

LASSEN
Local Agency Formation Commission

DRAFT

COUNTY SERVICE AREA 2
JOHNSTONVILLE WATER SYSTEM

MUNICIPAL SERVICE REVIEW
and
SPHERE OF INFLUENCE

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1 INTRODUCTION

This Municipal Service Review is prepared for CSA 2 Johnstonville Water System in Lassen County which provides water service. The Municipal Service Review (MSR) includes the following information:

- LAFCO requirements for MSRs
- Johnstonville background
- Description of service provided by CSA 2 Johnstonville Water System
- Analysis of CSA 2's capability to serve existing and future residents in the area

1.1 LAFCO's Responsibilities

Local Agency Formation Commissions are quasi-legislative local agencies created in 1963 to assist the State in encouraging the orderly development and formation of local agencies. The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code §56000 et seq.) is the statutory authority for the preparation of an MSR, and periodic updates of the Sphere of Influence of each local agency. The Governor's Office of Planning and Research has issued Guidelines for the preparation of an MSR. This MSR adheres to the procedures set forth in the MSR Guidelines.

A Sphere of Influence is a plan for the probable physical boundaries and service area of a local agency, as determined by the affected Local Agency Formation Commission (Government Code §56076). Government Code §56425(f) requires that each Sphere of Influence be updated not less than every five years, and §56430 provides that a Municipal Service Review shall be conducted in advance of the Sphere of Influence update.

1.2 Municipal Service Review Requirements

The statute as amended by AB1744 and regulations call for a review of the municipal services provided in the county or other appropriate area designated by the LAFCO. The LAFCO is required, as part of the MSR, to prepare a written statement of findings of its determinations with respect to each of the following:

1. Growth and Population
2. Capacity and Infrastructure
3. Financial Ability
4. Shared Facilities
5. Government Structure and Accountability

1.3 Lassen LAFCO Policies and Procedures Related to Municipal Services

Lassen LAFCO adopted policies and procedures related to municipal services.

1.4 Preparation of the MSR

Research for this Municipal Service Review (MSR) was conducted during winter 2010/2011. This MSR is intended to support preparation and update of Spheres of Influence, in accordance with the provisions of the Cortese-Knox-Hertzberg Act. The objectives of this Municipal Service Review (MSR) are as follows:

- ✓ To develop recommendations that will promote more efficient and higher quality service patterns
- ✓ To identify areas for service improvement
- ✓ To assess the adequacy of service provision as it relates to determination of appropriate sphere boundaries

While LAFCO prepared the MSR document, LAFCO did not engage the services of experts in engineering, hydrology, geology, water quality, fire protection, accounting or other specialists in related fields, but relied upon published reports and Lassen County staff for information.

Therefore, this MSR reflects LAFCO's recommendations, based on available information during the research period and provided by Lassen County staff to assist in its determinations related to promoting more efficient and higher quality service patterns; identifying areas for service improvement; and assessing the adequacy of service provision for CSA 2 Johnstonville.

1.5 Description of Public Participation Process

The LAFCO proceedings are subject to the provisions California's open meeting law, the Ralph M. Brown Act (Government Code Sections 54950 et seq.) The Brown Act requires advance posting of meeting agendas and contains various other provisions designed to ensure that the public has adequate access to information regarding the proceedings of public boards and commissions. Lassen LAFCO complies with the requirements of the Brown Act. The State MSR Guidelines provide that all LAFCOs should encourage and provide multiple public participation opportunities in the municipal service review process. Local MSR policies have been adopted by the Lassen LAFCO.

Lassen LAFCO has discussed and considered the MSR process in open session, and has adopted a schedule for completing the various municipal service reviews and sphere of influence updates for districts in Lassen County. Each municipal service review will be prepared as a draft, and will be subject to public and agency comment prior to final consideration by the Lassen LAFCO.

1.6 California Environmental Quality Act (CEQA)

The Municipal Service Review is a planning study that will be considered by Lassen LAFCO in connection with subsequent proceedings regarding the CSA 2 Johnstonville and the Sphere of Influence. The Sphere of Influence review or update that will follow has not been approved or adopted by LAFCO.

This MSR was initiated during the 2010-2011 fiscal year. This MSR includes an analysis, to the extent required by Section 15262 of the CEQA Guidelines, of the environmental factors that may be affected by the Municipal Service Review process, but will not include the preparation of an environmental review document.

1.7 Sphere of Influence Requirements

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.

1.8 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 likely 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.¹

Since the recommendation is for the Sphere of Influence for the boundary of the CSA 2 Johnstonville is to adopt a Zero Sphere (provided that the water system can be transferred to another agency) there will be no environmental impacts from the adoption of the Sphere because the water system will continue to function and no environmental document is required.

¹ 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.

2 LASSEN COUNTY AND JOHNSTONVILLE BACKGROUND

2.1 Lassen County Background

2.1.1 Lassen County Topography

Lassen County is located in northeastern California. It is bordered on the north by Modoc County, on the south by Plumas and Sierra Counties, on the west by Shasta County, and on the east by the State of Nevada.

Lassen County contains varied topography. The County has a variety of open valleys, forested plateaus, mountain meadows, and high mountain peaks and ranges. Various river and stream courses dominate the landscape, along with Honey Lake and Eagle Lake, the major water features of the County (Eagle Lake is the second largest natural lake located wholly within California).

The total land area in Lassen County is approximately 2,910,080 acres. Of this land area, over 63 percent consists of public lands managed by Federal, State or other governmental agencies. Over 1,025,000 acres in Lassen County are managed by the Bureau of Land Management and approximately 610,000 acres are managed by the U.S. Forest Service.

Other public lands include Lassen Volcanic National Park, the Sierra Army Depot, and lands owned by the State of California, including lands managed primarily for wildlife resources by the California Department of Fish and Game. There are also Native American Lands north and east of Susanville. Most of the land in Lassen County is undeveloped. Of the total 2,910,080 acres included within the County, a very large portion consists of wildland areas of forest or brushland.

Lassen County sits in two hydrologic regions, the North Lahonton Hydrologic Region and the Sacramento River Hydrologic Region as described below:

- A. The North Lahonton Hydrologic Region covers approximately 3.91 million acres and includes portions of Modoc, Lassen, Sierra, Nevada, Placer, El Dorado, Alpine, Mono, and Tuolumne counties.
- B. The Sacramento River Hydrologic Region covers approximately 17.4 million acres and includes portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa counties.

2.1.2 Lassen County Climate

The climate of Lassen County is variable but in general is characterized by warm dry summers and cold moist winters. Most of the precipitation falls between October and May. The average annual rainfall ranges from four inches along the Nevada border in the eastern Honey Lake Valley and increases going west to 48 inches near Juniper Lake in Lassen Volcanic National Park. Average daily temperatures range from 69.6° F in July to 20.4° F in January. Wildland fire season varies slightly, but usually runs from late May to late October.

2.1.3 Lassen County Communities

Lassen County includes one incorporated city, the City of Susanville, and various unincorporated communities spread throughout the County. Unincorporated community centers include the following:

- Bieber
- Clear Creek
- Doyle
- Herlong
- Janesville
- Johnstonville
- Leavitt Lake
- Litchfield
- Little Valley
- Milford
- Spalding
- Standish
- Stones-Bengard
- Westwood

The primary means of access to Lassen County is via automobile, and the roadway system within Lassen County serves as the primary means of movement between communities. The major service routes are as follows:

- A. U.S. Highway 395, which serves as a north-south route connecting Lassen County to points north via Alturas, and points south including the metropolitan area of Reno, Nevada;
- B. State Route 36, which provides regional access to Lassen County from west via the Lake Almanor Basin;
- C. State Route 44, which intersects Highway 36 approximately 7 miles west of Susanville, connects the County to Redding and points north;
- D. State Route 139, which connects Susanville with the northern communities of the County via Willow Creek Valley, the north shore of Eagle Lake and State Route 299 in Big Valley;
- E. State Route 299, which connects the area of Big Valley with Alturas in Modoc County to the northeast and with Shasta County, Redding and Interstate 5 to the west;
- F. State Route 147, with less than two miles of this State Route running through Lassen County, connecting with State Route 36 approximately five miles west of Westwood.

