# FINAL MUNICIPAL SERVICE REVIEW UPDATE AND SPHERE OF INFLUENCE PLAN FOR THE LAKE OROVILLE AREA PUBLIC UTILITY DISTRICT

**ADOPTED JULY 10, 2013** 







PREPARED BY THE BUTTE LOCAL AGENCY FORMATION COMMISSION

### **FINAL**

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#### 1.0 INTRODUCTION

This report represents the Commission's review and update of the Lake Oroville Area Public Utility District Sphere of Influence Plan (SOI). The report has been prepared to review the District's existing SOI relative to current legislative directives, local policies, and member preferences to form the basis for either confirming the current SOI or considering possible amendments to the SOI. This report supersedes the last SOI adopted in 1985. The report draws on information collected and analyzed in the Commission's Wastewater Service Providers-Oroville Region Municipal Service Review (2009) and the Environmental Impact Report prepared for the District's Sphere of Influence Update, both of which include the evaluation of the availability, adequacy, and capacity of services provided by the District.

#### 1.1 LAFCO

Established in 1963, Local Agency Formation Commissions (LAFCO) are responsible for administering California Government Code Section 56000 *et. seq.*, which is known as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH). CKH charges LAFCOs with encouraging the orderly formation and development of all local governmental agencies in their respective counties in a manner that preserves agricultural and open-space lands, promotes the efficient extension of municipal services, and prevents urban sprawl. Principle duties include regulating boundary changes through annexations or detachments, approving or disapproving city incorporations; and forming, consolidating, or dissolving special districts. There is a LAFCO located in each of the 58 counties in California.

#### 1.2 BUTTE LAFCO POLICIES AND CRITERIA FOR ANNEXATION

Under the CKH Act, LAFCOs are required to "develop and determine the sphere of influence of each local governmental agency within the county and enact policies designed to promote logical and orderly development of areas within the sphere" (Section 56425, CKH). A Sphere of Influence (SOI) is generally considered a 20-year, long-range planning tool, and is defined by Government Code Section 56425 as "... a plan for the probable physical boundary and service area of a local agency or municipality ...." According to the CHK Act, LAFCOs are required to review and update SOIs as necessary, but no less than once every five years.

A Sphere of Influence is a long-range planning tool that analyzes the physical boundary of a local agency or jurisdiction, and the present and probable need for services within that area. As such, it does not give property inside the sphere boundary any more development rights than already exist as land use authority in these areas remains entirely at the discretion of the County of Butte and City of Oroville. Realistically, the agency SOI is solely reactive to the land use decisions already adopted by the agencies with land use authority. Ultimately, an SOI study assists LAFCO in making decisions about a jurisdiction's future boundary. The sphere indicates the logical area in which the District anticipates services will be utilized.

Pursuant to Butte LAFCO's Operations Manual Policies and Procedures (Revised May 6, 2010), the Sphere of Influence Plans for all government agencies within LAFCO's jurisdiction shall contain the following:

- 1. A map defining the probable 20-year boundary of its service area delineated by near-term (<10 years) and long-term (>10 years) increments and coordinated with the Municipal Service Review.
- 2. Maps and explanatory text delineating the present land uses in the area, including, without limitation, improved and unimproved parcels; actual commercial, industrial, and residential uses; agricultural and open space lands; and the proposed future land uses in the area.
- 3. The present and probable need for public facilities and services in the sphere area. The discussion should include consideration of the need for all types of major facilities, not just those provided by the agency.
- 4. The present capacity of public facilities and adequacy of public services which the agency provides or is authorized to provide.
- 5. Identification of any relevant social or economic communities of interest in the area.
- 6. Existing population and projected population at build-out of the near- and long-term spheres of the agency.
- 7. A Municipal Service Review.

#### 1.3 MUNICIPAL SERVICE REVIEWS

The Cortese-Knox-Hertzberg Act requires that a Municipal Service Review (MSR) be conducted prior to, or in conjunction with, the update of an SOI. An MSR is a comprehensive analysis of service provision by each of the special districts, cities, and the unincorporated county service areas within the legislative authority of the LAFCO. It essentially evaluates the capability of a jurisdiction to serve its existing residents and future development in its SOI. The legislative authority for conducting MSRs is provided in Section 56430 of the CKH Act, which states "... in order to prepare and to update Spheres of Influence in accordance with Section 56425, LAFCOs are required to conduct a MSR of the municipal services provided in the County or other appropriate designated area . . . ."

To assist in conducting a MSR, the State Office of Planning and Research developed guidelines that advise on information gathering, analysis, and organization of the study. In order to update a SOI, the associated MSR must have written determinations that address the following legislative factors:

- 1. Growth and population projections for the affected area.
- 2. Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies.
- 3. Financial ability of agencies to provide services.
- 4. Status of, and opportunities for, shared facilities.
- 5. Accountability for community service needs, including governmental structure and operational efficiencies.
- 6. Any other matter related to effective or efficient service delivery, as required by commission policy.

These determinations, which range from infrastructure needs or deficiencies to government structure options, must be adopted by the Commission before, or concurrently with, the sphere review of the subject agency.

Government Code (GC) Section 56430, as recently amended by Senate Bill 244, now requires LAFCOs to include in the MSR a description of the "location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence." (Gov. Code, § 56430(a)(2).) The MSR must also contain specific written determinations on infrastructure needs or deficiencies related to public facilities and services, including but not limited to sewer, water, and fire protection services in any disadvantaged unincorporated communities within or contiguous to the sphere of influence of a city or special district that provides those services.

The *Domestic Water and Wastewater Service Providers Municipal Service Review*, adopted by Butte LAFCo on June 1, 2006, contained an evaluation of the Lake Oroville Area Public Utility District. A subsequent service review of LOAPUD was completed in conjunction with the preparation of the *Wastewater Service Providers-Oroville Region Municipal Service Review*, adopted by Butte LAFCo on November 5, 2009. That MSR examined the services provided by the District and the information in the MSR provides baseline information for the SOI study. However, some of the information in the 2009 MSR is dated. Thus, additional information from the District has been collected and various other land planning documents have been reviewed, including land use zoning maps and the Butte County General Plan 2030, in order to provide the most current and accurate information available. As a part of the proposed LOAPUD SOI Plan/Update, the Lake Oroville Area Public Utility District section of the *Wastewater Service Providers-Oroville Region Municipal Service Review* has been updated and attached to this document (Attachment 2), and will be re-adopted as a part of this SOI Plan/Update process.

#### 1.4 SPHERE OF INFLUENCE PLAN UPDATE PROCESS

Butte LAFCO is now in the process of updating the SOI Plan for the Lake Oroville Area Public Utility District (LOAPUD or District). The original, and only, SOI study prepared for LOAPUD was completed in 1985, which was then named the North Burbank Public Utility District<sup>1</sup>. The 1985 SOI Plan is included as Attachment 1 to this document. This document addresses the SOI update for the Lake Oroville Area Public Utility District. The existing LOAPUD SOI currently encompasses approximately 10,500 acres in Butte County. The District is proposing to add 1,826 parcels totaling approximately 9,700 acres to their Sphere of Influence.

There are numerous factors to consider in reviewing an SOI Plan, including current and anticipated land uses, facilities, and services, as well as any relevant communities of interest. Updates generally involve a comprehensive review of the entire SOI Plan, including boundary and SOI maps and the District's MSR. In reviewing an agency's sphere, the Commission is required to consider and prepare written statements addressing five factors enumerated under California Government Code Section 56425(e). These factors are identified below.

Final Sphere of Influence Plan Lake Oroville Area Public Utility District

<sup>&</sup>lt;sup>1</sup>Oroville – Thermalito Area Sphere of Influence Study – Butte County Local Agency Formation Commission. April 1985.

