy. We recommend the District have controls in place to authorize or deny transactions that are not in accordance with the District policy. The check signers should also have access to and should review and authorize the payroll register and timesheets prior to signing payroll checks.

District Action: District put controls in place and updated vacation policy. The check signers have access to and review the payroll register and timesheets prior to signing payroll checks.

2) Vacation Accrual

During our review of the QuickBooks vacation module we noted that the District did not print out the vacation and sick accrual as of June 30, 2011. The system will not go back to a past date to report what the prior balance was and we were unable to validate that the amount in the system agrees to our recalculation of vacation and sick leave at June 30, 2011.

Recommendation: We recommend that the District perform a separate reconciliation of vacation balances by taking the balances at July 1, 2010 and adding the amounts accrued (per the District Policy) and subtracting the amounts used (per the employee authorized timesheets) for each employee. This amount should then agree to the amount reported in QuickBooks.

District Action: District performed a separate reconciliation of vacation balances for each employee as recommended.

⁵² Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 14.

3) Segregation of Duties

We noted that the District had a lack of segregation of duties, because one person is capable of handling all aspects of processing transactions from beginning to end. A lack of segregation of duties increases the risk of potential errors or irregularities occurring without being detected; however, due to a limited number of personnel an adequate segregation of duties is not possible without incurring additional costs. We have also noted this comment in previous audits.

4) Financial Accounting Manual

During our audit we noted that the District did not have a written financial and accounting policy/manual that included internal control procedures. The District should create the financial and accounting policies that demonstrate how transactions are to be processed from beginning to end. The policy should include the processes for internal controls that are designed to provide reasonable assurance that objectives related to effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations are met. This should also include documenting controls over processing transactions, authorization transactions and for maintaining and safeguarding assets.

The District also relies on the external auditor to ensure its financial statements are in accordance with GAAP. In addition, the District relies on the external auditor to ensure that all necessary disclosures are included in the notes to the financial statements. The District does not employ a staff member with the necessary knowledge and training to prepare governmental financial statements. In accordance with Statement of Auditing Standards, No. 115, external auditors cannot be part of an entity's internal controls over preparation of the financial statements and are prohibited from auditing their own work, which would impair their independence.

Recommendation: We recommend that the District create a written financial and accounting policy. The District should also consider training staff in preparing GAAP financial statements or hire an external qualified accountant to prepare the GAAP financial statements. The District could opt to take no action if it considers the cost will outweigh the benefit.

District Action: District has drafted a financial/accounting policy and will review and finalize this year. District has contracted with an outside bookkeeper to do quarterly reviews of financial statements to ensure they are consistent with GAAP (Generally Acceptable Accounting Principles).

4 WATER SERVICE RATES

4.1 Comparison of Water Service Rates

The following table is included to compare the cost of water rates from different districts in Northern California. Water rates for Lake County districts are shown on the following page. It is difficult to compare one district with another because the base rates include different amounts of water. Where the base amount of water is low, the average bill will almost always be higher than the base fee shown.

COMPARISON OF DOMESTIC WATER SERVICE RATES NORTHERN CALIFORNIA		
District/County	Number of Connections	Monthly Water Rate (Base Rate)
Arbuckle PUD/Colusa	792 (mostly unmetered) ⁵³	\$15.00 ⁵⁴
Artois CSD/Glenn	59 metered ⁵⁵	\$39.00 (16,000 gallons)
Callayomi County Water District/Lake	450 (366 active, 84 inactive)⁵⁶ (metered)	\$37.00 (6,000 gallons)
California Pines CSD/Modoc	131 metered (April 30 to October 31) ⁵⁷	\$32.25 ⁵⁸
Clear Creek CSD/Lassen	156 unmetered ⁵⁹	\$27.00 ⁶⁰
CSA 1 Century Ranch/Colusa	112 metered	\$39.22 (8,000 gallons) ⁶¹
CSA 2 Stonyford/Colusa	91 metered	\$45.58 (10,000 gallons) ⁶²
Elk Creek CSD/Glenn	90 metered ⁶³	\$44.00 (14,961 gallons)
Maxwell PUD/Colusa	400 (meters, not read)	\$32.00 (unlimited) ⁶⁴
Lassen Co. Waterworks 1, Bieber/Lassen	172 metered ⁶⁵	35.00 (40,000 gallons) ⁶⁶
Little Valley CSD/Lassen	50 unmetered	\$23.00 ⁶⁷
Westwood CSD/Lassen	765 metered	\$35.78 (30,000 gallons) ⁶⁸
City of Colusa/Colusa	2088 metered	\$21.76 (300 cubic feet*) ⁶⁹
City of Susanville/Lassen	4200 metered	\$23.65 (300 cubic feet*) ⁷⁰
City of Williams/Colusa	1321	\$15.72 (500 cubic feet) ⁷¹

*(100 cubic feet of water = 748 gallons)

⁵³ Arbuckle PUD, Small Water System 2011 Annual Report to the Drinking Water Program for year Ending December 31, 2011.

⁵⁴ Arbuckle PUD, Water Rates as of January 1, 2009.

⁵⁵ Artois Community Services District, Jack Cavier, Jr., President, March 1, 2012.

⁵⁶ Callayomi County Water District, **General Manager/ Board members, June 13, 2013.**

⁵⁷ California Pines CSD, Vera Sphar, June 12, 2009.

⁵⁸ California Pines CSD Service Rates Effective June 2006.

⁵⁹ Clear Creek CSD, Pat Mudrich, Manager, August 22, 2012

⁶⁰ Clear Creek CSD, Lassen LAFCO Questionnaire June 6, 2012.

⁶¹ Colusa County Ordinance No. 673, An Ordinance of the Colusa County Board of Supervisors Increasing water service Fees; authorizing administrative Fees; providing for the Collection of Delinquent Charges; and Directing That No New Water Hook-ups Be Permitted for County Service Area Number 1-Century Ranch, March 16, 2004.,

⁶² Colusa County Ordinance No 674, An Ordinance of the Colusa County Board of Supervisors Increasing Water Service Fees; Authorizing Administrative Fees; Providing for the Collection of Delinquent charges; and Directing That No New Water Hook-ups be permitted for County Service Area Number 2-Stonyford, March 16, 2004.

⁶³ Elk Creek Community Services District, Arnold Kjer, Water Plant Operator, September 28, 2011

⁶⁴ Maxwell PUD, Diana Mason, Phone 438-2505, August 8, 2012.

⁶⁵ Lassen County Waterworks District 1 (Bieber), Stephen Jackson, Manager, Phone: 530-294-5524, March 1, 2011.

⁶⁶ Lassen County Waterworks District 1 (Bieber), Ordinance 09-2, An Ordinance amending the Ordinance Establishing the Rate for Water Service by the Lassen County Waterworks District 1 (Bieber), June 16, 2009.

⁶⁷ Little Valley CSD, Director Devora Kelley, March 19, 2012.

⁶⁸ Westwood Community Services District, Resolution 2011-01, A resolution of the Westwood Community Services District Increasing Water Rates, June 6, 2011.

⁶⁹ City of Colusa, Water Department, Phone 458-4740 Ex100, August 7, 2012.

⁷⁰ City of Susanville, 530-252-5111, August 3, 2012.

⁷¹ City of Williams, Greg Endeman, gendeman@cityofwilliams.org, October 1, 2012.

Areas that are served by the California Water Service (a public utility) usually have higher fees than those areas served by a government facility. For example, in the Willows area California Water Service charges \$47.50 for the smallest meter size and 800 cubic feet of water.⁷²

The base rates for nine water districts managed by the Lake County Special Districts Administration are shown below. It may appear that the rates are lower than for the CCWD; however, the amount of water allowed for the base rate is less than the amount allowed by CCWD.