Recreational opportunities in Lassen County attract a substantial number of visitors to the area, especially in the summer. The summer population can sometimes exceed the resident population, especially on holiday weekends. This increase in visitor population is largely attributed to second-home ownership in community centers and various

recreational attractions such as Eagle Lake, the Lassen Volcanic National Park, and the Bizz Johnson trail.

2.1.4 Lassen County Population

The following information is provided by the State of California on Lassen County population growth from 2000 to 2009:

LASSEN COUNTY POPULATION 2000 TO 2009²										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Susanville	17,465	17,403	17,243	17,514	17,922	18,049	17,973	17,904	17,636	17,402
Balance Of County	16,363	16,462	16,592	16,584	16,752	16,952	16,873	17,967	18,320	18,148
County Total	33,828	33,865	33,835	34,098	34,674	35,001	34,846	35,871	35,956	35,550

2.2 Johnstonville

Johnstonville is an unincorporated community in Lassen County. It is located 4.5 miles east-southeast of Susanville, at an elevation of 4,131 feet. The place was founded as Toadtown by settlers in 1857. The name reflected the abundance of toads at the place. A post office operated at Johnstonville from 1902 to 1943. The name honors Robert Johnston, who helped to develop the town.³

Due to its proximity to Susanville, Johnstonville has been considered a “bedroom community” within the area. Much of the trade activity and employment occur adjacent to the CSA.

The Susan River, fed by Lassen Creek and smaller, ephemeral tributaries, meanders through the CSA for approximately two miles and is the key feature in the landscape. The settled portions of the area are situated on terraces above the floodplain. To the south end of the proposed area, the settlement is located on the beginning of the Diamond Mountain foothills. It is estimated that the population of the CSA is 860 persons.⁴

The CSA is located within the Lassen Community College District, the Lassen High School District, the Johnstonville School District, and the Susan River Fire Protection District. There is one school in the CSA as follows:

Johnstonville Elementary School, 167 students.
704-795 Bangham Lane, Susanville, CA 96130; (530) 257-2471.

² State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark. Sacramento, California, May 2009.

³ Durham, David L. (1998). *California's Geographic Names: A Gazetteer of Historic and Modern Names of the State*. Quill Driver Books. p. 389. ISBN 9781884995149.

⁴ Lassen LAFCO, Staff Report for Formation of County Service Area 2, LAFCO File 3-03-91, April 25, 1991.

3 COUNTY SERVICE AREA 2 JOHNSTONVILLE

3.1 Background for County Service Area 2

In 1991, the Lassen County Board of Supervisors recognized the need to provide utility services to the Johnstonville area to stimulate growth and economic development. The establishment of County Service Area 2 for water and sewer service was the first step. The County, with financial support from Caltrans, constructed a water system in 1994. Since the water system became operable, there has been only one customer, the Caltrans Maintenance Station. The system has run at a loss each year. It has been difficult to begin any expansion effort because of the County's intent to avoid mandatory connections.⁵

County Service Area #2 is managed by the Lassen County Economic Development Department on behalf of County Administration. The County is contemplating requesting Lassen LAFCO to dissolve CSA 2 and offer to sell the water system.⁶

3.2 Domestic Water Supply, Treatment and Distribution Background

Small community water treatment has posed an enormous problem for the drinking water regulatory community, drinking water professionals, and the people living in these communities. The Safe Drinking Water Act (SDWA) and subsequent regulations require that all water in the distribution system and at every tap connected to the distribution system comply. Water treatment usually consists of filtration and disinfection. The Johnstonville water system is regulated by the State Department of Public Health, holds a state drinking water permit, which is renewed on an annual basis, provides monthly water quality testing to the state with on outstanding water quality violations.

Water treatment standards essentially mandate central treatment for drinking water prior to entering the distribution system. No water that exceeds a primary standard may be used for drinking water. Primary standards have been developed to protect human health and are rigorously enforced by the California Department of Health Services.

For very small communities, this may be a cost that poses an undue burden. Often it could be a cost that has negative public health implications. For a very low-income family, the money spent on water treatment may not be available for other essentials.

Rather than spend that money, a community may apply for a variance or exemption.⁷ Exemptions and variances are intended to be temporary solutions to regulatory compliance. They may, however, extend indefinitely leaving a community with no water that meets the regulation.⁸

Secondary standards are intended to protect the taste, odor or appearance of drinking water. California Code requires that, if a community water system experiences an

⁵ County of Lassen, Administrative Services, Memorandum to Board of Supervisors from John T. Ketelsen, County Administrative Officer, April 8, 2010, Pages 2-3.

⁶ County of Lassen, Administrative Services, Memorandum to Board of Supervisors from John T. Ketelsen, County Administrative Officer, April 8, 2010, Page 3.

⁷ *A Variance or an Exemption is a State Department of Health Services permission to exceed an MCL or to not comply with a treatment technique under certain conditions.*

⁸ NSF International, "Feasibility of an Economically Sustainable Point-of-Use/Point-of-Entry Decentralized Public Water System Final Report", March 2005, p18. nsf.org/business/.../pdf/GrimesFinalReport_Dec05.pdf

exceedance of certain secondary standards, quarterly sampling must be initiated. Compliance is then determined based upon the average of four consecutive quarterly samples. Non-compliant water must then be treated to meet the secondary standards.⁹

Water distribution systems carry water for both domestic use and for fire suppression. The distribution system should be sized to perform both functions simultaneously, delivering sufficient water volume and pressure. Pipes should be made of durable and corrosion-resistant materials, and alignments located in areas that are easy to access for repairs and maintenance.¹⁰ Fire hydrants should be placed a maximum of 600 feet apart along the water mains and a maximum of 500 feet from the end of water lines.¹¹

Some water loss in the distribution system can be expected. Water loss is the difference between the volume of water pumped from the water supply well and the volume of water sold to users. A loss of water from 5% to 15% is considered acceptable.¹²

The Best Management Practices for water conservation recommended by the California Water Association are as follows:¹³

1. Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers
2. Residential Plumbing Retrofit
3. System Water Audits, Leak Detection and Repair
4. Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections
5. Large Landscape Conservation Programs & Incentives
6. High-Efficiency Washing Machine Rebate Programs
7. Public Information Programs
8. School Education Programs
9. Conservation Programs for Commercial, Industrial and Institutional Accounts
10. Wholesale Agency Assistance Programs
11. Conservation Pricing Home
12. Conservation Coordinator
13. Water Waste Prohibition
14. Residential ULFT (ultra-low-flow-toilet) Replacement Programs

3.3 County Service Area 2 Johnstonville Water Service

3.3.1 CSA 2 Johnstonville Facilities

The CSA 2 Johnstonville water system includes a 400 foot deep well equipped with a production pump designed to generate 200 gallons per minute, a pressure vessel and a fire pump, a 120,000 gallon storage tank, and a section of ten-inch main line running from the tank and well site, under State Highway 395 to the Caltrans Maintenance

⁹ Brelje & Race Consulting Civil Engineers, "Preliminary Engineering Report Bonanza Springs Water System CSA #7 Lake County Special Districts", December 2006, p 8.

¹⁰ Brelje & Race Consulting Civil Engineers, "Preliminary Engineering Report Bonanza Springs Water System CSA #7 Lake County Special Districts", December 2006, p. 10

¹¹ Brelje & Race Consulting Civil Engineers, "Preliminary Engineering Report Bonanza Springs Water System CSA #7 Lake County Special Districts", December 2006, p. 11

¹² Brelje & Race Consulting Civil Engineers, "Preliminary Engineering Report Starview Water System CSA #18 Lake County Special Districts", December 2006, p. 4.

¹³ <http://www.calwaterassn.com/conservation.htm>, July 26, 2010.

Facility. The water comes from the Honey Lake Groundwater Basin described in Appendix B at the end of this report.