- The present and planned land uses in the area, including agricultural and open-space lands.
- The present and probable need for public facilities and services in the area.
- The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
- The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.
- For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, that occurs pursuant to subdivision (g) on or after July 1, 2012, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

In addition, when reviewing a sphere for an existing special district, the Commission must also do the following:

- Require the existing district to file a written statement with the Commission specifying the functions or classes of services it provides.
- Establish the nature, location, and extent of any functions or classes of services provided by the existing district.

#### 1.5 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Sphere of Influence Studies are subject to environmental review under the California Environmental Quality Act (CEQA). To comply with CEQA, a Draft Environmental Impact Report (DEIR) was prepared for the SOI update. The Draft EIR was submitted to the State Clearinghouse for distribution and review by State agencies, was submitted to effected local agencies for review, and was publically noticed for a review period of 45 days. A Final EIR, which included the Draft EIR by reference, was adopted by Butte LAFCo on July 10, 2013. Butte LAFCo determined that the SOI Update/Plan would create significant impacts that could not be mitigated and adopted a Statement of Overriding Findings for those impacts.

The MSR Update is categorically exempt from the preparation of environmental documentation under a classification related to information gathering (Class 6 - Regulation section 15306), which states: "Class 6 consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded." This MSR collects data for the purpose of evaluating municipal services provided by the agency. There is no land use change or environmental impact created by such a study.

# DATA SHEET LAKE OROVILLE AREA PUBLIC UTILITY DISTRICT

Contact: Dwayne Long, General Manager

Address: 1960 Elgin Street, Oroville, CA 95966 Phone: (530) 533-2000

#### **GOVERNING BOARD**

Five members elected at large who serve four-year terms.

Board Meeting Location: LOAPUD Office, 1960 Elgin Street, Oroville, CA 95966

Normal Board Meeting Date: Second Tuesday of each month at 2:00 p.m

#### FORMATION INFORMATION

Date of Formation: 1938

#### **MAPPING**

GIS Date: July 10, 2013

#### **PURPOSE**

- 1. Enabling Legislation: California Public Utilities Code, Division 7, *et seq*.
- 2. Empowered Services: Wastewater collection and conveyance.
- 3. Provided Services: Wastewater collection and conveyance.

#### AREA SERVED

- 1. Parcels: 5,180
- 2. Supervisorial District: 1
- 3. Acreage: 8,300 acres
- 4. Estimated Population: 12,000
- 5. Location Description: Oroville Area6. Sphere of Influence: 10,500 acres

#### **FINANCIAL INFORMATION**

Annual (2013) Expenditures: \$1,567,000 Annual (2013) Revenues: \$1,671,000

Source of Revenues: Service fees, connection fees, interest, property tax

#### **NOTES**

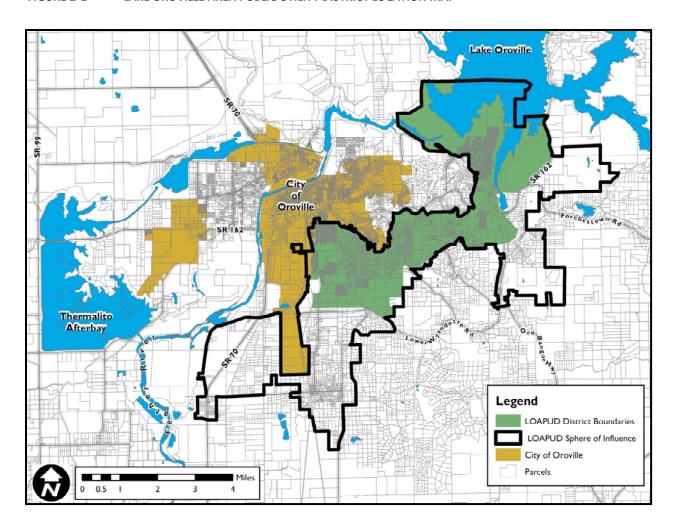
Number of Connections: 4,436

Number of Equivalent Dwelling Units: 6,014

Average Dry Weather Flow: 0.856 million gallons per day

Number of Employees: 8 full-time

FIGURE 2-1 LAKE OROVILLE AREA PUBLIC UTILITY DISTRICT LOCATION MAP\*



<sup>\*</sup>SOI boundary as updated by Butte LAFCo on July 10, 2013

The present Lake Oroville Area Public Utility District Sphere of Influence (inclusive of its jurisdictional territory), is approximately 10,500 acres in size, includes 5,645 mostly unincorporated parcels generally located east and southeast of the City of Oroville (see Figure 3-1). The District's jurisdictional boundaries include approximately 5,175 parcels, 140 of which (totaling approximately 133 acres) are within the jurisdictional boundaries of the City of Oroville. LOAPUD's SOI is not coterminous with its District boundaries, with approximately 1,995 acres, consisting of 629 parcels, inside the District's SOI but not within the District jurisdictional boundaries. The only SOI Study prepared for the District was the 1985 SOI Study for Butte County special districts (Attachment 1).

The District is proposing to add 1,826 parcels totaling approximately 9,700 acres to their SOI. The SOI addition area consists of five separate geographical areas as shown in Figures 3-5, 3-8, 3-9, and 3-10.

As described in Section 1.4, LAFCO is required to consider and prepare written statements addressing the five factors enumerated under California Government Code Section 56425(e), including present and probable land uses in the area, present and probable need for public facilities and services, the present capacity of facilities and adequacy of services, the existence of social or economic communities of interest, and the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence. An analysis of each of these factors is provided in the following sections.

#### 3.1 PRESENT AND PLANNED LAND USE

In order to achieve an accurate overview of the growth and development potential within the District, a number of factors need to be considered. The following factors, when considered together, reflect the existing development within the District, as well as provide a picture of existing development potential:

- Land use designations, including existing and any proposed changes
- Special land use limitations, including Williamson Act and designated open spaces
- Improved and unimproved parcels

State law requires every city and county in California to adopt and maintain a comprehensive and long-term General Plan that is to serve as a "blueprint" for land use and development. The District's lands fall mostly within the unincorporated area of Butte County, with a small portion (approximately 133 acres) located within the City of Oroville. Therefore, land use development within the District is guided by the Butte County General Plan<sup>2</sup> and the City of Oroville General Plan<sup>3</sup>, which establish the growth patterns and guides the future development of the area. More specifically, the zoning codes of these jurisdictions provide regulatory oversight and establish future land uses. The District's SOI is merely reactive to these land use plans rather than guiding them in any way.

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<sup>&</sup>lt;sup>2</sup> Butte County General Plan 2030, adopted October, 26, 2010

<sup>&</sup>lt;sup>3</sup> City of Oroville 2030 General Plan, adopted June 2, 2009

#### Land Use Designations

TABLE 3-1

The majority of the parcels within LOAPUD's existing SOI are designated by the Butte County General Plan as Medium Density Residential, which allows for a density of 3 to 6 dwelling units per acre. Table 3-1 and Figure 3-1 show the General Plan land use designations found within the unincorporated areas of the District. There are no parcels within LOAPUD's existing SOI that are designated or zoned as agricultural by either Butte County or the City of Oroville. The areas of the District within the City of Oroville are designated primarily for urban-type uses, including medium density and mixed use residential, commercial, and industrial uses. Table 3-2 and Figure 3-2 show the General Plan land use designations found within the City of Oroville portion of the District.