COMPARISON OF 2012 DOMESTIC WATER SERVICE RATES LAKE COUNTY⁷³

District	Capacity Fee	Meter Set	Line Tap & Set	Base Rate SFD Monthly	Monthly Cubic Feet (CF)	(CIP) Capital Improvement Plan	Loan Repay Monthly	# of SFD Billed	
CSA # 2 Spring Valley	\$19,218.02	\$809.75	\$925.96	\$25.00	w/600	\$7.20		493	
					>600cf				\$2.75
					>1000cf				\$5.50
					>2000cf				\$8.00
CSA # 6 Finley	\$2,500.00	\$350.00	\$450.00	\$12.44	\$0.79 to 750cf		\$14.86	237	
					>750cf				\$1.07
CSA # 7 Bonanza Springs	\$1,500.00	\$350.00	\$450.00	\$18.22	\$7.95 to 750cf			179	
					>750cf				\$2.58
					>1500cf				\$4.55
					>3000cf				\$7.13
CSA # 13 Kono Tayee	\$12,228.84	\$477.86	\$584.05	\$23.10	w/700			139	
					>750cf				\$2.58
					>1500cf				\$3.47
					>3000cf				\$6.93
CSA # 16 Paradise	\$14,083.50	\$829.99	\$1,230.00	51.60	\$4.13 to 500 cf			72	
					>500cf				\$6.19
					>1000cf				\$10.32
CSA# 20 Soda Bay	\$4,775.95	\$835.66	\$955.20	\$23.00	\$1.25 to 750cf			733	
					>750cf				\$2.50
					>1500cf				\$6.50
CSA # 21 North Lakeport	\$4,775.97	\$835.66	\$955.20	\$21.50				1628	
					<751cf				\$1.08
					>750cf				\$1.31
CSA # 22 Mt. Hannah	\$7,360.00	\$450.00	\$450.00	\$27.00		\$2.50	\$5.00	36	
					<750cf				\$2.00
					751-1500cf				\$4.33
					>1500cf				\$6.75
Kelseyville CWD # 3	\$2,500.00	\$350.00	\$450.00	\$13.71			\$7.66	1269	
					<750cf				\$0.80
					>750cf				\$1.07

With 450 connections, the Callayomi County Water District falls in the middle of the above listed districts in size. Four are larger and five are smaller. The CSA #2 Spring Valley is closest to the Callayomi County Water District in the number of connections.

⁷² California Water Service Company, 1720 North First Street, San Jose, California, 95112, Phone: 408-367-8200, Schedule No. WL-1-R Willows Tariff Area, Effective 5/3/12.

⁷³ Lake County, Special Districts Administration, <http://www.co.lake.ca.us/Assets/SpecialDistricts/docs/Rates+and+Fees+Summary+2012.pdf>, February 27, 2013.

4.2 Water Service Pricing Strategy

Prop 218 prohibits any formal subsidies that depart from cost-of-service principles. In other words, one customer class cannot pay more than its fair share of revenue requirements for the purpose of providing a subsidy to other customers. Informally, there are ways to design rate structures that benefit low-income groups. For example, senior and low-income customers tend to have smaller homes and yards that consume less water than higher income customers.

Therefore, seniors and low-income groups will benefit from:

- 1) Water rates that have lower fixed monthly charges
- 2) Water rates that include lower minimum water consumption amount in the fixed charges
- 3) Water rates that have lower consumption rates for customers using less than the average amount of water⁷⁴

To encourage water conservation it makes sense to charge for the number of gallons (or cubic feet) used in addition to the base rate because then the water bill always reflects consumption. There are water meters available that can be read electronically so the cost of a meter-reader can be eliminated. The District currently charges with this philosophy in mind as they have a base rate for a set amount of water and any use beyond that amount has an additional charge.

⁷⁴ Average or slightly less than average water consumption is a good gage for setting lower tier water rates for this purpose, since most low income customers use less than average amount of water. Seniors in particular tend to have smaller household sizes that would benefit from this approach.

5 MUNICIPAL SERVICE REVIEW

Lake LAFCO is responsible for determining if an agency is reasonably capable of providing needed resources and basic infrastructure to serve areas within its boundaries and, later, within the Sphere of Influence.

LAFCO will do the following:

1. Evaluate the present and long-term infrastructure demands and resources available to the City or District.
2. Analyze whether resources and services are, or will be, available at needed levels.
3. Determine whether orderly maintenance and expansion of such resources and services are planned to occur in line with increasing demands.

The Final Municipal Service Review Guidelines prepared by the Governor's Office of Planning and Research recommend issues relevant to the jurisdiction be addressed through written determinations called for in the Cortese-Knox-Hertzberg Act.

Determinations are provided for each of the six factors, based on the information provided in this Municipal Service Review.

5.1 Growth and Population Projections for the Area

Purpose:

To evaluate service needs based on existing and anticipated growth patterns and population projections.

5.1.1 Callayomi Area Population Projections

The Lake County Board of Supervisors adopted the Middletown Area Plan on August 17, 2010. The Policy 5.5.2a is to "Evaluate proposals to amend the Planning Area land use maps that increase the acreage of land designated rural residential, suburban residential reserve, and low density residential by the following criteria:". The first criteria listed is that "Adequate water with suitable quality must be available and capable of being provided for each potential parcel."⁷⁵

The Housing Element adopted April 3, 2012 recognizes the Callayomi County Water District and states that "The District has the water rights to supply properties within its district boundaries, but will require additional wells, storage and treatment facilities as lots are built-out in the community."⁷⁶

So both the Middletown Area Plan and the Housing Element recognize that water availability is the key to additional population growth.

⁷⁵ Lake County Community Development Department, Middletown Area Plan, Adopted August 17, 2010, Page 5-56.

⁷⁶ Lake County Community Development Department, General Plan Housing Element, Adopted April 3, 2012, Page 4-6.

The Middletown Area Plan makes the following changes in Residential Land Use Designations:

Middletown Area Plan Changes in Residential Land Use Designations⁷⁷		
Land Use Designation	Existing Acres	Proposed Acres
Rural Residential	7493	5796
Suburban Residential Reserve	766	1062
Low Density Residential	1677	1635
Medium Density Residential	29	27
High Density Residential	17	21

The ~~Rural Residential~~ and Suburban Residential Reserve have increased so additional housing is expected at some point.

The Housing Element lists the following sites for Moderate-Income Housing in the Middletown Area:

Lake County Middletown Area Moderate Income Housing Inventory⁷⁸						
Site #	Parcel Number (APN)	Acres	Zon-ing	General Plan	Situs Address*	Situs Town
779	024-362-05	0.16	R2	MDR	21082 Barnes Street	Middletown
780	024-367-04	0.14	R2	MDR	21362 State Hwy. 175	Middletown
781	024-441-10	0.17	R2	MDR	21173 State Hwy. 175	Middletown
782	024-441-20	0.17	R2	MDR	21155 State Hwy. 175	Middletown
783	024-442-12	0.15	R1	LDR	15465 Graham Street	Middletown
784	024-442-14	0.15	R1	LDR	15445 Graham Street	Middletown
785	024-451-17	0.16	R2	MDR	21223 State Hwy. 175	Middletown
786	024-461-24	0.14	R1	LDR	15571 Douglas Street	Middletown
787	024-461-25	0.14	R1	LDR	15567 Douglas Street	Middletown

*All sites allow for one residential unit, are vacant, have ready access to basic infrastructure and contain no environmental constraints.

MDR: Medium Density Residential General Plan Land Use Designation

LDR: Low Density Residential General Plan Land Use Designation

The above table is included to show that additional housing in the Middletown community is expected and these houses would be within the Callayomi County Water District.

⁷⁷ Lake County Community Development Department, Middletown Area Plan, Adopted August 17, 2010, Page 5-52.

⁷⁸ Lake County Community Development Department, General Plan Housing Element, Adopted April 3, 2012, Page B-21.

5.1.2 MSR Determinations on Growth and Population Projections for the Callayomi Area

- | | |
|------|--|
| 1-1) | Little or no growth can occur in the Middletown area until there is a greater water supply from the Callayomi County Water District. |
| 1-2) | The Callayomi County Water District should maintain good communication with the Lake County Community Development Department (255 North Forbes Street, Third Floor, Room 323, Lakeport, CA 95453, Hours: 8:00 a.m. - 5:00 p.m. Monday through Friday, Planning: (707) 263-2221, E-mail: cdd@co.lake.ca.us) to ensure that the general plan, zoning and building regulations are coordinated with the ability of the District to serve new development. |

5.2 MSR Determinations on Disadvantaged Unincorporated Communities (DUC)

Purpose:

To comply with the State Law to examine any unincorporated areas which could be provided with better services by annexing to an adjacent city.