3.3.2 CSA 2 Initial Financing

The project was constructed in 1994 and cost \$226,982.¹⁴ The cost was financed with \$150,000 from Caltrans and \$100,000 from the Prison Mitigation funds loaned to CSA 2 to cover the \$90,629 remainder of the cost to complete the core system and to provide initial operating capital.¹⁵

3.3.3 Studies for Expansion

A 1999 Study

In 1999, Lassen County hired HydroScience Engineers, Inc., to conduct an engineering study of the Johnstonville Water System. The purpose of the study was to determine the feasibility of expanding the system to meet the water service requirements for new residential and commercial development. Lassen County also conducted an income survey to determine eligibility for use of Community Development Block Grant (CDBG) funding; however, the household incomes in the area were too high to qualify for Federal funding.

The engineering study indicated that the water system could theoretically support a maximum of 260 equivalent dwelling units (EDU). It was recommended that another well be drilled for additional capacity and to provide redundancy for the system. Three alternatives for pipeline alignment were proposed.¹⁶

B 2005 Study

In 2005, a residential expansion project located southwest of the existing water system was proposed. Using the previous engineering study and considering changes necessary for the specific development, cost estimates were created to determine the cost to expand the water system to serve the proposed development. To serve 55 lots, the total cost was estimated to be \$661,000.¹⁷ The following facilities were included in this estimate:

- 8,900 lineal feet of main line
- 300,000 gallon storage tank
- Backup well and pump station

¹⁴ County of Lassen, Administrative Services Memorandum, from John T. Ketelsen, CAO to Board of Supervisors, January 8, 2009, Page 4.

¹⁵ County of Lassen, Administrative Services Memorandum, from John T. Ketelsen, CAO to Board of Supervisors, January 8, 2009, Page 4.

¹⁶ County of Lassen, Administrative Services Memorandum, from John T. Ketelsen, CAO to Board of Supervisors, January 8, 2009, Page 4.

¹⁷ County of Lassen, Administrative Services Memorandum, from John T. Ketelsen, CAO to Board of Supervisors, January 8, 2009, Page 5.

3.4 CSA 2 Finances

3.4.1 **Financial Background of CSA 2 Johnstonville**

Since beginning operation in 1995, the CSA 2 Johnstonville water system has consistently run at a deficit. The “interim” rate schedule adopted at the start of operations has not generated the revenue necessary to cover the costs of operation. The rate schedule was based upon the City of Susanville’s rate schedule and was not meant to be permanent. Funds remaining from construction of the system supported the system until 2004. Since then a series of three loans totaling \$75,000 over a four–year period were made to CSA 2 from Fund 178 (Economic Development).¹⁸

The Former County Administrator, John Ketelson, has recommended that the Board of Supervisors adopt a new rate schedule. The proposed rate schedule would result in a charge of \$2,462 per month for Caltrans, an increase of \$1,517 per month.¹⁹

3.4.2 **Budget for CSA 2**

The 2010-2011 Budget for CSA 2 Johnstonville Water System is shown below:

Johnstonville Water System Enterprise Programs Fund 589				
Financing Uses and Classification	Actual 2007-2008	Actual 2008-2009²⁰	Actual 2009-2010	Budget 2010-2011²¹
Insurance	\$124	\$94	\$85	\$45
Maintenance	15			
Professional Services	2,659	2,431	2,653	2500
Equipment			2,500	1500
Special Expense			7	500
Special A-87	988	2,377	928	1,111
Utilities	1,548	1,552		
Utilities Lights		150	2,226	2,100
Services and Supplies Total	\$5,334	\$6,604	\$5,899	\$7,756
Operating Transfers-Out		6,000	6,632	6,273
Net County Cost	\$5,334	\$12,604	\$12,531	\$14,029

The beginning balance for the 2010-2011 Budget is \$1,968; the estimated revenue is \$12,000. If all the budgeted money were spent the projected fund balance would be \$439.²² The Lassen County 2010-2011 Budget recommends a grant of \$10,000 to CSA 2 Johnstonville from Fund 178 Economic development Housing Income, Budget Center 1781 Pre 89 Loan Income.²³

¹⁸ County of Lassen, Administrative Services, Memorandum to Board of Supervisors from John T. Ketelsen, County Administrative Officer, April 8, 2010, Page 2.

¹⁹ County of Lassen, Administrative Services, Memorandum to Board of Supervisors from John T. Ketelsen, County Administrative Officer, April 8, 2010, Page 2.

²⁰ County of Lassen, Budget 2009-2010, Page 254.

²¹ County of Lassen, Budget 2010-2011.

²² County of Lassen, Budget 2010-2011.

²³ County of Lassen, Budget 2010-2011.

On May 22, 2010, the Board of Supervisors adopted Ordinance No. 521-A which stated that "The fee for connection to the Johnstonville Water System shall be the actual cost, in labor and materials, to extend the Water System's main to the customer's property and to connect the customer's service line to the water system main and shall include the cost of the water meter."²⁴

3.4.3 Loan Repayment Issues

The former Lassen County Counsel, R. Craig Settlemire, analyzed the debt repayment issues for CSA 2 as follows.²⁵

A county may loan money to one of its county service areas. Government Code §25210.9 provides for a short-term loan as follows:

The Board of supervisors may from time to time transfer money to a county service area or to a zone within a county service area, for the benefit of the service area or zone, from any available funds of the county. Any moneys so transferred may be used for the payment of any currently payable expenses incurred by reason of the establishment of any extended services within the service area or zone prior to December 1 of the first fiscal year in which a tax may be levied for extended services within the service area or zone. The rate of interest earned by such moneys shall be determined by the board of supervisors.

Also, Government Code §25210.9b contemplates that such a loan would be repaid from the levy of a special tax, and further authorizes the Board of Supervisors to extend a short-term loan for an additional period not to exceed three years. In addition, Government Code §25210.9c allows a county to establish a "revolving fund" not to exceed \$2 million that may be used to loan money to county service areas for up to 10 years for certain specified purposes.

In short, it appears that the maximum period of time that a county can loan money to one of its county service areas is 10 years. As discussed above, the initial \$100,000 loan from the Prison Mitigation Fund was made approximately 14 years ago, but repayment of the same has been frustrated by a lack of additional new customers to the water system.

The concern is that continued forbearance or a forgiveness of the loans to the Johnstonville Water System CSA may constitute a gift of public funds depending on the source of the funds used since the water system benefits a very narrow group of persons compared to the county as a whole. In this situation, the Johnstonville Water System benefits only one customer, Caltrans.

However, if it can be shown that the source of the county funds used to make the loan to the county service area could have been spent on the project and have met the purposes of that fund from which the moneys were derived, a gift of public funds issue may be avoided. For example, if it can be shown that the development of a water system in the Johnstonville area addresses the impact

²⁴ Lassen County, Ordinance No. 521-A, Ordinance Amending Ordinance No. 521 and the Lassen County Code Establishing Water Utility Rates for the Johnstonville Water System.

²⁵ County of Lassen, Office of County Counsel, Inter-Office Memorandum, "Johnstonville Water System County Service Area", December 12, 2008.

caused by the prison expansion, the use of the Prison Mitigation Fund monies for that purpose would be appropriate. Likewise, if it can be shown that moneys held in the Economic Development and Housing Income Fund can be used for the development of a community water system, then forgiveness of the loan from that fund to be Johnstonville Water System CSA would be appropriate.

3.5 Proposals for Change

The former County Administrator, John Ketelson, recommended the Board of Supervisors either sell the water system (perhaps to Caltrans or the City of Susanville) and dissolve CSA 2 or explore alternatives to expand the water system and put the water system on a better financial basis. Dissolution of CSA 2 would require LAFCO action but it would be premature for LAFCO to act until the water system is sold and the debt retired. Expansion of CSA 2 could require LAFCO action and would require excellent justification and documentation.