General Plan Land Use Designation	<u>Acres</u>	Number of <u>Parcels</u>	% of Acreage
Public	4,483	56	45.4
Medium Density Residential (up to 6 du/ac)	3,400	4,805	34.4
Rural Residential (5 to 10 ac/du)	892	164	9
Mixed Use (4 to 20 du/ac and 0.5 maximum FAR)	358	260	3.6
Retail and Office (0.4 maximum FAR)	211	79	2.1
Very Low Density Residential (up to 1 du/ac)	176	207	1.8
Low Density Residential (up to 3 du/ac)	114	41	1.2

BUTTE COUNTY GENERAL PLAN LAND USE DESIGNATIONS WITHIN EXISTING LOAPUD SOI

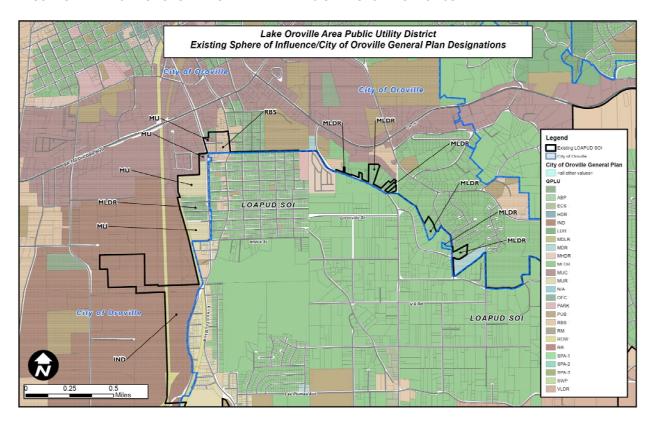
Medium High Density Residential (up to 14 du/ac) 103 16 1 Resource Conservation (40-ac minimum) 70 9 0.7 Recreation Commercial (0.4 maximum FAR) 49 6 0.5 High Density Residential (14 to 20 du/ac) 28 2 0.3 Total 9,884\* 5,645 100

\*Excludes road right-of-ways Source: Butte County GIS

TABLE 3-2	CITY OF OROVILLE GENERAL PLAN LAND USE DESIGNATIONS WITHIN EXISTING LOAPUD SOI						
Gener	al Plan Land Use Designation	<u>Acres</u>	Number of Parcels	% of Acreage			
Industrial		80.5	8	60.8			
Mixed Use R	esidential	22	3	16.6			
Medium Low	Density Residential (3-6 du/acres)	21	90	15.8			
Retail and Bu	usiness Services	6	34	4.5			
Mixed Use C	ommercial	3	8	2.3			
Total		132.5	143	100			
Source: Butte County and City of Oroville GIS							

FIGURE 3-1 **BUTTE COUNTY GENERAL PLAN DESIGNATIONS IN LOAPUD SOI** Mixed Use & Planned Unit Development Resource Conservation Existing LOAPUD SOI City of Oroville Commercial Agricultural Public Other Lake Oroville Area Public Utility District Existing Sphere of Influence/General Plan Designations City of Oroville

FIGURE 3-2 CITY OF OROVILLE GENERAL PLAN DESIGNATIONS IN LOAPUD SOI



#### Uses and Improved and Unimproved Parcels

Table 3-3 lists the existing land uses within LOAPUD's existing SOI. As identified by the Butte County Assessor's Office, the primary land use within the current LOAPUD SOI is residential, with over 2,742 parcels developed with residential uses. The majority of the residential parcels are located in the Kelly Ridge, east Oroville, and south Oroville areas. There are over 800 undeveloped parcels within the District's SOI that are identified by the County Assessor's Office as residential undeveloped. The District's SOI contains 93 parcels that are developed with a commercial use and 7 parcels developed with industrial uses. Thirty parcels are identified as being commercial undeveloped.

Two Tribal trust lands – the Tyme Maidu Tribe of the Berry Creek Rancheria and the Concow-Maidu of Mooretown Rancheria - are located within LOAPUD's SOI and jurisdictional boundaries and are provided wastewater services by LOAPUD. Both of these trust lands are developed with casino/hotel uses, along with a large number of residential uses.

Approximately 4,664 acres (44%) of LOAPUD's current SOI consists of public recreation areas. The majority of this area is the Lake Oroville State Recreation Area, which consists primarily of Lake Oroville as well as the Lake Oroville Visitor Center, Bidwell Canyon Campground, and the Loafer Creek Campground.

TABLE 3-3 CURRENT LAND USES WITHIN EXISTING LOAPUD SOI							
<u>Land Use</u>	Acres	<u>Parcels</u>	% of Parcels				
Residential	4,756	2,742	73.4				
Public Recreation Areas	4,664	19	0.5				
Residential Undeveloped	1,953	824	22				
Agricultural	259	9	0.3				
Commercial	221	93	2.5				
Commercial Undevelope	d 123	30	0.8				
Schools	99	12	0.3				
Industrial	35	7	0.2				
Total	12,100	3,737	100				
Source: Butte County Assess	sor's Office data						

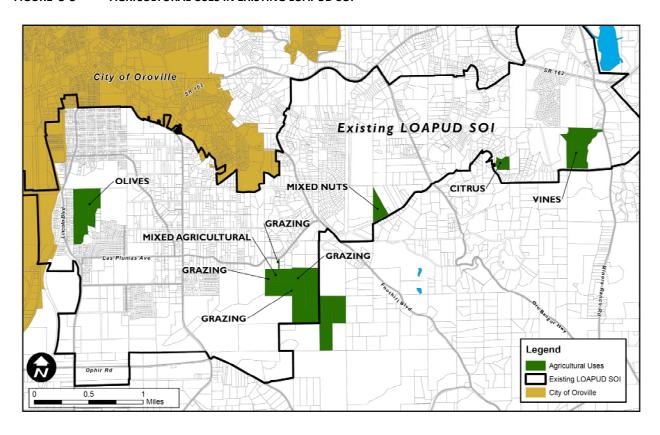
#### Agricultural Uses

Agricultural uses within LOAPUD's existing SOI consist of nine parcels totaling approximately 259 acres in size (Table 3-4 and Figure 3-3). The agricultural uses include seasonal livestock grazing, olives, vines, citrus, and nuts. It must be noted that none of the parcels with existing agricultural uses are designated by the Butte County General Plan as Agricultural. A large portion of LOAPUD's SOI was at one time developed with agricultural uses, primarily olive and citrus orchards, but most of those uses were discontinued many years ago and many of the agricultural parcels were subsequently divided into smaller lots for large-lot residential uses. Scattered, unmaintained remnants of the original orchards are found throughout LOAPUD's SOI. There is land within LOAPUD's existing SOI and proposed SOI that is designated Prime Farmland, Farmland of Statewide Importance, and unique farmland.

TABLE 3-4	AGRICULTURAL	USES IN EXISTING LOAPUD SO	1			
<u>APN</u>	<u>Acres</u>	Agricultural Use	General Plan	Zoning		
035-130-046	62	Olives	Medium Density Residential	MDR		
079-170-005	0.6	Grazing	Very Low Density Residential	VLDR		
079-270-028	79.9*	Grazing	Rural Residential	RR-5		
079-270-049	89.0**	Grazing	Rural Residential	RR-5		
079-270-050	4.6	Grazing	Rural Residential	RR-5		
079-270-051	4.6	Mixed Agricultural	Rural Residential	RR-5		
079-290-001	14.9	Mixed Nuts	Rural Residential	RR-5		
079-330-010	8.6	Citrus	Rural Residential	RR-5		
072-090-008	53.6	Vines	Rural Residential	RR-5		
*Only 50.4 acres of this parcel is within LOAPUD's SOI						

\*\* Only 59.9 acres of this parcel is within LOAPUD's SOI Source: Butte County GIS/Butte County Assessor's Office