5.2.1 Determination of Middletown Disadvantaged Unincorporated Community Status

In addition to a consideration of population growth, the State Law (SB 244) requires LAFCO to consider whether or not an area is a Disadvantaged Unincorporated Community (DUC). A DUC is an area where the Median Household Income is less than 80% of the State of California Median Household Income of \$60,833.⁷⁹ Eighty percent of the 2010 California Median Household Income would be \$48,666.

Disadvantaged unincorporated communities (DUCs) are defined as “a territory that constitutes all or a portion of a ‘disadvantaged community’ including 12 or more registered voters or some other standard as determined by the commission.” In California Government Code Section 65302.30 (a) “Community” means an inhabited area within a city or county that is comprised of no less than 10 dwellings adjacent or in close proximity to one another.

The Median Household Income in Middletown in 2009⁸⁰ was reported as \$44,740 Therefore, the Middletown is a Disadvantaged Unincorporated Community. However, there is no incorporated city nearby which could help the community by annexation.

Middletown qualifies as a DUC. The Middletown Area Plan reports that “The household income figures are significantly higher in the Planning Area than in the remainder of Lake County...due to a large number of residents who commute to Sonoma County, Napa County and other Bay Area workplaces.” Within the Middletown Area Plan communities, Middletown has the lowest Median Household Income while that in Coyote Valley/Hidden Valley Lake is somewhat higher.

⁸¹

⁷⁹ US Census Bureau, <http://quickfacts.census.gov/qfd/states/06/0685586.html>, November 7, 2012

⁸⁰ <http://www.city-data.com/income/income-Middletown-California.html>, January 16, 2013.

⁸¹ Lake County Community Development Department, [Middletown Area Plan](#), Adopted August 17, 2010, Page 5-2.

5.2.2 MSR Determination on DUC status of Middletown

- 2-1) The community of Middletown qualifies as a Disadvantaged Unincorporated Community (DUC) because the Median Household Income is less than 80% of the State of California Median Household Income.
- 2-2) There is no incorporated city that the DUC could be annexed into.
- 2-3) The Callayomi County Water District should keep in mind the low Median Household Income in the area and adjust the water service fees accordingly. [16]
- 2-4) Callayomi County Water District should encourage water conservation and other measures that would reduce the cost of water service.

5.3 Capacity and Infrastructure for Callayomi County Water District

Purpose:

To evaluate the infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities and service quality.

5.3.1 Callayomi County Water District Infrastructure

The Callayomi County Water District infrastructure has been described above in this report based on the District's Water System Master Plan prepared in 2007. The Water System Master Plan proposes improvements to the District's water supply, the water distribution system and to the water storage system.

The District has a Capital Improvement Plan but it is only based on the number of connections at this time and does not include plans for improvements, which would be required to allow additional connections. The District has a water supply well which is located outside of the District and is only leased until 2038.⁸² Additional water storage could help mitigate the water supply issues.

5.3.2 MSR Determinations on Infrastructure for the CCWD

- 3-1) Although the District has a lease for the Diamond-D water well until 2038 it is not too soon to begin negotiations to convert the lease into some type of automatically renewing lease or other arrangement to keep the well in the District system.
- 3-2) The District needs to emphasize water conservation with information on the District website and in the bills each month. Water conservation measures are shown in Appendix C at the end of this report.
- 3-3) The District could adjust the billing structure to make water conservation more attractive.
- 3-4) The District could offer financial incentives for the installation of low water use plumbing fixtures, appliances, and timers for landscape water systems.

⁸² Callayomi County Water District, Water System Master Plan, October 2007, Prepared by Coastland Civil Engineering-Construction Management-Building Department Services, Page 2-1.

- 3-5) The District should work with the County to require drought tolerant landscaping for new development and encourage drought tolerant landscaping for existing development.
- 3-6) The District should investigate the use of solar energy to power District facilities. The use of solar energy will save the District money and will supply power when the cost of power from PG&E is usually the highest.
- 3-7) The Water System Master Plan proposes improvements to the District's water supply, distribution, and storage system. No new annexations should be approved by LAFCO without additional improvements to supply and storage and to the water distribution system, as determined necessary.
- 3-8) A Capacity Analysis should be developed prior to any new annexations proposals are approved by LAFCO.

5.4 Financial Ability

Purpose:

To evaluate factors that affect the financing of needed improvements and to identify practices or opportunities that may help eliminate unnecessary costs without decreasing service levels.

5.4.1 Financial Considerations for Callayomi County WD

Financial information for the Callayomi County Water District is provided above in this report. The District has income from water service fees but this does not entirely cover the cost of water service.⁸³ In most places water service is considered to be an "enterprise" type of service where fees should pay the entire cost of the service.

The District has a current Independent Audit but the small staff of the District makes it difficult to conform to the recommended accounting systems where different people are in charge of incoming and outgoing funds.⁸⁴

5.4.2 MSR Determinations on Financing for the CCWD

- 4-1) The Callayomi County Water District provides the rate schedule on the District Website, which is: www.ccwd.home.mchsi.com
- 4-2) The Callayomi County Water District should provide the Independent Audit and the Budget on the District Website for public review
- 4-3) The District has moderately high water rates but may have to increase them for new infrastructure due to the demand for a scarce resource.
- 4-4) The District should stress water conservation as a way to help keep rates low.
- 4-5) The District should consider changing the water rates to have a smaller base water allowance and more of the fee based on actual water use.

⁸³ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 3.

⁸⁴ Callayomi County Water District, Financial Statements, Modified Cash Basis, June 30, 2011, Prepared by: Larry Bain, CPA, An accounting Corporation, 2148 Frascati Drive, El Dorado Hills, CA 95762, Page 14.

5.5 Opportunities for Shared Facilities

Purpose:

To evaluate the opportunities for a jurisdiction to share facilities and resources to develop more efficient service delivery systems.

5.5.1 Callayomi County Water District Facilities

The Callayomi County Water District Facilities are described above in this report. The District is fortunate to have a Water System Master Plan prepared in 2007. It may be time for a new Water System Master Plan to be prepared with greater emphasis on proposed improvements since the existing system is well described in the existing Plan.

5.5.2 MSR Determinations on Shared Facilities for Callayomi County Water District

- 5-1) The Callayomi County Water District shares its facilities with the Middletown Rancheria and various other out-of-District customers.
- 5-2) The Callayomi County Water District is geographically isolated and cannot feasibly share facilities with any other special district.
- 5-3) The Callayomi County Water District provides fire hydrants and water for fire protection used by the South Lake County Fire Protection District (headquartered in Middletown).
- 5-4) The Callayomi County Water District should investigate a shared program with the Lake County Sanitation District to encourage the use of ultra-low-flow toilets, front-loading washing machines, low-flow shower heads and other water-saving devices which would benefit both districts.
- 5-5) The Callayomi County Water District may want to investigate the pros and cons of having a contract with the Lake County Special Districts Administration for specific financial functions of the District.

5.6 Government Structure and Accountability

Purpose:

To consider the advantages and disadvantages of various government structures that could provide public services, to evaluate the management capabilities of the organization, and to evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.

5.6.1 Callayomi County Water District Government Structure

The Callayomi County Water District government is described above in this report. An alternative government structure, which could be considered, would be to change the District to a County Service Area (CSA). A CSA would be governed by the Lake County Board of Supervisors and administered through the Lake County Special District Administration. The Lake County Special District Administration already manages several other CSAs, which

provide water service. This could save money on staff expenses. The Board members could serve as an advisory committee to the Board of Supervisors.

5.6.2 MSR Determinations on Local Accountability and Governance for the Callayomi County Water District

- 6-1) The Callayomi County Water District has an active Board of Directors.
- 6-2) The Callayomi County Water District maintains a website but could improve the website and provide more information on the website such as the District Budget, the District Audit, Board Agendas, Board Minutes and information about water conservation.
- 6-3) The Board of Directors invested in a Water System Master Plan in 2007 but has only partially implemented the projects and plans suggested in that Plan.

6 CALLAYOMI COUNTY WATER DISTRICT SPHERE OF INFLUENCE UPDATE

6.1 Sphere of Influence Requirements

6.1.1 Sphere of Influence Determinations

In determining the Sphere of Influence for each local agency, LAFCO must consider and prepare a statement of determinations with respect to each of the following:

1. The present and planned land uses in the area, including agricultural and open space lands
2. The present and probable need for public facilities and services in the area
3. The present capacity of public facilities and adequacy of public services, which the agency provides, or is, authorized to provide.
4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency. For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing Sphere of Influence.