The following adjacent water systems could be investigated to determine if selling the CSA 2 system would be feasible or some other means of working together (contracts or a joint powers agreement) would be beneficial:

1. County Superintendent of Schools
2. Motel
3. Johnstonville School
4. Mobile Home Park
5. California Highway Patrol
6. Dick Herman Subdivision
7. Vacant commercial facilities (restaurant, grocery store)
8. City of Susanville Airport (water system does not have DPH license)
9. Gables/R House Restaurant (closed)
10. Caltrans Utilities (does not have DPH approval for drinking water)

4 MUNICIPAL SERVICE REVIEW

Lassen 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 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.

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

4.1 Growth and Population Projections for the Johnstonville Area

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

4.1.1 Lassen County General Plan

The Johnstonville Area Plan was adopted in August 1987. The community of Johnstonville was designated a Town Center. Approximately one half of the CSA area is zoned either Industrial or Commercial-Town. There are two agriculturally-zoned areas within the CSA. One agricultural area along Johnstonville Road includes lots with the road frontage zoned commercial. The other agricultural area includes 100 acres designated for Urban Reserve.

The remaining agricultural area in the Johnstonville Area Plan is contained within the Susan River flood plain and is bounded on three sides by other lands within the County Service Area.

There are three residential areas within the CSA. One of these is a 146-area Planned Development with a "PD" General Plan Designation.²⁶

The 2009 program to update the Area Plan describes the following vision for Johnstonville:

The Johnstonville Planning Area will maintain its small-town atmosphere and promote increased vitality through:

- *Coordinated commercial, residential and employment growth within and adjacent to the Town Center;*
- *Expansion of water and wastewater services as opportunities arise;*

²⁶ Lassen LAFCO, Staff Report for Formation of County Service Area 2, LAFCO File 3-03-91, April 25, 1991.

- *An improved transportation network;*
- *Development of clean industry that is compatible with airport operations; and*
- *Protection of agricultural lands and scenic vistas surrounding the Town Center.*²⁷

4.1.2 MSR Determinations on Growth and Population for CSA 2 Johnstonville

- 1-1) Although the County desires economic development and growth for the Johnstonville area, the expansion of services should be done with realistic plans for financing these services.
- 1-6) The Lassen County Community Development Department should coordinate zoning and general plan designations for the area with services available and develop specific population and building projections for the CSA if possible.

4.2 Capacity and Infrastructure

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

LAFCO is responsible for determining that an agency is reasonably capable of providing needed resources and basic infrastructure to serve areas within the District and later in the Sphere of Influence. It is important that such findings of infrastructure availability occur when revisions to the Sphere of Influence and annexations occur.

In the case of this Municipal Service Review, it is prudent for Lassen LAFCO to evaluate the present and long-term infrastructure demands and resource availability of the District. Further, LAFCO needs to see that resources and services are available at needed levels and orderly maintenance and expansion of such resources and services are made to coordinate with increasing demands.

4.2.1 Infrastructure Background

The infrastructure for CSA 2 Johnstonville is adequate to serve the Caltrans Maintenance Station; however, substantial expansion of the facilities would be required to serve additional areas.

4.2.2 MSR Determinations Regarding Capacity and Infrastructure for CSA 2 Johnstonville

- 2-1) The infrastructure for CSA 2 Johnstonville is adequate to serve the Caltrans Maintenance Station.

²⁷ Lassen County, http://www.lassenplan.com/wp-content/filez/2009/06/keychoices_Johnstonville_draft6.25.09rev.pdf, July 24, 2010. NOTE: See downloaded result from selecting this hyperlink -- attached to EMAIL (NOT RIGHT!)

- 2-2) It could be more appropriate to encourage other water service providers to provide the additional services needed for the Johnstonville area.

4.3 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.

LAFCO should consider the ability of the District to pay for improvements or services associated with annexed sites. This planning can begin at the Sphere of Influence stage by identifying what opportunities there are to identify infrastructure and maintenance needs associated with future annexation and development, and identifying limitations on financing such improvements, as well as the opportunities that exist to construct and maintain those improvements.

LAFCO should consider the relative burden of new annexations to the community when it comes to its ability to provide public safety and administrative services, as well as capital maintenance and replacements required as a result of expanding District boundaries.

Rate restructuring may be forced by shortfalls in funding, but the process may also reflect changing goals and views of economic justice or fairness within the community. LAFCO should evaluate the impact of SOI and Annexation decisions on existing community rates for public water service.

4.3.1 Financial Considerations

The CSA Budget, financial background, debt issues and inadequate rate structure are discussed above in this report.

4.3.2 MSR Determinations on Financial Ability for CSA 2 Johnstonville

- 3-1) If the CSA determines to stay in operation and to expand service the Board should do the following:
- a. Establish Development Impact Fees to ensure that all new development pays the cost of development.
 - b. Prepare a Capital Improvement Plan to be prepared for future capital expenditures.
 - c. Become familiar with Community Facilities Districts and Mello-Roos Bonds as a means for new development to pay for infrastructure.
- 3-2) The Budget for the CSA is available through the County's website. If the CSA stays in operation and more customers served, it may be beneficial for a separate site attached to the County's website to be developed.

- 3-3) The CSA's budgeting process does not address the financial problems of the CSA and the need to increase rates.

4.4 Opportunities for Shared Facilities

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

In the case of annexing new lands into a district, LAFCO can evaluate whether services or facilities can be provided in a more efficient manner if the District can share them with another agency. In some cases, it may be possible to establish a cooperative approach to facility planning by encouraging agencies to work cooperatively in such efforts.

The California Water Association recommends public-private partnerships (ranging from the sale of a municipal water system to the procurement of a single service, such as reading water meters) as follows:

There are as many reasons for entering into a public-private partnership as there are different types of partnerships. However, the primary drivers are costs and regulations. As water systems age, the cost to maintain and improve them increases. This is money local governments often don't have or prefer to use for something else, like police services or fire protection. California's private water companies are well capitalized with good access to funds that they can invest in our state's water treatment and delivery infrastructure.

As costs increase, so do the number and stringency of state and federal water quality regulations. To operate a water system that provides high quality, safe drinking water now requires access to a high-level of technical expertise in areas such as biology, chemistry, engineering and other relevant fields. Private water companies have these capabilities and can provide them at an affordable price.

And that is the bottom line benefit of public-private partnerships. They work because private sector water utilities often enjoy significant economies-of-scale and expertise that smaller governmental systems often don't have. That means they can provide a high level of service at a low cost per customer – a benefit to water customers, local governments and water companies.²⁸

4.4.1 Facilities

The facilities for the CSA 2 Johnstonville are explained above in this report. The facilities are adequate to serve the Caltrans Maintenance Station; however, they would require substantial expansion to serve additional customers. The CSA should seriously consider the sale of this water system to another public or private entity.

²⁸ <http://www.calwaterassn.com/partnerships.htm>, July 26, 2010.

4.4.2 MSR Determinations on Shared Facilities for CSA 2 Johnstonville

- 4-1) The following adjacent water systems could be investigated to determine if selling the CSA 2 system would be feasible or some other means of working together (contracts or a joint powers agreement) would be beneficial:
1. County Superintendent of Schools
 2. Motel
 3. Johnstonville School
 4. Mobile Home Park
 5. California Highway Patrol
 6. Dick Herman Subdivision
 7. Vacant commercial facilities (restaurant, grocery store)
 8. City of Susanville Airport (water system does not have DPH license)
 9. Gables/R House Restaurant (closed)
 10. Caltrans Utilities (does not have DPH approval for drinking water)

4.5 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.

One of the most critical components of LAFCO's responsibilities is in setting logical service boundaries for communities based on their capacity to provide services to affected lands.

Lassen LAFCO may consider the agency's record of local accountability in its management of community affairs as a measure of the ability to provide adequate services to the Sphere of Influence and potential annexation areas.

4.5.1 Government Structure

The government structure for a County Service Area is that the Board of Supervisors serves as the governing board for the CSA. This can be beneficial for small areas where services are required but there aren't enough people to serve on a board of directors.