FIGURE 3-3 AGRICULTURAL USES IN EXISTING LOAPUD SOI



#### Williamson Act

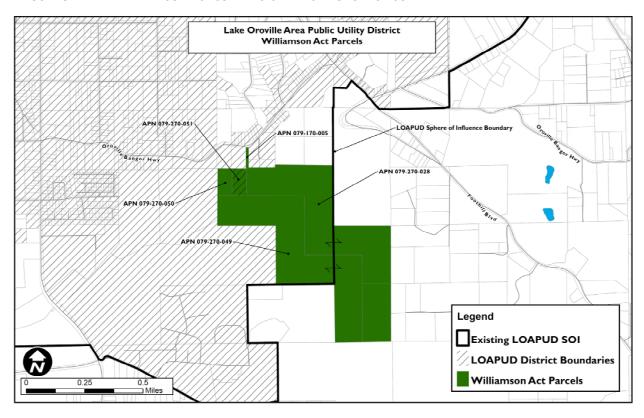
The Williamson Act, or the California Land Conservation Act of 1965, enables local governments, in this case Butte County, to enter into contracts with private landowners to preserve specific parcels of land for agricultural or related open space use. As shown in Figure 3-4 and listed in Table 3-5, there are five parcels within LOAPUD's existing SOI that are currently under Williamson Act contracts. Only one of these parcels – APN 079-270-051 (4.5 acres in size) is within the jurisdictional boundaries of the District. Two of the parcels – APNs 079-270-028 and 079-270-049 – cross the District's SOI boundary. These five parcels have been subject to a Williamson Act contract since 1972 and notice of non-renewals have not been submitted for these parcels. Four of the five Williamson Act parcels are designated by the Butte County General Plan as Rural Residential and are zoned RR-5 (Rural Residential, 5-acre minimum parcel size). The fifth Williamson Act parcel, APN 079-170-005, is designated as Very Low Density Residential and is zoned Very Low Density Residential. The Williamson Act parcels appear to be utilized for seasonal livestock grazing and no orchards, vines, row crops, or irrigated pastures are found on the parcels.

TABLE 3-5	WILLIAMSON A	WILLIAMSON ACT CONTRACTS IN EXISTING LOAPUD				
Assessor's Parcel Number	Size (acres)	Contract <u>Status</u>	General Plan <u>Designation</u>	Zoning		
079-170-005	0.6	Ongoing	Very Low Density Residential	VLDR		
079-270-028	79.9*	Ongoing	Rural Residential	RR-5		
079-270-049	89.0**	Ongoing	Rural Residential	RR-5		
079-270-050	4.6	Ongoing	Rural Residential	RR-5		
079-270-051	4.6	Ongoing	Rural Residential	RR-5		

<sup>\*</sup>Only 50.4 acres of this parcel is within LOAPUD's SOI

Source: Butte County GIS data

FIGURE 3-4 WILLIAMSON ACT CONTRACTS IN EXISTING LOAPUD SOI



Butte LAFCO Policy 3.1.11 provides guidance relative to the inclusion of lands that are subject to Williamson Act contract in SOIs. The Policy states that LAFCO shall not approve changes to SOIs to include Williamson Act lands if the annexing agency has the ability to provide infrastructure sufficient to promote development of those properties. The service provided by LOAPUD - sanitary sewer service - does have the potential to serve new growth, but the decision of whether to allow such parcels to develop remains within the County's jurisdiction. As

<sup>\*\*</sup> Only 59.9 acres of this parcel is within LOAPUD's SOI

discussed below, none of the parcels proposed to be added to the District's Sphere of Influence are subject to a Williamson Act contract.<sup>4</sup>

#### **SOI** Addition Areas

The District submitted a map with their SOI update request that showed their existing SOI, a proposed 5-10 year SOI, a proposed 15-20 year SOI, and a proposed area of interest beyond 20 years. The LOAPUD-proposed 5-10 year SOI would have added approximately 23,900 acres to District's current SOI. LAFCo staff reviewed the map submitted by LOAPUD and determined that the District's proposed 5-10 year SOI included territory that was designated for parcels greater than one acre or more in size by the Butte County General Plan or were designated for agricultural uses. Parcels one acre or more in size would not normally require sanitary sewer services due to the large amount of area available for an on-site septic system. LAFCo staff altered the LOAPUD-proposed 5-10 year SOI based upon the land use designations contained in the Butte County General Plan, mostly including only parcels that were designated for parcel sizes of one acre or less. The resultant proposed SOI boundary map was reviewed by LOAPUD staff, who agreed with the changes.

The area now proposed to be added to LOAPUD's SOI - 1,826 parcels totaling approximately 9,700 acres - represents almost a doubling of the District's current sphere yet remains reflective of the recent County General Plan update. The SOI addition areas are located in five separate geographical areas as shown in Figure 3-5 and, more detailed, in Figures 3-8, 3-9, and 3-10. The SOI addition areas are generally to the west, south, and east of the current LOAPUD SOI and include the proposed Rio D' Oro Specific Plan area along SR 70 south of Oroville, the Power House Hill Road/Lone Tree Road area, the unincorporated community of Palermo, the Miners Ranch Road area, and the Stringtown Mountain Specific Plan area. Each LOAPUD SOI addition area is evaluated below.

Most of the parcels proposed to be added to LOAPUD's SOI are designated by the Butte County General Plan for residential uses on parcels generally one acre or less in size. Some areas designated as Rural Residential by the General Plan, which allows for residential uses on parcels five acres or more in size, are recommended for inclusion in LOAPUD's SOI to provide for logical, orderly, and efficient jurisdictional boundaries. Many of the Rural Residential-designated parcels are found in the Power House Hill Road/Lone Tree Road and east Palermo areas (SOI Addition Area 5), which have poor soils and/or high ground water levels that make use of on-site septic systems problematic and where septic system perform poorly and septic system failures are not uncommon. Some of the Rural Residential-designated parcels within SOI Addition Areas 2 and 3 are one acre or less in size and could benefit from sanitary sewer service.

Seventeen parcels, totaling approximately 1,623 acres, which are designated by the Butte County General Plan as Agricultural, are proposed to be added to LOAPUD's SOI. Additionally, forty-five of the parcels within the SOI addition areas are assessed by the Butte County Assessor's Office for various types of agricultural uses, which includes seasonal livestock grazing, orchards (primarily olives), and wine grapes. The existing agricultural uses within the SOI addition areas are shown on Figures 3-6 and 3-7 and are listed on Table 3-8

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<sup>&</sup>lt;sup>4</sup> Butte County GIS "CLCA" layer

Lands designated for agricultural or open space uses are typically not included in spheres for purposes of discouraging urban development and preserving open space and prime agricultural lands. In this case, however, the proposed sphere maintains areas with agricultural soils and agricultural land uses because it has been found that these areas have social and economic ties to the District, as well as the community at-large. Many of the Agricultural-designated parcels are within areas that are within an approved specific plan area or are within a future specific plan area identified in the County General Plan. Additionally, many of the parcels with agricultural uses are designated by the Butte County General Plan for residential uses. Removing these areas would cause a disconnect with respect to the land uses and land use densities identified in the Butte County General Plan and with respect to LOAPUD's planned sewer services to areas within the proposed sphere.