6.1.2 Possible Approaches to the Sphere of Influence

LAFCO may recommend government reorganizations to particular agencies in the county, using the SOIs as the basis for those recommendations. Based on review of the guidelines of Lake LAFCO as well as other LAFCOs in the State, various conceptual approaches have been identified from which to choose in designating an SOI. These seven approaches are explained below:

1) Coterminous Sphere:

A Coterminous Sphere is a sphere for a city or special district that is the same as its existing boundaries.

2) Annexable Sphere:

A sphere larger than the agency's boundaries identifies areas the agency is expected to annex. The annexable area is outside its boundaries and inside the sphere. This is the recommendation for the District. However, infrastructure improvements would be required for supply and storage and possibly distribution prior to any new annexations and not until the Water Master Plan is updated to address needed improvements.

3) Detachable Sphere:

A sphere that is smaller than the agency's boundaries identifies areas the agency is expected to detach. The detachable area is the area within the agency bounds but not within its sphere.

4) Zero Sphere:

A zero sphere indicates the affected agency's public service functions should be reassigned to another agency and the agency should be dissolved or combined with one or more other agencies.

5) Consolidated Sphere:

A consolidated sphere includes two or more local agencies and indicates the agencies should be consolidated into one agency.

6) Limited Service Sphere:

A limited service sphere is the territory included within the SOI of a multi-service provider agency that is also within the boundary of a limited purpose district which provides the same service (e.g., fire protection), but not all needed services. Territory designated as a limited service SOI may be considered for annexation to the limited purpose agency without detachment from the multi-service provider.

This type of SOI is generally adopted when the following four conditions exist:

- a) The limited service provider is providing adequate, cost effective and efficient services
- b) The multi-service agency is the most logical provider of the other services
- c) There is no feasible or logical SOI alternative, and
- d) Inclusion of the territory is in the best interests of local government organization and structure in the area

Government Code §56001 specifically recognizes that in rural areas it may be appropriate to establish limited purpose agencies to serve an area rather than a single service provider, if multiple limited purpose agencies are better able to provide efficient services to an area rather than one service district.

Moreover, Government Code Section §56425(i), governing sphere determinations, also authorizes a sphere for less than all of the services provided by a district by requiring a district affected by a sphere action to "establish the nature, location, and extent of any functions of classes of services provided by existing districts" recognizing that more than one district may serve an area and that a given district may provide less than its full range of services in an area.

7) Sphere Planning Area:

LAFCO may choose to designate a sphere planning area to signal that it anticipates expanding an agency's SOI in the future to include territory not yet within its official SOI.

6.1.3 SOI Amendments and CEQA

LAFCO has the discretion to limit SOI updates to those that it may process without unnecessarily delaying the SOI update process or without requiring its funding agencies to bear the costs of environmental studies associated with SOI expansions. Any local agency or individual may file a request for an SOI amendment. The request must state the nature of and reasons for the proposed amendment, and provide a map depicting the proposal.

LAFCO may require the requester to pay a fee to cover LAFCO costs, including the costs of appropriate environmental review under CEQA. LAFCO may elect to serve as lead agency for such a review, may designate the proposing agency as lead agency, or both the local agency and LAFCO may serve as co-lead agencies for purposes of an SOI amendment. Local agencies

are encouraged to consult with LAFCO staff early in the process regarding the most appropriate approach for the particular SOI amendment under consideration.

Certain types of SOI amendments are usually exempt from CEQA review. Examples are SOI expansions that include territory already within the bounds or service area of an agency, SOI reductions, and zero SOIs. SOI expansions for limited purpose agencies that provide services (e.g., fire protection, levee protection, cemetery, and resource conservation) needed by both rural and urban areas are typically not considered growth-inducing and are likely exempt from CEQA. Similarly, SOI expansions for districts serving rural areas (e.g., irrigation water) are typically not considered growth-inducing.

Remy et al. write:

*"In City of Agoura Hills v. Local Agency Formation Commission (2d Dist.1988) 198 Cal.App.3d480, 493-496 [243 Cal.Rptr.740] (City of Agoura Hills), the court held that a LAFCO's decision to approve a city's sphere of influence that in most respects was coterminous with the city's existing municipal boundaries was not a "project" because such action did not entail any potential effects on the physical environment."*⁸⁵

Since the recommendation is for the Sphere of Influence for Callayomi County Water District is to remain the same as the District boundary, there will be no environmental impacts from the update of the Sphere and no environmental document is required.

6.1.4 Alternatives for CCWD Sphere of Influence

Lake LAFCO should consider at least three alternatives for the Sphere of Influence for the Callayomi County Water District as follows:

1. Coterminous Sphere Alternative

A Coterminous Sphere would mean that the Sphere of Influence for the CCWD would remain the same as the District Boundary. This would be a vote of confidence in the District. Lake LAFCO would be telling that District that they are doing a good job and should continue as is.

Lake LAFCO should make the District aware that the Sphere of Influence will be reviewed in five years and that some of the issues raised in the MSR accompanying this SOI update should be addressed before the end of the five year period. These issues would include the need to have more specific plans for the future and for improvements to the water supply and distribution system.

Although the District does have out-of-District connections, it may not be practical or necessary to annex them at this time.

2. Annexable Sphere Alternative

An Annexable Sphere would allow the District to annex additional lands without a special amendment to the Sphere of Influence. At a minimum, the existing out-of-District connections could be included in the Sphere of Influence to show that they should be annexed to the District at some point.

⁸⁵ Remy, Michael H., Tina A. Thomas, James G. Moose, Whitman F. Manley, Guide to CEQA, Solano Press Books, Point Arena, CA, February 2007, page 111.

If additional lands for annexation are included in the Sphere of Influence an environmental review document may be required. Also, Lake LAFCO should make it clear to the Callayomi County Water District what conditions, if any, would have to be met in order to proceed with the annexations.

3. Zero Sphere Alternative

A Zero Sphere of Influence would mean that Lake LAFCO recommends that the Callayomi County Water District be dissolved and that another District or organization should take over the functions of the District. The most logical successor to the Callayomi County Water District would be to form a County Service Area and have the water system be administered by the Lake County Special Districts Administration.

This might be less expensive for the water service customers than the present District with the three District employees. The Board would be the Lake County Board of Supervisors and would no longer be the locally elected Board of Directors. The Board of Directors could serve in an advisory capacity to the Board of Supervisors but these positions would be appointed rather than elected.

Even if this SOI alternative is not adopted at this time it might be prudent for the Board of Directors to ask the Special District Administration to prepare an estimate of the costs of operating the CCWD water system to see if there could be substantial savings and improvements in service.

6.1.5 Recommended SOI Alternative

The following SOI Determinations are prepared with the Annexable SOI as the recommended alternative. If the out-of-District connections are to be annexed the SOI could be amended at the time of annexation.

6.2 Present and Planned Land Uses in the Callayomi County Water District Area, Including Agricultural and Open Space Lands

6.2.1 Lake County General Plan and Zoning

The Lake County General Plan designations and zoning for the Middletown area are explained in the Middletown Area Plan.⁸⁶ This Plan described the Land Use and Zoning Plans as follows:

“This plan generally seeks to locate land uses adjacent to one another that are compatible, related, mutually supportive, and similar in the amount of traffic they generate and types of transportation facilities they need. In some cases, though, existing land use or circulation patterns, the timing of development on properties with different owners, environmental constraints or other factors prevent new land use patterns from providing a gradation of uses to ensure compatibility and thus necessitate the use of other tools. One of the most commonly used and effective means of minimizing conflicts between potentially incompatible land uses is to provide a buffer zone between the uses.”

⁸⁶ Lake County, Middletown Area Plan, August 17, 2010, Page 5-51.

6.2.2 SOI Determinations on Present and Planned Land Uses

- 1-1] The Callayomi County Water District is aware of proposed developments in the Middletown Area and of the required improvements to the water service that will be needed.

- 1-2] The Callayomi County Water District should have close coordination with the Lake County Community Development Department to understand the implications for the District of all general plan and zoning designations in the area.