At a Board of Supervisors meeting held January 20, 2009, where the Board was meeting as the Directors of CSA 2, Treasurer/Tax Collector Richard Egan stated that “There appears to be a chain-of-command problem where no one knows who is in charge at the County level. [He thinks] it would be important for the County to put someone in charge of being the contact person or one responsible for reviewing the budget and calculating the rates so there is some accountability.”²⁹

The above comment and the problems of CSA 2 show that, in this case, the CSA form of government has not worked particularly well. This could be used as an argument for dissolution of the CSA if the facilities can be sold.

4.5.2 MSR Determinations on Government Structure and Accountability for CSA 2 Johnstonville

- 5-1) The County has a website to communicate with tax payers, residents, and the public; however, this has not been particularly helpful or effective regarding CSA 2 Johnstonville Water System.
- 5-2) The County adopts budgets and rate changes at hearings where the public is notified and invited. Information is placed in the local newspaper, when required. However, the Board of Supervisors has been unable or unwilling to adopt appropriate rate increases for CSA 2 Johnstonville Water System.
- 5-3) Changes in government structure are generally hard to justify in small rural communities and a great deal of public discussion would be required before any changes could be made; however, dissolution or merger of this CSA with another jurisdiction would clearly be desirable in this case. Alternatively, selling the system to Caltrans and dissolving the CSA would also be desirable.
- 5-4) The CSA complies with health regulations and has regularly scheduled meetings whereby the public is invited; however, even though the meetings are held the Board does not seem to be able to take the necessary and appropriate actions.

²⁹ County of Lassen, “Summary Minutes, Board of Supervisors, 707 Nevada Street, Susanville,” January 20, 2009.

5 SPHERE OF INFLUENCE (SOI) DETERMINATIONS

5.1 Sphere of Influence Requirements

The determination of Sphere of Influence plans is the most important planning function given to LAFCO by the State Legislature. Spheres of Influence are described by the Cortese-Knox-Hertzberg Act as an important tool for “planning and shaping the logical and orderly development and coordination of local governmental agencies so as to advantageously provide for the present and future needs of the county and its communities.”

Spheres serve a similar function in LAFCO determinations as general plans do for cities and counties. Consistency with the adopted sphere plan is mandatory, and changes to the plan require careful review. It is intended that written determinations adopted by LAFCO and the Sphere Diagram will together guide the provision of water for the Johnstonville area.

While LAFCO encourages the participation and cooperation of the subject agency, the Sphere of Influence plan is a LAFCO responsibility, and the Commission is the sole authority as to the sufficiency of the documentation and the plan’s consistency with law and LAFCO policy.

5.1.1 *Sphere of Influence Required 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; and
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.

5.1.2 *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 Lassen 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 means that the Sphere of Influence for a city or special district that is the same as its existing boundaries of the city or district. **This is the recommendation for CSA 2 Johnstonville** since the County is undergoing an effort to find more water customers for the CSA to help spread cost and facilitate Economic Development.

2) Annexable Sphere:

A sphere larger than the agency's boundaries identifies areas the agency is expected to annex. The annexable area is outside the district boundaries and inside the sphere of influence.

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 of influence.

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 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
- 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.

5.2 Sphere of Influence for CSA 2 Johnstonville Water System

The Sphere of Influence for CSA 2 Johnstonville should be a Coterminous Sphere. If the County is unsuccessful at finding new customers or economic development efforts within the Johnstonville CSA #2 service area are fruitless; then the CSA 2 could be considered to have no valid reason to exist and a successor entity should be identified to provide domestic water services especially if the CSA's financial issues are not resolved.

5.3 Present and Planned Land Uses in the Area, Including Agricultural and Open Space Lands

5.3.1 Johnstonville Area

The Johnstonville Area was the subject of an extensive Area Plan in 1987. In the Lassen County General Plan 2000, Johnstonville is shown as Planning Area 6.³⁰ The land use designations in the Johnstonville Area include the following residential designations:

- Urban Residential
- Estate Residential
- Rural Residential I

Commercial and Industrial land use designations are also included.

5.3.2 SOI Determinations on Present and Planned Land Use for Johnstonville Area

- 1-1] The General Plan allows for growth in Johnstonville; however, little growth has occurred in the past and is expected in light of the current economic downturn.

5.4 Municipal Services—Present and Probable Capacity and Need

LAFCO is responsible for determining if an agency is reasonably capable of providing needed resources and basic infrastructure to serve areas within the District and its Sphere of Influence. It is important that such findings of infrastructure availability occur when revisions to the Sphere of Influence occur.

In the case of the Sphere of Influence Update, it is prudent for LAFCO to evaluate the present and long-term infrastructure demands and resource availability and to see that

- 1) Resources and services are available at needed levels.
- 2) Orderly maintenance and expansion of such resources and services are made in line with increasing demands.

5.4.1 CSA 2 Johnstonville Services

The facilities and services for the CSA 2 Johnstonville are described above in this report.

5.4.2 SOI Determinations on Facilities and Services: Present and Probable Need for the CSA 2 Johnstonville

- 2-1] There is a need for the water service; however, the economics of paying back the loan, operating the system, and expanding the system seem prohibitive in the present economic climate.
- 2-2] The County may have to transfer the water system to a new operator, even if it means a financial loss to the County.

³⁰ Lassen County, http://www.co.lassen.ca.us/govt/dept/com_dev/planning_division/documents/LandUseMappage2-21.pdf, December 11, 2010.

5.5 The Present Capacity of Public Facilities and Adequacy of Public Services Provided

5.1.1 Capacity of Facilities

The capacity of the facilities is adequate and the system may be able to be expanded in the future when there is greater demand.

5.1.2 SOI Determinations on Public Facilities Present and Future Capacity for the CSA 2 Johnstonville

- 3-1] The primary reason for recommending a zero sphere of influence for this CSA is that it is not functioning in an economical manner and the probability for expansion is unlikely.
- 3-2] The present capacity of this system is adequate, but the cost of increasing the number of services is prohibitive. There are many water systems in close proximity, which cause overall expansion costs to rise and economies of scale difficult to achieve.

5.6 Social or Economic Communities of Interest

5.6.1 CSA 2 Johnstonville Area

The Johnstonville area is located close to Susanville and the residents depend on Susanville for many services. The Elementary School and the Volunteer Fire Department provide some focus for the community but for other services the residents either provide for themselves or travel to Susanville. The addresses for the community are Susanville addresses.

5.6.2 SOI Determinations on Social or Economic Communities of Interest for the CSA 2 Johnstonville

- 4-1] Johnstonville is a distinct community and relies upon county and independent special district services such as fire and EMS services.

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 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 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:

- It limits the *ad valorem* property tax rate.
- It limits growth of the assessed value of property.
- It requires voter approval of certain local taxes.

Generally, this measure fixes the *ad valorem* tax at one percent of the value at the most recent sale; 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

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 (1978).

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 the following three types of fees:

- User fees
- Development impact fees
- Mello-Roos districts

F. 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.

G. 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:

- 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 district function and to 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 - GROUNDWATER

North Lahontan Hydrologic Region (6) California's Groundwater Honey Lake Valley Groundwater Basin (Bulletin 118 Last update 2/27/04)

Honey Lake Valley Groundwater Basin

- Groundwater Basin Number: 6-4
- County: Lassen, CA and Washoe, NV
- Surface Area: 311,750 acres (487 square miles)

Basin Boundaries and Hydrology

Honey Lake Valley is part of the Basin Range Geomorphic Province that extends into California. The valley is bounded to the north and northeast by Plio-Pleistocene basalt of Antelope Mountain, Shaffer Mountain, and Amedee and Skedaddle Mountains, and the Modoc plateau. The valley is bounded on the southwest by Mesozoic granitic rocks of the Diamond Mountains of the Sierra Nevada Geomorphic Province. Bald Mountain protrudes through the valley floor northwest of Honey Lake.

More than 40 streams flow from the Diamond, Fort Sage, and the Virginia Mountains and the northern volcanic uplands. Most streams are intermittent. The largest streams are the Susan River, Willow Creek, Long Valley Creek, and Gold Run Creek, which originate in the western mountains. Tributaries to the Susan River are Gold Run, Piute, and Willow creeks. Honey Lake is the most prominent surface feature in the basin with an average surface area of 47,000 acres. The lake fluctuates greatly in area and volume (USGS 1990).