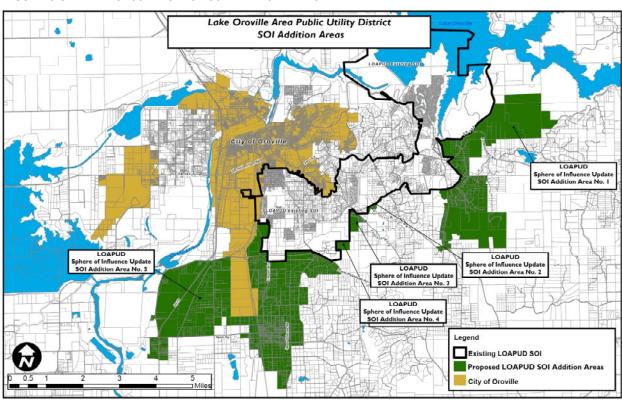


FIGURE 3-5 PROPOSED LOAPUD SOI ADDITION AREAS

TABLE 3-6 SUMMARY OF BUTTE COUNTY GENERAL PLAN LAND USE DESIGNATIONS WITHIN PROPOSED LOAPUD SOI ADDITION AREAS

Butte County General Plan Land Use Designation	<u>Acreage</u>	Number of Parcels	% of Acreage
Very Low Density Residential (up to 1 du/ac)	3,094	719	34.2
Rural Residential (5 to 10 ac/du)	1,783	320	19.7
Agricultural (20-ac to 160-ac minimum)	1,623	17	17.9
Foothill Residential (1 to 40 ac/du)	512	42	5.7
Industrial (0.5 maximum FAR)	425	84	4.7
Low Density Residential (up to 3 du/ac)	414	433	4.6
Mixed Use (4 to 20 du/ac and 0.5 maximum FAR)	411	102	4.6
Resource Conservation (40-ac minimum)	272	13	3
Medium Density Residential (up to 6 du/ac)	183	17	2
Public	172	17	1.9
Retail and Office (0.4 maximum FAR)	85	53	0.9
Recreation Commercial (0.4 maximum FAR)	49	4	0.5
Medium High Density Residential (up to 14 du/ac)	26	5	0.3
Total	9,049*	1,826*	100

<sup>\*</sup>Excludes road, railroad, and utility right-of-ways Source: Butte County GIS

TABLE 3-7 SUMMARY OF EXISTING LAND USES WITHIN LOAPUD SOI ADDITION AREAS						
Existing Land Use	Number of Parcels	% of Parcels				
Residential	1,314	72				
Residential Undeveloped	342	18.7				
Agricultural	54	3				
Commercial	52	2.8				
Industrial Undeveloped	18	1				
Commercial Undeveloped	15	0.8				
Industrial	15	0.8				
Public	13	0.7				
Undetermined	3	0.2				

Source: Butte County GIS/Butte County Assessor's Data

FIGURE 3-6 EXISTING AGRICULTURAL USES IN LOAPUD SOI ADDITION AREA NO. 1

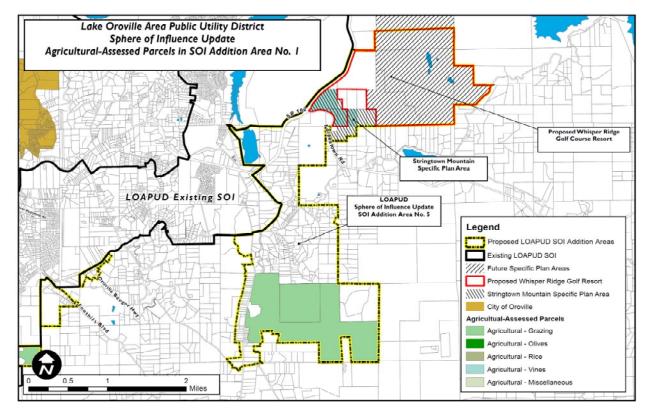


FIGURE 3-7 EXISTING AGRICULTURAL USES IN LOAPUD SOI ADDITION AREAS NO. 2, 3, 4, & 5

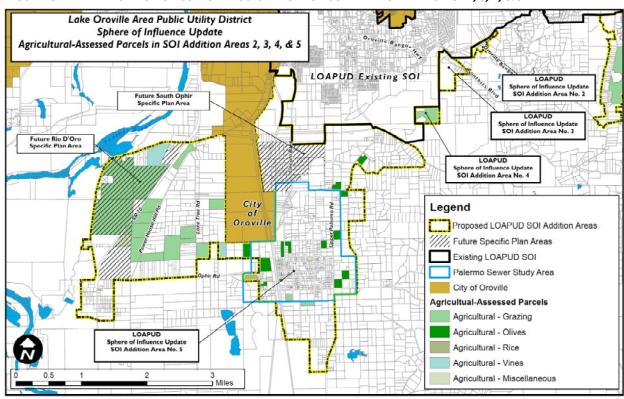


TABLE 3-8	AGRICULTURAL USES	IN LOAPUE	SOI ADDITION A	AREAS		
SOI Addition	APN	Acres	Agricultural	General	Zoning	Specific Plan Area
<u>Area No.</u>		15.3	<u>Use</u>	<u>Plan</u> MHDR	MHDR	
1	072-180-016*	14.3	Vines	REC	REC-1	SMSP
1	072-100-010	14.2	VIIICS	FR	FR-40	314131
		5.3		FR	FR-20	
1	072-180-030*	3.8	Vines	MDR	MDR	SMSP
-	072 100 030	0.4	VIIICS	REC	REC	314131
		15.3		MDR	MDR	
1	072-180-029*	2.8	Vines	FR	FR-40	SMSP
1	072-180-029		Vines			SMSP
1	072-180-028	17.4	Vines	MDR	MDR	SMSP
		484		VLDR	VLDR	
2	072-230-010*	87	Grazing	MU	MU-1	N/A
2	072-230-020	160	Grazing	VLDR	VLDR	N/A
4	079-230-003	45.1	Grazing	MDR	MDR	N/A
5	079-250-004	8.6	Olives	LDR	LDR	N/A
5	078-070-011	8	Olives	VLDR	VLDR	N/A
5	027-070-002	3	Olives	VLDR	VLDR	N/A
5	027-070-003	4.4	Olives	VLDR	VLDR	N/A
5	027-060-006	10.6	Olives	VLDR	VLDR	N/A
5	026-080-018	6.8	Olives	VLDR	VLDR	N/A
5	026-090-008	7.4	Olives	VLDR	VLDR	N/A
5	026-090-024	7.2	Olives	VLDR	VLDR	N/A
5	026-131-001	3.4	AZ	LDR	LDR	N/A
5	026-260-015	26.2	Grazing	RR	RR-5	N/A
5	027-082-002	9.3	Olives	RR	RR-5	N/A
5	027-082-016	10.1	Olives	RR	RR-5	N/A
5	026-230-022	8.9	Grazing	VLDR	VLDR	N/A
5	026-230-004	7.1	Grazing	VLDR	VLDR	N/A
5	026-171-004	0.8	Olives	LDR	LDR	N/A
5	026-241-014	3.3	Olives	VLDR	VLDR	N/A
5	026-280-027	3.8	AZ	VLDR	VLDR	N/A
5	026-100-010	5.1	Olives	VLDR	VLDR	N/A
5	026-100-009	16.6	Olives	VLDR	VLDR	N/A
5	026-250-030	17	AR	VLDR	VLDR	N/A
5	026-100-029	9	Olives	RR	RR-5	N/A
5	026-100-030	9	Olives	RR	RR-5	N/A
5	026-290-016	20	Vines	RR	RR-5	N/A
5	026-010-072	32.2	Grazing	RR	RR-5	N/A
5	025-340-026	27.7	Grazing	RR	RR-5	N/A
5	025-340-033	68.8	Grazing	RR	RR-5	N/A
5	025-340-038	29.3	Grazing	RR	RR-5	N/A
5	025-240-068	41.9	Grazing	AG	AG-40	N/A
5	025-240-067	38.8	Grazing	AG	AG-40	N/A
5	025-240-066	35	Grazing	AG	AG-40	N/A
5 5	025-240-065 025-240-069	35 24	Grazing	AG RC	AG-40 RC	N/A Rio D'Oro SP
5	025-240-009		AZ			VIO D OLO 25
5	025-240-054*	10.4 189	Grazing	RC AG	RC AG-80	Rio D'Oro SP
5	025-350-035	172	Grazing	AG	AG-80	Rio D'Oro SP

5	025-360-001	120	Grazing	AG	AG-80	Rio D'Oro SP
5	025-380-013	54.6	Vines	RR	RR-5	N/A
5	025-380-058	23.8	Grazing	I	HI	N/A
*Parcel is split by	y General Plan Land Use	e Designation	ons and/or by Zo	ning Districts		

#### LOAPUD SOI Addition Area No. 1

As shown in Table 3-9 and Figure 3-8, the LOAPUD SOI Addition Area No. 1 is approximately 3,488 acres in size (including road and public utility right-of-ways) and consists of 359 parcels. As shown in Table 3-10, the predominant land use within this area is residential, with 259 parcels assessed for residential uses and 82 parcels assessed as residential undeveloped. Thirteen parcels, totaling approximately 821 acres, are assessed for agricultural uses, with vines being the primary agricultural use (Figure 3-6). None of the parcels assessed as agricultural are designated by the Butte County General Plan as Agricultural.