6.3 Municipal Services – Present and Probable Need

6.3.1 Municipal Services Background

Lake County and various other special districts provide the municipal services in the Middletown area. The wastewater collection and treatment service is provided by LACOSAN. The County Sheriff provides the police protection. The South County Fire Protection District provides fire Protection.

6.3.2 SOI Determinations on Facilities and Services Present and Probable Need for Callayomi County Water District

- 2-1] There will continue to be a need for the Callayomi County Water District or a successor District such as a County Service Area to provide water service to the Middletown area.

- 2-2] The facilities and services of the Callayomi County Water District are good but need to be upgraded to be prepared for additional development and prior to any additional annexations.

- 2-3] While the District is providing good service, looking for ways to improve service at a reduced cost. LAFCO will allow no new annexations until the master plan assesses the impacts of new development and these impacts are completely mitigated and the costs are paid for by new development.

- 2-4] Because the facilities of the Callayomi County Water District will need to be upgraded to serve additional development and no additional out of area services should be allowed.

6.4 Public Facilities Present and Future Capacity

6.4.1 Capacity Background

The Callayomi County Water District has a Water System Master Plan, which describes the facilities in detail and the need for additional wells, distribution and storage facilities to serve future development. The District has initiated plans for the addition of a new well and tank. District has developed preliminary engineering studies to support the new well and tank, and has made application for the funds to initiate the planning for the new additions.

6.4.2 SOI Determinations on Public Facilities Present and Future Capacity for Callayomi County Water District

- 3-1] The Callayomi County Water District needs to emphasize water conservation on its website and in other ways.
- 3-2] The Sphere of Influence should include the area surrounding the district within the Community of Middletown. However, adequate plans in place before expanding Boundary of the District and new development should provide adequate infrastructure to accommodate growth.

6.5 Social or Economic Communities of Interest

6.5.1 Middletown Community Background

The Middletown community is described at length in the Middletown Area Plan. Middletown is clearly a separate community and provides both the local economic center and the social community identity. Since many of the services are provided by the County or by area-wide districts the Callayomi County Water District provides a sense of community specifically for Middletown.

4.5.2 Determinations on Social or Economic Communities of Interest for Callayomi County Water District

- 4-1] Middletown is a separate community and will need the services of the Callayomi County Water District to provide water now and in the future.

6.6 Disadvantaged Unincorporated Communities

6.6.1 Disadvantaged Unincorporated Community Background

The State Law (SB 244) requires LAFCO to consider whether or not an area is a Disadvantaged Unincorporated Community (DUC). A DUC is an area where the Median Household Income is

less than 80% of the State of California Median Household Income of \$60,833.⁸⁷ Eighty percent of the 2010 California Median Household Income would be \$48,666.

Disadvantaged unincorporated communities (DUCs) are defined as “a territory that constitutes all or a portion of a ‘disadvantaged community’ including 12 or more registered voters or some other standard as determined by the commission.” In California Government Code Section 65302.30 (a) “Community” means an inhabited area within a city or county that is comprised of no less than 10 dwellings adjacent or in close proximity to one another.

The Median Household Income in Middletown in 2009⁸⁸ was reported as \$44,740.

6.6.2 SOI Determinations regarding the present and probable need for public facilities and services of any disadvantaged unincorporated communities within the existing Sphere of Influence.

- | | |
|------|---|
| 5-1] | The determination of a Disadvantaged Unincorporated Community appears to be subjective by agency. According to 2010 US Census Designated Places Data, the Middletown area meets the criteria to be considered a disadvantaged unincorporated community. In addition other state and federal agencies (SWRCB, CDPH, USDA Rural Development) consider the Middletown area as well as the entire unincorporated area of Lake County to be disadvantaged since those agencies use countywide data. |
| 5-2] | A majority of the area within and adjacent to areas served by the Callayomi County Water District and its SOI are considered disadvantaged with a median household of less than 80 percent of the statewide median income. The Median Household Income for California’s \$60,883 and the Median Household Income for Lake County is \$39,491 and the Median Household income for the Middletown area is \$44,740 to be considered a DUC the Median Household Income must be less than \$48,706. |

⁸⁷ US Census Bureau, <http://quickfacts.census.gov/qfd/states/06/0685586.html>, November 7, 2012

⁸⁸ <http://www.city-data.com/income/income-Middletown-California.html>, January 16, 2013.

6.7 APPENDIX A - LOCAL GOVERNMENT ISSUES

1 Municipal Financial Constraints

Municipal service providers are constrained in their capacity to finance services by the inability to increase property taxes, requirements for voter approval for new or increased taxes, and requirements of voter approval for parcel taxes and assessments used to finance services. Municipalities must obtain majority voter approval to increase or impose new general taxes and two-thirds voter approval for special taxes.

Limitations on property tax rates and increases in taxable property values are financing constraints. Property tax revenues are subject to a formulaic allocation and are vulnerable to State budget needs. Agencies formed since the adoption of Proposition 13 in 1978 often lack adequate financing.

1.1 California Local Government Finance Background

The financial ability of the cities and special districts to provide services is affected by financial constraints. City service providers rely on a variety of revenue sources to fund city operating costs as follows:

- Property Taxes
- Benefit Assessments
- Special Taxes
- Proposition 172 Funds
- Other contributions from city or district general funds.

As a funding source, property taxes are constrained by Statewide initiatives that have been passed by voters over the years and special legislation. Seven of these measures are explained below:

A. Proposition 13

Proposition 13 (which California voters approved in 1978) has the following three impacts:

- Limits the *ad valorem* property tax rate
- Limits growth of the assessed value of property
- Requires voter approval of certain local taxes.

Generally, this measure fixes the *ad valorem* tax at one percent of value; except for taxes to repay certain voter approved bonded indebtedness. In response to the adoption of Proposition 13, the Legislature enacted Assembly Bill 8 (AB 8) in 1979 to establish property tax allocation formulas.

B. AB 8

Generally, AB 8 allocates property tax revenue to the local agencies within each tax rate area based on the proportion each agency received during the three fiscal years preceding adoption of Proposition 13. This allocation formula benefits local agencies, which had relatively high tax rates at the time Proposition 13 was enacted.

C. Proposition 98

Proposition 98, which California voters approved in 1988, requires the State to maintain a minimum level of school funding. In 1992 and 1993, the Legislature began shifting billions of local property taxes to schools in response to State budget deficits. Local property taxes were diverted from local governments into the Educational Revenue Augmentation Fund (ERAF) and transferred to school districts and community college districts to reduce the amount paid by the State general fund.

Local agencies throughout the State lost significant property tax revenue due to this shift. Proposition 172 was enacted to help offset property tax revenue losses of cities and counties that were shifted to the ERAF for schools in 1992.

D. Proposition 172

Proposition 172, enacted in 1993, provides the revenue of a half-cent sales tax to counties and cities for public safety purposes, including police, fire, district attorneys, corrections and lifeguards. Proposition 172 also requires cities and counties to continue providing public safety funding at or above the amount provided in FY 92-93.

E. Proposition 218

Proposition 218, which California voters approved in 1996, requires voter- or property owner-approval of increased local taxes, assessments, and property-related fees. A two-thirds affirmative vote is required to impose a Special Tax, for example, a tax for a specific purpose such as a fire district special tax.

However, majority voter approval is required for imposing or increasing general taxes such as business license or utility taxes, which can be used for any governmental purpose. These requirements do not apply to user fees, development impact fees and Mello-Roos districts.

F. Proposition 26

Proposition 26 approved by California voters on November 2, 2010, requires that certain state fees be approved by two-thirds vote of Legislature and certain local fees be approved by two-thirds of voters. This proposition increases the legislative vote requirement to two-thirds for certain tax measures, including those that do not result in a net increase in revenue. Prior to its passage, these tax measures were subject to majority vote.

However, majority voter approval is required for imposing or increasing general taxes such as business license or utility taxes, which can be used for any governmental purpose. These requirements do not apply to user fees, development impact fees and Mello-Roos districts.

G. Mello-Roos Community Facilities Act

The Mello-Roos Community Facilities Act of 1982 allows any county, city, special district, school district or joint powers authority to establish a Mello-Roos Community Facilities District (a "CFD"), which allows for financing of public improvements and services. The services and improvements that Mello-Roos CFDs can finance include streets, sewer systems and other basic infrastructure, police protection, fire protection, ambulance services, schools, parks, libraries, museums and other cultural facilities. By law, the CFD is also entitled to recover expenses needed to form the CFD and administer the annual special taxes and bonded debt.