The basin extends into Washoe County, Nevada. The California portion of the basin is about 45 miles long and varies in width from 10- to 15-miles. The basin is underlain by granitic bedrock at depths of 5,000 to 7,000 feet (USGS 1990). Annual precipitation ranges from 7 to 15 inches.

Hydrogeologic Information

Water-Bearing Formations

Holocene sedimentary deposits, Pleistocene lake and near-shore deposits, and Pleistocene and Plio-Pleistocene volcanic rocks comprise the Honey Lake Valley Groundwater Basin aquifer system. The following summary is from USGS (1990) and DWR (1963).

Holocene Sedimentary Deposits These deposits consist of intermediate alluvium, alluvial fans, and basin deposits that partly fill the structural depression underlying Honey Lake Valley. The alluvial deposits contain poorly sorted silt, sand, and gravel that accumulate near the rim of the basin and along perennial streams where they enter the valley. The permeability of these deposits is moderate and, due to their limited thickness (up to 100 feet), yield small amounts of water.

The alluvial fans consist of poorly sorted deposits ranging in size from clay to boulders that interfinger with fine-grained lake deposits toward the center of the basin. These deposits have moderate to high permeability and may reach a thickness of 300 feet. The fans have limited areal extents along the southern perimeter of the basin. The fans yield large amounts of confined and unconfined groundwater.

The finer-grained basin deposits consist of poorly consolidated, bedded sand, silt, and clay deposited near the center of the basin. The basin deposits interfinger with the alluvial deposits. The deposits are generally thin, have low permeability, and are considered a poor source of water. Underlying the Holocene sedimentary deposits are Pliocene semiconsolidated sedimentary and pyroclastic deposits of tuffaceous silt, clay, diatomite, sand, and pyroclastic air-fall and water-laid volcanic tuffs. The thickness is over 4,500 feet between Litchfield and Herlong and thins toward the edge of the basin. The deposits generally have low permeability.

Pleistocene Lake and Near-Shore Deposits Lake and near-shore deposits reach a thickness up to 700 feet. The lake deposits contain a number of highly permeable sand beds in the area northwest of Honey Lake where they are important sources of groundwater. Lake deposits found east of Honey Lake and north of Herlong consist mainly of silt and clay with low permeability and are a poor source of groundwater. The near-shore deposits are coarse-grained and form a continuous belt around the edge of the valley. The deposits are highly permeable and yield large amounts of water where saturated.

Plio-Pleistocene and Pleistocene Volcanic rocks These volcanic rocks consist of jointed volcanic flows of the Modoc Plateau, which generally have scoriaceous tops and bottoms and dense interiors. They are found in the north and east side of the basin. This unit has moderate to high permeability and is an important confined aquifer in the northwestern and northeastern portions of the valley. The lava flows also serve as important recharge areas.

Recharge Areas

The major sources of groundwater recharge are direct infiltration of precipitation in upland areas and infiltration of streamflow in alluvial fan areas accounting for approximately 80% of total recharge (USGS 1990). The remaining 20% consists of infiltration of surface water and irrigation flow on the valley floor (USGS 1990). The upland recharge areas consist of Plio-Pleistocene and Pleistocene basalt flows. Subsurface flow may also enter the valley from Secret Valley through Pliocene lake sediments, which appear to be continuous beneath the lava field separating the two valleys (DWR 1963).

Groundwater Level Trends

The water levels in most wells declined 10 feet or more during the early 1990s and have since recovered to pre-1990 levels.

Groundwater Storage

The total volume of water stored in the upper 100 feet of saturated basin-fill deposits and volcanic-rock aquifers is estimated to be 10 million acre-feet. Not all of this water is economically recoverable or of acceptable quality for practical use (USGS 1990).

Groundwater Budget (Type B)

Estimates of groundwater extraction are based on a survey conducted by the California Department of Water Resources during 1997. The survey included land use and sources of water. Estimates of groundwater extraction for agricultural, municipal and industrial, and environmental wetland uses are 51,000, 15,000, and 3,800 acre-feet, respectively. Deep percolation from agricultural applied water is estimated to be 14,000 acre-feet.

Groundwater Quality

Characterization: Water quality varies in the basin. Calcium bicarbonate to sodium bicarbonate type waters occur in the Janesville-Buntingville area and south of Herlong and along the southwestern side of Honey Lake. Sodium bicarbonate type waters occur east of Honey Lake and north of the railroad. Poor quality waters, sodium-calcium bicarbonate-sulfate in character, exist east of Honey Lake and north of Herlong near the ordnance depot. Dissolved solids generally increase west to east and range from 89 to 2,500 mg/L; averaging 518 mg/L (DWR unpublished data).

Impairments: Poor quality water with high boron, arsenic, ASAR, total dissolved solids, fluoride, and nitrate levels occur between Litchfield and Honey Lake, and east of Honey Lake and north of Herlong. Some wells in the vicinity of Standish have high concentrations of arsenic. Thermal waters exist in several areas derived from a fractured bedrock flow system associated with the Honey Lake and Walker Lane fault systems—most notably in the Wendel and Amedee area (Varian 1997). The Juncal and Bohm (1987) investigation indicates that the Wendel-Amedee system is part of a deep flow system with recharge from the Diamond Mountain Range of the Sierra Nevada (Varian 1997). Amedee Hot Springs is on the eastern edge of Honey Lake and is coincident with the extension of Amedee fault (DWR 1968). Locally, wells have high hardness, boron, fluoride, iron, ammonia, phosphorus, sulfate, manganese, sodium, calcium, chloride, and nitrate levels.

Water Quality in Public Supply Wells

Constituent Group ¹	Number of wells sampled ²	Number of wells with a concentration above an MCL ³
Inorganics – Primary	54	4
Radiological	17	1
Nitrates	60	0
Pesticides	12	0
VOCs and VSOCs	12	0
Inorganics – Secondary	54	11

¹ A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater North Lahontan Hydrologic Region (6) California's Groundwater Honey Lake Valley Groundwater Basin Bulletin 118* Last update 2/27/04 – *Bulletin 118* by DWR (2003).

² Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.

³ Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

Well Production Characteristics

Well yields (gal/min)		
Irrigation	Range: 20–2500	Average: 784 (19 Well Completion Reports)
Total depths (ft)		
Domestic	Range: 20–1005	Average: 180 (1,525 Well Completion Reports)
Irrigation	Range: 35–845	Average: 368 (146 Well Completion Reports)

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
DWR	Groundwater levels	39 wells semi-annually
Soil Conservation Service		14 wells semi-annually
Sierra Army Depot		4 wells semi-annually
DWR	Miscellaneous water quality	24 wells every 3 years
Department of Health Services		49 wells HOW OFTEN?

Basin Management

Groundwater Management:	Honey Lake Valley Groundwater Basin Act Honey Lake Valley Groundwater Management District
Water Agencies Public	West Patton Village CSD, City of Susanville WSA
Private	Lassen Irrigation District

References Cited

California Department of Water Resources (DWR). February 1963. Northeastern Counties Ground Water Investigation. Bulletin 98, Volume I and II.

California Department of Water Resources. 1968. Honey Lake Water Quality Investigation.

California Department of Water Resources, Northern District. Memorandum Report.
 Handman EH, Londquist CJ, Maurer DK. 1990. Ground-water Resources of Honey Lake Valley, Lassen County, California, and Washoe County Nevada. USGS. 90-4050.

Juncal DW and Bohm B. 1987. Conceptual Model of the Wendel-Amedee Geothermal System, Lassen County, California. Geothermal Resources Council Trans. Vol. 11.

Varian AR. 1997. Use of Environmental Isotopes to Investigate Hydrologic Processes at Honey Lake Basin, Lassen County, California and Washoe County, Nevada.

Additional References

Bader JS. 1969. Ground Water Data as of 1967, North Lahontan Subregion, California. USGS. Open File Report.

Bailey EH. 1966. Geology of Northern California. California Division of Mines and Geology. Bulletin 190.