TABLE 3-9	BUTTE COUNTY GENERAL PLAN LAND USE DESIGNATIONS WITHIN SOI ADDITION AREA NO. 1	

General Plan Land Use Designation	Acres	Number of Parcels	% of Acreage
Very Low Density Residential (up to 1 du/ac)	1266	145	37.6
Agricultural (20-ac to 160-ac minimum)	892	4	26.4
Foothill Residential (1 to 40 ac/du)	512	42	15.2
Mixed Use (4 to 20 du/ac and 0.5 maximum FAR)	315	81	9.3
Rural Residential (5 to 10 ac/du)	164	68	4.9
Medium Density Residential (up to 6 du/ac)	103	11	3
Public	78	1	2.3
Medium High Density Residential (up to 14 du/ac)	15	1	0.5
Recreation Commercial (0.4 maximum FAR)	15	3	0.5
Retail and Office (0.4 maximum FAR)	10	3	0.3
Total	3,370*	359	100

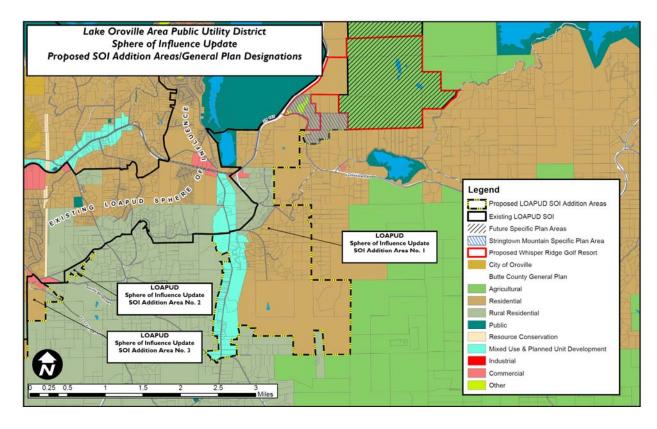
<sup>\*</sup>Excludes road and public utility right-of-ways

Source: Butte County GIS

TABIF 3-10	FXISTING LAND LISES WITHIN SOLADDITION AREA NO. 1

Existing Land Use	Number of Parcels	% of Parcels	
Residential	259	72.1	
Residential Undeveloped	82	22.9	
Agricultural	13	3.6	
Public	3	0.8	
Commercial	2	0.6	
Source: Butte County Assessor's Office Data			

FIGURE 3-8 LOAPUD SOI ADDITION AREA NO. 1



Approximately 1,266 acres of SOI Addition Area No. 1, consisting of 145 parcels, are designated and zoned as Very Low Density Residential (VLDR). The VLDR designation and zone allow for up to one dwelling unit per acre. The VLDR zone does allow for a second dwelling unit, which effectively doubles the allowed density.

Approximately 315 acres of SOI Addition Area No. 1, consisting of 81 parcels, are designated as Mixed Use, which allows a residential density of 4 to 20 dwelling units per acre and commercial uses with 0.5 maximum floor-to-area ratio. The MU-1 zone allows a minimum parcel size of 10,000 sq. ft., with a maximum residential density of six units per acre and 0.3 maximum floor-to-area ratio for commercial uses. Mixed-use uses within this area will require public sanitary sewer services.

The existing Stringtown Mountain Specific Plan (SMSP) area is located in SOI Addition Area No. 1. Approved by the Butte County Board of Supervisors in 1994, the 171.6-acre SMSP was designed to utilize the scenic beauty and recreational opportunities of the Lake Oroville area, to create a high quality living environment offering new housing and recreational facilities to local residents, a new vacation destination for visitors to the area, and convenient commercial services to meet the needs of both populations. Major components of the SMSP include:

Detached single family 112 Attached single family 9.3

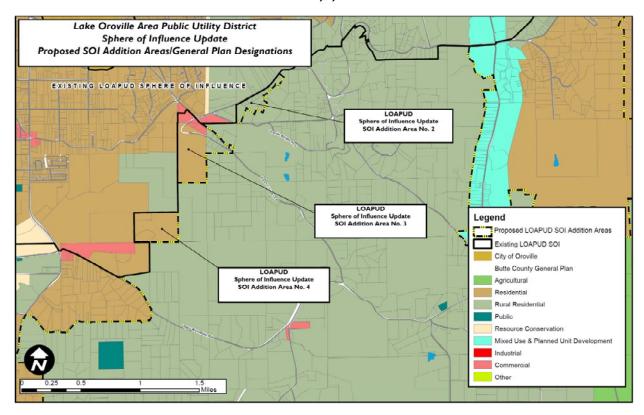
Townhouse/Condos	4.4
Resort Complex	12.0
Wellness Center	1.2
Commercial Center	3.1
Overlook Park	3.2
Fire Station	1.0
Open Space	<u>25.4</u>
Total	171.6

The SMSP has not been developed; however, Butte County has recently approved (April 2013) discretionary permits for a large golf course resort use ("Whisper Ridge Golf Resort") within a portion of the SMSP area. The golf course resort uses within the SMSP area includes an 82-room hotel complex and a wellness center totaling 13.2 acres, along with on-site roads and utility infrastructure. The golf course resort will require sanitary sewer services from LOAPUD and domestic water services from the South Feather Water and Power Agency.

The golf course resort use will also be located on portions of five parcels adjacent to the SMSP area. These five parcels, which total approximately 1,011 acres in size, are a part of Stringtown Mountain Specific Plan Update Area and are proposed to be added to LOAPUD's SOI. The Stringtown Mountain Specific Plan Update Area (identified as a "Specific Plan to be Developed Overlay" in the Butte County General Plan) will determine the mix of uses that will occur in a 1,239-acre area located adjacent to and east of the existing adopted Stringtown Mountain Specific Plan area. The future Specific Plan will limit development to not more than 2,700 dwelling units of mixed residential types. The proposed golf course resort uses within the Stringtown Mountain Specific Plan Update Area encompass approximately 498 acres and include an 18-hole professional golf course, a 9-hole kids short course, golf driving range, nine guest cottages, access roads, club house, and a maintenance building.

Four of the five parcels within SOI Addition Area No. 1 that are proposed to be developed with the golf course resort use are designated as Agricultural by the Butte County General Plan and are zoned AG-80 (Agricultural, 80-acre minimum parcel size). As a part of the golf course resort project, the General Plan land use designation of Agricultural and the AG-80 zoning will be retained on these four parcels, but the 498-acre area that the golf course improvements will be located will be given an overlay zoning of Recreational Commercial (REC), which allows the proposed golf course use.

FIGURE 3-9 LOAPUD SOI ADDITION AREAS NO. 2, 3, & 4



#### LOAPUD SOI Addition Area No. 2

As shown in Table 3-11 and Figure 3-9, LOAPUD SOI Addition Area No. 2 is approximately 28 acres in size (including road and public utility right-of-ways) and consists of 19 parcels. Table 3-12 shows that the predominant existing land use within this area is residential, with 17 parcels assessed for residential uses and two parcels are assessed as residential undeveloped. All of the parcels are designated by the Butte County General Plan as Rural Residential and are zoned RR-5 (Rural Residential, up to 1 dwelling unit per 5 acres. None of the parcels within SOI Addition Area No. 2 are currently assessed for agricultural uses (Figure 3-7). Thirteen of the parcels in this area are one acre or less in size and, based upon the small parcel sizes, may require sanitary sewer service from LOAPUD to facilitate new development or to replace failing septic systems.