A CFD is created by a sponsoring local government agency. The proposed district will include all properties that will benefit from the improvements to be constructed or the services to be provided. A CFD cannot be formed without a two-thirds majority vote of residents living within the proposed boundaries. Or, if there are fewer than 12 residents, the vote is instead conducted of current landowners.

In many cases, that may be a single owner or developer. Once approved, a Special Tax Lien is placed against each property in the CFD. Property owners then pay a Special Tax each year.

If the project cost is high, municipal bonds will be sold by the CFD to provide the large amount of money initially needed to build the improvements or fund the services. The Special Tax cannot be directly based on the value of the property. Special Taxes instead are based on mathematical formulas that take into account property characteristics such as use of the property, square footage of the structure and lot size. The formula is defined at the time of formation, and will include a maximum special tax amount and a percentage maximum annual increase.

If bonds were issued by the CFD, special taxes will be charged annually until the bonds are paid off in full. Often, after bonds are paid off, a CFD will continue to charge a reduced fee to maintain the improvements.

H. Development Impact Fees

A county, cities, special districts, school districts, and private utilities may impose development impact fees on new construction for purposes of defraying the cost of putting in place public infrastructure and services to support new development.

To impose development impact fees, a jurisdiction must justify the fees as an offset to the impact of future development on facilities. This usually requires a special financial study. The fees must be committed within five years to the projects for which they were collected, and the district, city or county must keep separate funds for each development impact fee.

1.2 *Financing Opportunities that Require Voter Approval*

Financing opportunities that require voter approval include the following five taxes:

- Special taxes such as parcel taxes
- Increases in general taxes such as utility taxes
- Sales and use taxes
- Business license taxes
- Transient occupancy taxes

Communities may elect to form business improvement districts to finance supplemental services, or Mello-Roos districts to finance development-related infrastructure extension. Agencies may finance facilities with voter-approved (general obligation) bonded indebtedness.

1.3 *Financing Opportunities that Do Not Require Voter Approval*

Financing opportunities that do not require voter approval include imposition of or increases in fees to more fully recover the costs of providing services, including user fees and Development Impact Fees to recover the actual cost of services provided and infrastructure.

Development Impact Fees and user fees must be based on reasonable costs, and may be imposed and increased without voter approval. Development Impact Fees may not be used to subsidize operating costs. Agencies may also finance many types of facility improvements through bond instruments that do not require voter approval.

Water rates and rate structures are not subject to regulation by other agencies. Utility providers may increase rates annually, and often do so. Generally, there is no voter approval requirement for rate increases, although notification of utility users is required. Water providers must maintain an enterprise fund for the respective utility separate from other funds, and may not use revenues to finance unrelated governmental activities.

2 Public Management Standards

While public sector management standards do vary depending on the size and scope of an organization, there are minimum standards. Well-managed organizations do the following eight activities:

1. Evaluate employees annually.
2. Prepare a budget before the beginning of the fiscal year.
3. Conduct periodic financial audits to safeguard the public trust.
4. Maintain current financial records.
5. Periodically evaluate rates and fees.
6. Plan and budget for capital replacement needs.

7. Conduct advance planning for future growth.

8. Make best efforts to meet regulatory requirements.

Most of the professionally managed and staffed agencies implement many of these best management practices. LAFCO encourages all local agencies to conduct timely financial record keeping for each city function and make financial information available to the public.

3 Public Participation in Government

The Brown Act (California Government Code Section 54950 et seq.) is intended to insure that public boards shall take their actions openly and that deliberations shall be conducted openly. The Brown Act establishes requirements for the following:

- Open meetings
- Agendas that describe the business to be conducted at the meeting
- Notice for meetings
- Meaningful opportunity for the public to comment
- Few exceptions for meeting in closed sessions and reports of items discussed in closed sessions.

According to California Government Section 54959

Each member of a legislative body who attends a meeting of that legislative body where action is taken in violation of any provision of this chapter, and where the member intends to deprive the public of information to which the member knows or has reason to know the public is entitled under this chapter, is guilty of a misdemeanor.

Section 54960 states the following:

(a) The district attorney or any interested person may commence an action by mandamus, injunction or declaratory relief for the purpose of stopping or preventing violations or threatened violations of this chapter by members of the legislative body of a local agency or to determine the applicability of this chapter to actions or threatened future action of the legislative body.

APPENDIX B

2011 Consumer Confidence Report

Water System Name: Callayomi County Water District Report Date: May 11, 2012

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2011.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: One groundwater well

Name & location of source(s): Diamond D well located on Diamond D Ranch

Drinking Water Source Assessment information: An assessment of the drinking water source for the Callayomi CWD was completed in December 2002. A summary of the source water assessment can be obtained from the District Office.

Time and place of regularly scheduled board meetings for public participation: Board meetings are held the second Thursday of each month at 6:00P.M.at the District office at 21282 Stewart Street, Middletown.

For more information, contact: FRANK HAAS Phone: (707)987-2180

TERMS USED IN THIS REPORT

<p>Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.</p>	<p>Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.</p>
<p>Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).</p>	<p>Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.</p>
<p>Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.</p>	<p>Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.</p>
<p>Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.</p>	<p>Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.</p>
<p>Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.</p>	<p>Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.</p>
	<p>ND: not detectable at testing limit</p>
	<p>ppm: parts per million or milligrams per liter (mg/L)</p>
	<p>ppb: parts per billion or micrograms per liter (ug/L)</p>
	<p>ppt: parts per trillion or nanograms per liter (ng/L)</p>
	<p>ppq: parts per quadrillion or picogram per liter (pg/L)</p>
	<p>pCi/L: picocuries per liter (a measure of radiation)</p>

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring

minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.)	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	10	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10	0.18	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2-25-10	29	29	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2-25-10	150	150	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Gross Alpha (pCi /L)	12-23-10	0.026	0.026	15	(0)	Erosion of natural deposits
Barium (ppm)	2-25-10	0.170	0.170	1	(2)	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits.
Flouride (ppm)	2-25-10	0.26	0.26	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (as nitrate, NO3)(ppm)	2-9-11	3.1	3.1	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Color (units)	2-25-10	10	10	15	NA	Naturally-occurring organic materials
Turbidity (units)	2-25-10	0.32	0.32	5	NA	Soil runoff
Total Dissolved Solids (ppm)	2-25-10	240	240	1000	N	Runoff/leaching from natural deposits
Specific Conductance (micromhos)	2-25-10	370	370	1600	(NA)	Substances that form ions when in water; seawater influence
Chloride (ppm)	2-25-10	5.2	5.2	500	NA (NA)	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	2-25-10	4.2	4.2	500	NA (NA)	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS					
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
NONE					

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Callayomi County Water District is an Equal Opportunity Employer. We do not discriminate against race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
NONE				

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	(In the year) 4	1-16-11 2-08-11 3-18-11 6-2-11	0	(0)	Human and animal fecal waste
Enterococci	(In the year) NONE		TT	n/a	Human and animal fecal waste

Coliphage	(In the year) NONE	TT	n/a	Human and animal fecal waste
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**Summary Information for Fecal Indicator-Positive Ground Water Source Samples,
 Uncorrected Significant Deficiencies, or Ground Water TT**

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE				
THE WATER DISTRICT IS PROVIDING 4 LOG VIRUS INACTIVATION AS REQUIRED BY FEDERAL LAW TO DEAL WITH THE ELEVATED E.COLI LEVELS IN THE RAW WATER.				
THE WATER DISTRICT IS ALSO INVESTIGATING THE POSSIBILITY OF OBTAINING FUNDING FOR A NEW GROUNDWATER SOURCE.				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
VIOLATION OF GROUND WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
NONE				

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique ^(a) (Type of approved filtration technology used)	
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to ____ NTU in 95% of measurements in a month. 2 – Not exceed ____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment requirements	

(a) A required process intended to reduce the level of a contaminant in drinking water.
 (b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.
 * Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language

APPENDIX C RESIDENTIAL WATER CONSERVATION TIPS

1. Top 10 Water Conservation Tips⁸⁹

1. Reduce irrigation by one day a week.
2. Find and repair leaks now.
3. Inspect and tune-up your sprinkler system monthly.
4. Water between midnight and 6:00 a.m. to reduce water loss from evaporation and wind.
5. Use a broom, not a hose, to clean your driveway, deck or patio.
6. Use a bucket and a hose with an automatic shut-off nozzle when you wash the car, or take your car to a carwash that recycles.
7. Cover pools and hot-tubs to reduce evaporation.
8. Use front-loading washing machines.
9. Run the dishwasher and clothes washer with full loads only.
10. Prevent and report water waste.