- Bedinger MS. 1990. Studies of Geology and Hydrology in the Basin and Range Province, Southwestern United States, for Isolation High-Level Radioactive Waste; Evaluation of the Regions. USGS. 84-745.
- California Department of Water Resources. 1960, Honey Lake and Willow Creek Valleys Water Quality Investigations.
California Department of Water Resources, Division of Resources Planning.
- California Department of Water Resources. 1960. Northeastern Counties Investigation. California Department of Water Resources. Bulletin 58.
- California Department of Water Resources. 1963. Northeastern Counties Groundwater Investigation, Volume 1, Text.
- California Department of Water Resources. Bulletin 98.224 p. PAGE WHAT?
- California Department of Water Resources. 1963. Northeastern Counties Investigation, Volume 2, Plates. California Department of Water Resources. Bulletin 98.
- California Department of Water Resources. 1964. Quality of Ground Water in California 1961-62, Part 1: Northern and Central California. California Department of Water Resources. Bulletin 66-62.
- California Department of Water Resources. 1965. Northeastern Counties Ground Water Investigation, Appendix C, Geology. California Department of Water Resources, Northern District. Bulletin 98.
- California Department of Water Resources. 1975. California's Ground Water. California Department of Water Resources. Bulletin 118.
- California Department of Water Resources. 1979. Ground Water Basins in California: A Report to the Legislature in Response to Water Code Section 12924.
- California Department of Water Resources. Draft Report. California Department of Water Resources. 1980. Ground Water Basins in California. California Department of Water Resources. Bulletin 118-80.
- California Department of Water Resources. 1987. Honey Lake Ground Water Basin Progress Report. California Department of Water Resources, Northern District. Office Memorandum.
- California Department of Water Resources. 1988. Aquifer Stress Test, May 11-13, 1988. Susanville: California Correctional Center. Office Memorandum.
- California Department of Water Resources. 1992. Lassen County Water Resources Assessment Study. California Department of Water Resources, Northern District. Memorandum Report.
- Cohen P, Loeltz OJ. 1964. Evaluation of Hydrogeology and Hydrochemistry of Truckee Meadows Area, Washoe County, Nevada. USGS.
- Dickinson WR, Ingersoll RV, Grahm SA. 1979. Paleogene Sediment Dispersal and Paleotectonics in Northern California. Geological Society of America Bulletin 90:1458-1528.
- Diggles MF, Batatian LD, Dellinger DA. 1986. Geologic Map of the Dry Valley Rim Wilderness Study Area, Lassen County, California, and Washoe County, Nevada. USGS.86-83.
Grose TLT. 1986. Geologic Map of the Marlette Lake Quadrangle, Nevada. Nevada Bureau of Mines and Geology.

- Grose TLT, McKee EH. 1986. Potassium-argon Ages of Late Miocene to Late Quaternary Volcanic Rocks in the Susanville-Eagle Lake Area, Lassen County, California. USGS.
- Handman EH. 1988. Ground-water Resources of Honey Lake Valley, Nevada and California. USGS.
- Handman EH. 1990. Principal Results of a Ground-water Study of Honey Lake Valley, California and Nevada. USGS.
- Handman EH. Hydrologic Aspects of Interbasin Transport of Ground Water from Honey Lake Valley, Washoe County, Nevada [abs.] in Herrmann, Raymond, ed., Managing Water Resources During Global Change; 1992; Reno, Nevada. American Water Resource Association.
- Hilton GS. 1963. Water-resources Reconnaissance in Southeast Part of Honey Lake Valley, Lassen County, California.
- Lydon PA, Gay TE, Jennings CW. 1969. Geologic Atlas of California [Westwood Sheet]. California Division of Mines and Geology.
- Mariner RH, Presser TS, Evans WC. 1977. Chemical Composition Data and Calculated Aquifer Temperature for Selected Wells and Springs for Honey Lake Valley, California. USGS. OFR-76-783.
- Maurer DK. 1993. Hydrologic Setting and Hydrologic Data of the Smoke Creek Desert Basin, Washoe County, Nevada, and Lassen County, California, Water Years 1988-90. USGS. WRI 93-4043.
- Moll NE. 2000. A Groundwater Flow Model of Eastern Honey Lake Valley, Lassen County, California and Washoe County Nevada.
- Planert M, Williams JS. 1995. Ground Water Atlas of the United States, Segment 1, California, Nevada. USGS. HA-730-B.
- Principia Mathematica, Inc. 1993. Evaluations of the Draft Environmental Statement, Bedell Flat Pipelines Rights of Way, Washoe County, Nevada.
- Reheis M. 1999. Extent of Pleistocene Lakes in the Western Great Basin. USGS. MF-2323.
- Rockwell GL. 1990. Surface-Water Hydrology of Honey Lake Valley, Lassen County, California and Washoe County, Nevada. USGS. OF-90-177.
- Rockwell GL. 1993. Surface-Water Hydrology of Honey-Lake Valley, Lassen County, California, and Washoe County, Nevada. USGS. HA-726.
- Rockwell GL, Friebel MF, Webster MD, Anderson SW. 1998. Water Resources Data for California, Water Year 1997; Volume 4, Northern Central Valley Basins and the Great Basin from Honey Lake Basin to Oregon State Line. USGS.
- Saucedo GJ, Wagner DL. 1992. Geologic Map of the Chico Quadrangle, California. California Division of Mines and Geology.
- Sinclair WC. 1963. Ground-Water Appraisal of the Long Valley-Massacre Lake Region, Washoe County, Nevada.
- Nevada Department of Conservation and Natural Resources. Groundwater Resources-Reconnaissance Report 15.

Sinclair WC, Loeltz OJ. 1963. Ground-Water Conditions in the Fernley-Wadsworth Area, Churchill, Lyon, Storey and Washoe Counties, Nevada. USGS. 1619-AA.

Mayo AL, Slosson JE. 1992. The Application of Ground-Water Flow Models as Predictive Tools – A Review of Two Ground-Water Models of Eastern Honey Lake Valley, California-Nevada. Bulletin of The Association of Engineering Geologists.

Thompson TH, Chappell R. 1983. Maps Showing Distribution of Dissolved Solids and Dominant Chemical Type in Ground Water, Basin and Range Province, Northern California. USGS. WRI 83-4115-B.

U. S. Geological Survey. 1981. Water Resources Data for California; Volume 4, Northern Central Valley Basins and the Great Basin from Honey Lake Basin to Oregon State Line. USGS.

Willden CR. 1961. Preliminary Geologic Map of Humboldt County, Nevada. USGS. MF-0236.

Williams TR, Bedinger MS. 1983. Selected Geologic and Hydrologic Characteristics of the Basin and Range Province, Western United States: Pleistocene Lakes and Marshes. USGS. OF-83-751.

Williams TR, Bedinger MS. 1984. Selected Geologic and Hydrologic Characteristics of the Basin and Range Province, Western United States: Pleistocene Lakes and Marshes. USGS. I-1522-D.

ABBREVIATIONS

AB	Assembly Bill
CEQA	California Environmental Quality Act
CFD	Mello-Roos Community Facilities District
CKH	Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000
CSA	County Service Area
CSD	Community Services District
District	CSA 2 Johnstonville
DHS	Department of Health Services (California)
DWR	California Department of Water Resources
EDU	Equivalent Dwelling Unit
ERAF	Educational Revenue Augmentation Fund
FCI	Federal Correctional Institute
FY	Fiscal Year
gpd	gallons per day
GPS	Global Positioning System
I&I	infiltration and inflow (wastewater collection)
LAFCO	Local Agency Formation Commission
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
MSR	Municipal Service Review (LAFCO)
PDWS	Primary Drinking Water Standards
PERS	Public Employees Retirement System (California)
PHG	Public Health Goal (water quality)
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter (ug/L)

ppt	parts per trillion or nanograms per liter (ng/L)
pCi/L	picocuries per liter (a measure of radiation)
psi	pounds per square inch
RWQCB	Regional Water Quality Control Board (California)
SDWA	Safe Drinking Water Act
SDWS	Secondary Drinking Water Standards
SOI	Sphere of Influence (LAFCO)
TT	Treatment Technique
WDR	Waste Discharge Requirement Permit (California)
ULFT	ultra-low-flow toilet
USEPA	U.S. Environmental Protection Agency

DEFINITIONS

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.