<b>TABLE 3-11</b>	TABLE 3-11 BUTTE COUNTY GENERAL PLAN LAND USE DESIGNATIONS WITHIN SOI ADDITION AREA NO. 2			
<u>Gen</u>	eral Plan Land Use Designation	<u>Acres</u>	Number of Parcels	
Rural Residential (5 to 10 ac/du) 28*		19		
*Excludes roa	d and public utility right-of-ways			
Source: Butte	County GIS			

TABLE 3-12 EXISTING LAND USES WITHIN SOI ADDITION AREA NO. 2Existing Land UseNumber of Parcels% of ParcelsResidential1789.5Residential Undeveloped210.5Source: Butte County Assessor's Office Data

#### LOAPUD SOI Addition Area No. 3

As listed in Table 3-13 and shown on Figure 3-9, the LOAPUD SOI Addition Area No. 3 is approximately 107 acres in size (including road and public utility right-of-ways) and consists of 19 parcels. As shown in Table 3-14, the predominant existing land use within this area is residential, with 11 parcels assessed for residential uses and six parcels assessed as residential undeveloped. Two of the parcels are assessed as commercial. Fourteen of the parcels are designated by the Butte County General Plan as Rural Residential and are zoned RR-5. Four of the parcels in this area are designated by the Butte County General Plan as Retail and Office and are zoned commercial. One parcel, which is 71 acres in size, is designated by the General Plan as Very Low Density Residential and is zoned Very Low Density Residential, which allow for a density of up to 1 dwelling unit per acre. The Very Low Density Residential zone allows second dwelling units, which effectively doubles the permitted density. None of the parcels within SOI Addition Area No. 3 are currently assessed for agricultural uses (Figure 3-7).

TABLE 3-13 BUTTE COUNTY GENERAL PLAN LAND USE DESIGNATIONS WITHIN SOI ADDITION AREA NO. 3				
General Plan Land Use Designation Acres Number of Parcels % of Acreage				
Very Low Density Residential (up to 1 du/ac)	71	1	71	
Rural Residential (5 to 10 ac/du)	16	14	16	
Retail and Office (0.4 maximum FAR)	13	4	13	
Total	100*	19	100	
*Excludes road and public utility right-of-ways				
Source: Butte County GIS				

TABLE 3-14 EXISTING LAND USES WITHIN SOI ADDITION AREA NO. 3				
Existing Land Use	Number of Parcels	% of Parcels		
Residential	11	57.9		
Residential Undeveloped	6	31.6		
Commercial	2	10.5		
Source: Butte County Assessor's Office Data				

#### LOAPUD SOI Addition Area No. 4

As shown in Table 3-15 and Figure 3-9, LOAPUD SOI Addition Area No. 4 is approximately 60 acres in size (including road and public utility right-of-ways) and consists of three parcels. The predominant existing land use within this area is agricultural (grazing) with one 45-acre parcel assessed for agricultural use (livestock grazing). The other two parcels in this area are assessed for residential uses. All of the parcels in this area are designated by the Butte County General

Plan as Medium Density Residential and are zoned Medium Density Residential, which allow for a density of up to six dwelling units per acre. Development of this area to the density specified by the General Plan will require public sanitary sewer service.

TABLE 3-15 BUTTE COUNTY GENERAL PLAN LAND USE DESIGNATIONS WITHIN SOI ADDITION AREA NO. 4

General Plan Land Use Designation	Acres	Number of Parcels
Medium Density Residential (up to 6 du/ac)	60*	3

<sup>\*</sup>Excludes road and public utility right-of-ways

Source: Butte County GIS

<b>TABLE 3-16</b>	EXISTING LAND USES WITHIN SOI ADDITION AREA NO. 4
IADLE 3-10	EXISTING LAND USES WITHIN SULADDITION AREA NO. 4

Existing Land Use	Number of Parcels	% of Parcels
Residential	2	66.7
Agricultural	1	33.3

Source: Butte County Assessor's Office Data

#### LOAPUD SOI Addition Area No. 5

As listed in Table 3-17 and shown on Figure 3-10, LOAPUD SOI Addition Area No. 5 is approximately 6,015 acres in size (including road, railroad, and public utility right-of-ways) and consists of 1,426 parcels. The predominant existing land use within this area is residential, with 1,025 parcels totaling approximately 2,557 acres assessed for residential uses. There are 252 parcels totaling approximately 1,118 acres within this area that are assessed as residential undeveloped. LOAPUD SOI Addition Area No. 5 includes 38 parcels, totaling approximately 1,110 acres, that are assessed for various types of agricultural uses, including grazing, orchards, and vines. Thirteen parcels totaling 731 acres are designated by the Butte County General Plan as Agricultural.

TABLE 3-17 BUTTE COUNTY GENERAL PLAN LAND USE DESIGNATIONS WITHIN SOI ADDITION AREA NO. 5

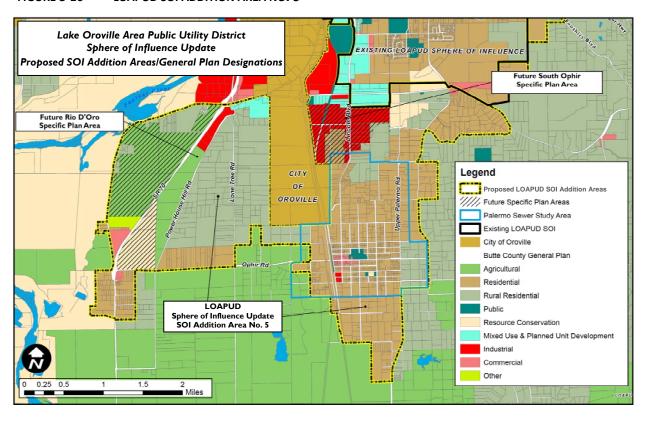
General Plan Land Use Designation	<u>Acres</u>	Number of Parcels	% of Acreage
Very Low Density Residential (up to 1 du/acre)	1,757	573	32
Rural Residential (5 to 10 acres per dwelling unit)	1,575	219	28.7
Agricultural (20-ac to 160-ac minimum)	731	13	13.3
Industrial (0.5 maximum FAR)	425	84	7.7
Low Density Residential (up to 3 du per acre)	414	433	7.5
Resource Conservation (40-acre minimum)	272	13	5
Mixed Use (4 to 20 du/ac and 0.5 maximum FAR)	96	21	1.8
Public	94	16	1.7
Retail and Office (0.4 maximum FAR)	62	46	1.1
Recreation Commercial (0.4 maximum FAR)	34	1	0.6
Medium Density Residential (up to 6 du/ac)	20	3	0.4
Medium High Density Residential (up to 14 du/ac)	11	4	0.2
Total	5,491*	1,426	100

<sup>\*</sup>Excludes road, railroad, and public utility right-of-ways

Source: Butte County GIS

TABLE 3-18 EXISTING LAND USES WITHIN SOI ADDITION AREA NO. 5				
Existing Land Use	Number of Parcels	% of Parcels		
Residential	1,025	71.9		
Residential Undeveloped	252	17.7		
Commercial	50	3.5		
Agricultural	38	2.7		
Industrial Undeveloped	18	1.3		
Commercial Undeveloped	15	1		
Industrial	15	1		
Public	10	0.7		
Undetermined	3	0.2		
Source: Butte County Assessor's	Office Data			

FIGURE 3-10 LOAPUD SOI ADDITION AREA NO. 5



The unincorporated community of Palermo is located within LOAPUD SOI Addition Area No. 5. Palermo, with a population of approximately 5,400 people, consists of about 775 parcels encompassing 1,475 acres. Most of the parcels in the Palermo area are zoned for, and developed with, residential uses. A few commercial uses are found in this area, primarily along Lincoln Boulevard and Palermo Road. Most of the parcels in Palermo area are smaller in size. No sanitary sewer system exists in Palermo and developed parcels utilize individual, on-site septic

systems for wastewater disposal and on-site wells for domestic water. Palermo is located in a flood-prone area with poorly drained soils. These conditions result in septic systems that do not function as designed during the winter months and have a high rate of failure.<sup>5</sup> Septic systems subject to periodic failure endanger public health and can adversely affect water quality and the safety of drinking water. Placing the Palermo area within LOAPUD's SOI will allow for the opportunity of LOAPUD extending sanitary sewer services to replace failing septic systems or to facilitate new development in conformance with the Butte County General Plan and Zoning Ordinance.