Indoor Tips

- Purchase a front-load washing machine that uses 40% less water. Check with your local water provider for rebates.
- Don't let water run while shaving, brushing teeth or rinsing dishes.
- When you are washing your hands, don't let the water run while you lather.
- Listen for dripping faucets and toilets that flush themselves. Fixing a leak can save 500 gallons each month.

Outdoor Tips

- Water your lawn and garden in 2 short cycles rather than one long one. Watering to a depth of 4 – 6" will encourage deeper healthier roots and allow the plants to go without water for longer periods of time.
- Adjust your sprinkler heads to prevent water draining off your lawn and down the gutter. Reduce sprinkler run-time, remember to water at night, and don't be a gutter flooder.
- Your water meter is an important conservation tool. It not only measures the amount of water you use, but can also tell you if there is a leak in your plumbing.
- A typical garden hose, without a trigger hose nozzle, will waste approximately 8 to 12 gallons per minute.

⁸⁹ Sonoma County Water Agency, <http://www.scwa.ca.gov/lower.php?url=residential>, January 16, 2013

2. Save Water, Money, Energy Now! Top 5 Actions⁹⁰

With so many ways to save water, here are the highlights for 5 key actions to help you capture the water savings around your home. Remember, every drop counts!

1. Stop Those Leaks!

Check your indoor water using appliances and devices for leaks. Check out **Leak Detection and Repair**. Many silent leaks allow water and your money to go down the drain. To help detect unseen leaks **Read Your Meter**. Studies have shown homes can waste more than 10% due leaking, which costs both you and the environment.

Another large water waster can be leaks in your irrigation system. Fix irrigation system leaks quickly and check for water in the gutters or mud puddles. Inspect your sprinklers and drip sprayers regularly for leaks during the daytime since the optimal time to water is in the nighttime hours when you cannot observe leaks. If you have an older irrigation system, over 50% and even more than 75% of the water can be lost to leaks. Learn more about **irrigation systems**.

2. Replace your old Toilet, the largest water user inside your home.

If your home was built before 1992 and the toilet has never been replaced, then it is very likely that you do not have a water-efficient 1.6-gallon per flush toilet. You can check the date stamp inside the toilet by lifting the lid and looking at the back of the toilet at the manufacturer's imprint of the make, model and date of manufacture. Learn more about **toilets**.

3. Replace your Clothes Washer, the second largest water user in your home.

Energy Star™ rated washers that also have a Water Factor at or lower than 9.5, use 35-50% less water and 50% less energy per load. This saves you money on both your water and energy bills. There is a current **qualifying products listing of water efficient clothes washer models** maintained by the Consortium for Energy Efficiency. Learn more about **clothes washers**.

4. Plant the Right Plants with Proper Landscape Design & Irrigation

Whether you are putting in a new landscape or slowly changing the current landscaping at your home; select plants that are appropriate for your local climate conditions. Having a yard with 100% lawn turf area in a dry desert climate uses significant amounts of water. Also consider the trend towards **Xeriscape** and a more natural landscape or wildscape. Learn more about **landscaping**.

5. Water Only What Your Plants Need

Most water is wasted in your garden by watering when you plants do not need the water or by not maintaining the irrigation system. Be attentive if you are manual watering by setting your oven timer or some other reminder to move the water promptly. Make sure your irrigation controller has a rain shutoff device and that it's appropriately scheduled. Most water is wasted in months prior to or just after the rainy season when intermittent rains occur. You can also consider installing a weather adjusting irrigation controller that automatically saves water by not watering when the plants don't need the water. Check with your local water provider to inquire if such controllers work in your area. Learn more about using the features that you have in your **garage** for efficient watering like your hose and irrigation controller timer.

Be sure to call your local water provider for more information and potential incentives.

Check out the **Library**, **Bookstore** and **Links** web pages under Resources for more information.

⁹⁰ <http://h2ouse.org/action/top5.cfm>, March 5, 2013.

ABBREVIATIONS

AB	Assembly Bill
ACP	Asbestos Cement
ADD	Average Day Demand (Water)
AL	Regulatory Action Level (Water Quality)
CA	California
CaIPERS	California Public Employees' Retirement System
CCR	Consumer Confidence Report (Water Quality)
CCWD	Callayomi County Water District
CDP	Census Designated Place
CEQA	California Environmental Quality Act
CFD	Community Facilities District
CIP	Capital Improvement Plan
CKH Act	Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000
CSA	County Service Area
CSD	Community Services District
CWC	California Water Code
District	Callayomi County Water District
DHS	Department of Health Services
DUC	Disadvantaged Unincorporated Community
DWR	Department of Water Resources (California)
EDU	Equivalent Dwelling Unit
ERAF	Educational Revenue Augmentation Fund
FPD	Fire Protection District
FY	Fiscal Year
GASB	Governmental Accounting Standards Board
gpd	gallons per day

gpm	gallons per minute
GWMP	Groundwater Management Plan (Lake County)
hp	horse power
ISO	Insurance Service Organization (Fire Protection)
K	Kilo or one thousand
LACOSAN	Lake County Sanitation District
LAFCO	Local Agency Formation Commission
LAIF	Local Agency Investment Fund
MCL	Maximum Contaminant Level (Water Quality)
MCLG	Maximum Contaminant Level Goal (Water Quality)
MFD	Multiple Family Dwelling-duplex, triplex, apartment, condominium
mgd	million gallons per day
MHD	Mobilehome or Single Family Dwelling
MRDL	Maximum Residual Disinfectant Level (Water Quality)
MRDLG	Maximum Residual Disinfectant Level Goal (Water Quality)
MSR	Municipal Service Review (LAFCO)
NCPA	Northern California Power Agency
NFPA	National Fire Protection Association
OPR	Office of Planning and Research (California)
PDWS	Public Drinking Water Standards
pH	a measure of the relative acidity or alkalinity of water
PHG	Public Health Goal (water quality)
POU	Point-of-Use
PG&E	Pacific Gas and Electric Company
psi	pounds per square inch
pvc	polyvinyl chloride
RCD	Resource Conservation District
SFD	Single Family Dwelling

SOI	Sphere of Influence (LAFCO)
SWQL	Secondary Water Quality Thresholds
TDS	Total Dissolved Solids
TT	Treatment Technique
ULFT	ultra-low-flow-toilet
USDA	United States Department of Agriculture
WAF	Water Availability Fee (Callayomi County Water District)
WD	Water District
WTP	Water Treatment Plant

DEFINITIONS

4-Log Removal of Biological Contaminants: This log-reduction terminology was developed as a way to express levels of decreased biological contamination in water by factors of 10 that could be easily converted to percent reduction. A 1 log reduction is equivalent to a 90 percent reduction. A 2 log reduction is 99 percent reduction and a 3 log reduction is 99.9 percent reduction. A 99.99 percent reduction in biological contaminants (such as viruses) is called a 4 log reduction.⁹¹

Acre Foot: The volume of water that will cover one acre to a depth of one foot, 325,850 U.S. Gallons or 1,233,342 liters (approximately).

Agriculture: Use of land for the production of food and fiber, including the growing of crops and/or the grazing of animals on natural prime or improved pasture land.

Aquifer: An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

Bond: An interest-bearing promise to pay a stipulated sum of money, with the principal amount due on a specific date. Funds raised through the sale of bonds can be used for various public purposes.

California Environmental Quality Act (CEQA): A State Law requiring State and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project.

Community Facilities District: Under the Mello-Roos Community Facilities Act of 1982 (Section 53311, et seq.) a legislative body may create within its jurisdiction a special tax district that can finance tax-exempt bonds for the planning, design, acquisition, construction, and/or operation of public facilities, as well as public services for district residents. Special taxes levied solely within the district are used to repay the bonds.