Alluvium: A general term for clay, silt, sand, gravel, or similar unconsolidated detrital material, deposited during comparatively recent geologic time by a stream or other body of running water, (1) as sediment in the bed of the stream or on its flood plain or delta, (2) as a cone or fan at the base of a mountain slope; esp., such a deposit of fine-grained texture (silt or silty clay) deposited during time of flood.³¹

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.

Flume: An open artificial water channel, in the form of a gravity chute, that leads water from one place to another. A flume can be used to measure the rate of flow. Specific designs include the Parshall, Palmer-Bowlus, Trapezoidal, and H-Flume.

Formation: A laterally continuous rock unit with a distinctive set of characteristics that make it possible to recognize and map from one outcrop or well to another. This is the basic rock unit of stratigraphy.³²

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

Groundwater recharge: Groundwater recharge or deep drainage or deep percolation is a hydrologic process where water moves downward from surface water to groundwater. This process usually occurs in the vadose zone below plant roots and is often expressed as a flux to the water table surface. Recharge occurs both naturally (through the water cycle) and

³¹ <http://www.maden.hacettepe.edu.tr/dmmrt/index.html>

³² <http://geology.com/dictionary/glossary-f.shtml>

anthropologically (i.e., "artificial groundwater recharge"), where rainwater and or reclaimed water is routed to the subsurface.

Groundwater is recharged naturally by rain and snow melt, though this may be impeded somewhat by human activities including paving, development, or logging. These activities can result in enhanced surface runoff and reduction in recharge. Use of groundwater, especially for irrigation, may also lower the water tables. Groundwater recharge is an important process for sustainable groundwater management, since the volume-rate abstracted from an aquifer should be less than or equal to the volume-rate that is recharged.

Recharge can help move excess salts that accumulate in the root zone to deeper soil layers, or into the ground water system. Another environmental issue is the disposal of waste through the water flux such as dairy farms, industrial, and urban runoff.³³

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.

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 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.

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 the US Environmental Protection Agency (US EPA).

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.

³³ http://en.wikipedia.org/wiki/Groundwater_recharge

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. These bonds are named after the program's legislative authors.

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

Pleistocene Epoch: The first epoch of the Quaternary Period, beginning 2 to 3 million years ago and ending approximately 10,000 years ago.³⁴

Primary Drinking Water Standards (PDWS): Maximum Contaminant Levels for contaminants.

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.³⁵

Proposition 218: (Article XIII D 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.³⁶

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.

Quaternary: The second period of the Cenozoic era, following the Tertiary; also, the corresponding system of rocks. It began 2 to 3 million years ago and extends to the present. It consists of two grossly unequal epochs; the Pleistocene, up to about 10,000 years ago, and the Holocene since that time.³⁷

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.

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

Sanitary Sewer: A system of subterranean conduits that carries refuse liquids or waste matter to a plant where the sewage is treated, as contrasted with storm drainage systems (that carry surface water) and septic tanks or leech fields (that hold refuse liquids and waste matter on-site).

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.

³⁴ http://www.webref.org/geology/p/pleistocene_epoch.htm

³⁵ http://www.californiataxdata.com/A_Free_Resources/glossary_PS.asp#ps_08

³⁶ http://www.californiataxdata.com/A_Free_Resources/glossary_PS.asp#ps_08

³⁷ <http://www.webref.org/geology/q/quaternary.htm>

Sludge is the residual semi-solid material left from wastewater treatment processes. When fresh sewage or wastewater is added to a settling tank, approximately 50% of the suspended solid matter will settle out in about an hour and a half. This collection of solids is known as raw sludge or primary solids and is said to be "fresh" before anaerobic processes become active. Once anaerobic bacteria take over, the sludge will become putrescent in a short time and must be removed from the sedimentation tank before this happens.

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.³⁸

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.³⁹

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.

Total Dissolved Solids (TDS): A quantitative measure of the residual minerals dissolved in water that remains after evaporation of a solution. Total Dissolved Solids is usually expressed in milligrams per liter. Abbreviation: TDS.⁴⁰

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.⁴¹

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 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.

³⁸ Lake County Watershed Protection District, "Lake County Groundwater Management Plan", March 31, 2006, P. 2-4.

³⁹ Lake County Watershed Protection District, "Lake County Groundwater Management Plan", March 31, 2006, P.2-4.

⁴⁰ <http://rubicon.water.ca.gov/v1cwp/glssry.html>

⁴¹ Lake County Watershed Protection District, "Lake County Groundwater Management Plan", March 31, 2006, P. 2-4.

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

Water Quality: Used to describe the chemical, physical, and biological characteristics of water, usually in regard to its suitability for a particular purpose or use.⁴²

Water Year: A water year is a continuous 12-month period for which hydrologic records are compiled and summarized. In California, it begins on October 1 and ends September 30 of the following year.⁴³

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.

⁴² <http://rubicon.water.ca.gov/v1cwp/glssry.html>

⁴³ <http://rubicon.water.ca.gov/v1cwp/glssry.html>

REFERENCES

Brelje & Race Consulting Civil Engineers, "Preliminary Engineering Report Bonanza Springs Water System CSA #7 Lake County Special Districts", December 2006.

Brelje & Race Consulting Civil Engineers, "Preliminary Engineering Report Starview Water System CSA #18 Lake County Special Districts", December 2006.

California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark. Sacramento, California, May 2009.

County of Lassen, Administrative Services, Memorandum to Board of Supervisors from John T. Ketelsen, County Administrative Officer, April 8, 2010.

County of Lassen, Budget 2009-2010, Page 254.

County of Lassen, Budget 2010-2011.

County of Lassen, Office of County Counsel, Inter-Office Memorandum, "Johnstonville Water System County Service Area", December 12, 2008.

County of Lassen, Ordinance No. 521-A, Ordinance Amending Ordinance No. 521 and the Lassen County Code Establishing Water Utility Rates for the Johnstonville Water System.

County of Lassen, "Summary Minutes, Board of Supervisors, 707 Nevada Street, Susanville," January 20, 2009.

Durham, David L. (1998). *California's Geographic Names: A Gazetteer of Historic and Modern Names of the State*. Quill Driver Books. p. 389. [ISBN 9781884995149](#).

http://en.wikipedia.org/wiki/Groundwater_recharge

<http://geology.com/dictionary/glossary-f.shtml>

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

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

<http://www.calwaterassn.com/conservation.htm>, July 26, 2010.

<http://www.maden.hacettepe.edu.tr/dmmrt/index.html>

http://www.webref.org/geology/p/pleistocene_epoch.htm

<http://www.webref.org/geology/q/quatarnary.htm>

Lake County Watershed Protection District, "Lake County Groundwater Management Plan", March 31, 2006.

Lassen County,
http://www.co.lassen.ca.us/govt/dept/com_dev/planning_division/documents/LandUseMappage2-21.pdf, December 11, 2010.

Lassen County, http://www.lassenplan.com/wp-content/filez/2009/06/keychoices_Johnstonville_draft6.25.09rev.pdf, July 24, 2010.

Lassen LAFCO, Staff Report for Formation of County Service Area 2, LAFCO File 3-03-91, April 25, 1991.

NSF International, "Feasibility of an Economically Sustainable Point-of-Use/Point-of-Entry Decentralized Public Water System Final Report", March 2005, p18.
nsf.org/business/.../pdf/GrimesFinalReport_Dec05.pdf

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.

PREPARERS

John Benoit, Lassen LAFCO Executive Officer
PO Box 2694, Granite Bay CA 95746
Phone: 916-797-6003 E-Mail: johnbenoit@surewest.net

Christy Leighton, Planning Consultant
555 East Willow Street, Willows CA 95988
Phone: 530-934-4597 E-Mail: christyleighton@sbcglobal.net