Community Services District (CSD): A geographic subarea of a county used for planning and delivery of parks, recreation, and other human services based on an assessment of the service needs of the population in that subarea. A CSD is a taxation district with independent administration.

Groundwater: Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater infiltration: Infiltration that enters pipeline and manhole defects located below the groundwater table. Groundwater infiltration is at a maximum during wet weather and might drop to near zero in the dry months.

Impact Fee: A fee, also called a development fee, levied on the developer of a project by a county, or other public agency as compensation for otherwise-unmitigated impacts the project will produce. California Government Code Section 66000, et seq., specifies that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

⁹¹ <http://www.baxwood.com/documents/GWRUpdatedocWIFinal.pdf>, January 14, 2013.

Infiltration and inflow analysis: An engineering and, if appropriate, an economic analysis demonstrating possible excessive or nonexcessive infiltration and inflow.

Infrastructure: Public services and facilities such as sewage-disposal systems, water-supply systems, and other utility systems, schools and roads.

Land Use Classification: A system for classifying and designating the appropriate use of properties.

Leapfrog Development; New development separated from existing development by substantial vacant land.

Local Agency Formation Commission (LAFCO): A five-or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCO is empowered to approve, disapprove, or conditionally approve such proposals. The LAFCO members generally include two county supervisors, two city council members, and one member representing the general public. Some LAFCOs include two representatives of special districts.

Maximum Contaminant Level (MCL): The designation given by the U.S. Environmental Protection Agency (USEPA) to water-quality standards promulgated under the Safe Drinking Water Act. The MCL is the greatest amount of a contaminant that can be present in drinking water without causing a risk to human health.⁹²

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Mean Sea Level: The average altitude of the sea surface for all tidal stages.

Mello-Roos Bonds: Locally issued bonds that are repaid by a special tax imposed on property owners within a community facilities district established by a governmental entity. The bond proceeds can be used for public improvements and for a limited number of services. Mello-Roos Bonds are named after the program's legislative authors.

Ordinance: A law or regulation set forth and adopted by a governmental authority.

Per Capita Water Use: The water produced by or introduced into the system of a water supplier divided by the total residential population; normally expressed in gallons per capita per day (gpcd).⁹³

Percolation: The downward movement of water through the soil or alluvium to a ground water table.⁹⁴

⁹² <http://ga.water.usgs.gov/edu/dictionary.html>

⁹³ <http://rubicon.water.ca.gov/v1cwp/glssry.html>

⁹⁴ <http://rubicon.water.ca.gov/v1cwp/glssry.html>

pH: a measure of the relative acidity or alkalinity of water. Water with a pH of 7 is neutral; lower pH levels indicate increasing acidity, while pH levels higher than 7 indicate increasingly basic solutions.⁹⁵

Potable Water: Water of a quality suitable for drinking.⁹⁶

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Proposition 13: (Article XIII A of the California Constitution) Passed in 1978, this proposition enacted sweeping changes to the California property tax system. Under Proposition 13, property taxes cannot exceed 1% of the value of the property and assessed valuations cannot increase by more than 2% per year. Property is subject to reassessment when there is a transfer of ownership or improvements are made.⁹⁷

Proposition 218: (Article XIID of the California Constitution) This proposition, named "The Right to Vote on Taxes Act", filled some of the perceived loopholes of Proposition 13. Under Proposition 218, assessments may only increase with a two-thirds majority vote of the qualified voters within the District. In addition to the two-thirds voter approval requirement, Proposition 218 states that effective July 1, 1997, any assessments levied may not be more than the costs necessary to provide the service, proceeds may not be used for any other purpose other than providing the services intended, and assessments may only be levied for services that are immediately available to property owners.⁹⁸

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Ranchette: A single dwelling unit occupied by a non-farming household on a parcel of 2.5 to 20 acres that has been subdivided from agricultural land.

Rainfall-dependent infiltration and inflow (RDI/I): Rainfall runoff from both infiltration and inflow sources that enter the wastewater collection system during and shortly after a rain event. RDI/I consists of stormwater inflow and rainfall-dependent infiltration.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

SCADA: SCADA is acronym for Supervisory Control and Data Acquisition. It is a kind of software application program used for process control and gather real time data from remote locations for exercising this control on equipments and conditions. The SCADA System consists of hardware and software components. The hardware collects and feeds data into a computer with SCADA software installed. The data is then processed by the computer before presenting it in a timely manner. The function of SCADA is recording and logging all events in a file that is stored in a hard disk or sending them to a printer. If conditions become hazardous, SCADA sounds warning alarm.⁹⁹

⁹⁵ <http://ga.water.usgs.gov/edu/dictionary.html#P>, February 3, 2011.

⁹⁶ <http://ga.water.usgs.gov/edu/dictionary.html>

⁹⁷ http://www.californiataxdata.com/A_Free_Resources/glossary_PS.asp#ps_08

⁹⁸ http://www.californiataxdata.com/A_Free_Resources/glossary_PS.asp#ps_08

⁹⁹ <http://www.scadaworld.net/>, July 3, 2009.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Service lateral: A sewer connecting a building or house to the mainline sewer.

Single-family dwelling (SFD) unit equivalent: A unit of measure equal to 210 gallons per day, used to estimate the amount of wastewater generated by a single-family residence.

Specific Capacity: The specific capacity of a water well depends on hydraulic characteristics of the aquifer and on the construction of the well. Specific capacity is determined by dividing the wells production by the drawdown that occurs during pumping. Higher specific capacities in wells tend to be indicative of higher aquifer production.¹⁰⁰

Specific Yield: The specific yield for a water well is the percent of space in the ground that will drain by gravity when the water table drops. Specific yield is reported as a percent. Higher specific yields tend to be indicative of higher aquifer production. An example of a good specific yield is 7 percent, which is a typical average specific yield of aquifers in the Sacramento Valley.¹⁰¹

Sphere of Influence (SOI): The probable physical boundaries and service area of a local agency, as determined by the Local Agency Formation Commission (LAFCO) of the county.

Surcharge: A condition occurring in sewers when flows exceeding the sewer's capacity are imposed on the system, causing the hydraulic grade line to rise above the sewer crown.

System Analysis Model: A computer program used to model a sanitary sewer system for various flow conditions.

Total Dissolved Solids (TDS): A quantitative measure of the residual minerals dissolved in water that remains after evaporation of a solution which is usually expressed in milligrams per liter. Abbreviation: TDS.¹⁰²

Transmissivity: Transmissivity is a term used to define the ability of an aquifer to convey or transport water, similar to the capacity of a pipeline. Transmissivity is related to hydraulic conductivity and saturated thickness of an aquifer or groundwater basin. Hydraulic conductivity is that rate at which groundwater moves through the aquifer. More porous aquifers, such as sand and gravel aquifers, have high hydraulic conductivities. The saturated thickness is the total depth of groundwater in an aquifer or basin. The term transmissivity combines both these terms so it is a good overall indication of the capacity of a groundwater basin to produce water. Higher transmissivity values tend to be indicative of higher aquifer production. An example of a good transmissivity is 100,000 gallons per day per foot (gpd/ft), which is the average transmissivity of a productive aquifer in the Sacramento Valley.¹⁰³

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Urban: Of, relating to, characteristic of, or constituting a city. Urban areas are generally characterized by moderate and higher density residential development (i.e., three or more dwelling units per acre), commercial development, and industrial development, and the availability of public services required for that development, specifically central water and sewer

¹⁰⁰ Lake County Watershed Protection District, "Lake County Groundwater Management Plan", March 31, 2006, P. 2-4.

¹⁰¹ Lake County Watershed Protection District, "Lake County Groundwater Management Plan", March 31, 2006, P.2-4.

¹⁰² <http://rubicon.water.ca.gov/v1cwp/glssry.html>

¹⁰³ Lake County Watershed Protection District, "Lake County Groundwater Management Plan", March 31, 2006, P. 2-4.

service, an extensive road network, public transit, and other such services (e.g., safety and emergency response). Development not providing such services may be “non-urban” or “rural”. CEQA defines “urbanized area” as an area that has a population density of at least 1,000 persons per square mile (Public Resources Code Section 21080.14(b)).

Urban Services: Utilities (such as water, gas, electricity, and sewer) and public services (such as police, fire protection, schools, parks, and recreation) provided to an urbanized or urbanizing area.

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Zoning: The division of a city by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the general plan.

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