The Rio D'Oro Specific Plan area, which encompasses a 700-acre area located along State Route 70 south of Oroville, is within LOAPUD SOI Addition Area No. 5. This specific plan is anticipated to limit development to not more than 2,700 dwelling units of mixed residential types. Commercial areas for this Specific Plan are limited to 30 acres of retail and office designation to be located along the northern portion of the Specific Plan area. The uses would include neighborhood retail service. Smaller areas dedicated to public and commercial uses will be located in the southeast portion of the specific plan area at State Route 70 and Palermo Road. Smaller areas dedicated to public and commercial uses will be located in the southeast portion of the Specific Plan Area at State Route 70 and Palermo Road. It should be noted that an application to create the Rio D'Oro Specific Plan was received by Butte County in 2008. According to the County, the Rio D'Oro Specific Plan is an active project and the County anticipates that a Draft EIR for the specific plan project will be completed by the end of 2013.

The South Ophir "Specific Plan to be Developed" area is located with the LOAPUD SOI Update Area No. 5. The City of Oroville and the County of Butte anticipate the development of the South Ophir Specific Plan in their General Plans. The Specific Plan area is anticipated to extend into both incorporated and unincorporated municipalities. The Specific Plan area will include approximately 330 acres of unincorporated land located south of Ophir Road and along Lincoln Boulevard in the LOAPUD SOI Update Area No. 5. A primary goal of the Specific Plan is to provide a mix of uses that includes a business/technology park complex for clean industry. The Specific Plan will determine the mix of uses that will occur but it is anticipated that within the entire Specific Plan area, including both incorporated and unincorporated municipalities, 150 to 300 acres of land are assumed to be dedicated to the development of an industrial park. Up to 1,500 dwelling units of mixed residential types may also be included, as well as neighborhood retail services.

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<sup>&</sup>lt;sup>5</sup> Palermo Wastewater Study Preliminary Engineering Report. April 23, 2010.

#### SOI DETERMINATION 3-1: PRESENT AND PLANNED LAND USE

The Lake Oroville Area Public Utility District serves an important role by providing wastewater collection and conveyance services to the mostly unincorporated south Oroville area. Uses within LOAPUDs existing and proposed SOI consists primarily of residential uses, along with public recreation uses, commercial uses, and industrial uses. LOAPUD's existing and proposed SOI is primarily designated by Butte County for relatively high levels of development, which may require connection to public sanitary sewer services to fully implement the County General Plan. Considering the existing and planned land uses in the area, LOAPUD is the logical sewer service provider to accommodate the planned growth.

#### 3.2 Present and Probable Need for Public Services and Facilities

Most of the District's existing SOI is designated by the Butte County General Plan for relativity high densities of development, and many parcels within the District's SOI are within the District's jurisdictional boundaries and receive sanitary sewer service from the District. However, many of the parcels within the District's SOI that currently utilize on-site septic systems for wastewater disposal have physical constraints, such as steep slopes, shallow or poor soils, and high ground water levels, which prevent development of the parcels to the density allowed under the County General Plan. With the extension of District sanitary sewer services, the parcels within the District's existing SOI could be developed, or redeveloped, to the density allowed by the General Plan. It is accepted that the County may under certain circumstances consider the use of alternative on-site wastewater treatment systems, but this is not considered a widely available option at this time in contrast to the traditional sewer collection system provided by LOAPUD.

The District proposes to amend their Sphere of Influence by adding approximately 1,826 parcels, totaling approximately 9,700 acres, to their sphere, which would allow future annexation of these parcels to the District for the provision of sanitary sewer service. As shown in Section 3.1 above, the Butte County General Plan envisions a significant amount of new development within the SOI addition areas. The new development will require sanitary sewer services in order to develop at the density permitted under the County General Plan.

The SOI addition area includes the unincorporated community of Palermo, which consists of approximately 760 parcels, most of which are zoned for residential uses. Most of the parcels in Palermo are small and are developed with residential uses. No sanitary sewer system exists in Palermo and developed parcels utilize individual, on-site septic systems for wastewater disposal and on-site wells for domestic water. Palermo is located in a flood-prone area with poorly drained soils. These conditions result in septic systems that do not function as designed during the winter month and have a high rate of failure. Septic systems subject to periodic failure endanger public health and can adversely affect water quality and the safety of drinking water. Placing the Palermo area within LOAPUD's SOI will allow for future annexation of the area to

LOAPUD and the extension of LOAPUD sanitary sewer services to replace failing septic systems.

As noted in Section 3.1, the LOAPUD SOI addition area also includes four areas that Butte County and/or the City of Oroville have identified for existing or future specific plan areas. The four areas include: the proposed Rio d'Oro Specific Plan area located on the west side of SR 70 south of Oroville; the future South Ophir Specific Plan area located on both sides of Lincoln Boulevard south of Ophir Road; the County-adopted Stringtown Mountain Specific Plan area located in the foothills east of Oroville, at SR 162 and Forbestown Road; and the proposed Stringtown Mountain Specific Plan expansion area located adjacent to the existing Stringtown Mountain Specific Plan area. Development of these existing and future specific plan areas in conformance with the Butte County General Plan and/or the City of Oroville General Plan will require connection to a sanitary sewer system. Placing these areas in LOAPUD's SOI will allow the future annexation to LOAPUD and allow these areas to connect to a sanitary sewer system.

The State of California is considering adopting new regulations or standards for the permitting or operation of specified categories of onsite wastewater treatment systems (OWTS/septic systems). The new regulations or standards may make it more difficult and expensive to install a new system or replace an existing system. Parcels in this situation that are within LOAPUD's SOI may be able to annex to the District to obtain sewer service, thus avoiding the difficulty and cost of installing a septic system.

#### SOI DETERMINATION 3-2: PRESENT AND PROBABLE NEED FOR PUBLIC SERVICES AND FACILITIES

LOAPUD provides sanitary sewer collection and conveyance services to parcels within its existing jurisdictional boundaries. LOAPUD will provide sewer services to parcels within its existing SOI upon annexation of those parcels to LOAPUD.

As identified in the County of Butte and the City of Oroville's General Plans, future residential, commercial, and industrial development within LOAPUD's SOI, including the Rio D'Oro Specific Plan area, the South Ophir Specific Plan area, and the Stringtown Mountain Specific Plan area, will require connection to a sanitary sewer system to develop at the densities allowed by the General Plans. Absent other large scale alternatives, LOAPUD is the most logical sewer service provider to serve the unincorporated south and east Oroville area in a traditional collection and treatment wastewater system.

The unincorporated community of Palermo has numerous poorly performing or failing septic systems due to poor soils and high groundwater levels in the area. Parcels within the Palermo area will need the opportunity to utilize another method of wastewater treatment and the connection to a public sanitary sewer system would be appropriate to ensure the health and safety of area residents and to prevent surface and groundwater contamination. At present, LOAPUD represents a viable and logical option to serve the Palermo area.

#### 3.3 Present and Future Capacity of Facilities

#### **LOAPUD** Facilities

LOAPUD provides sanitary sewer collection services mostly for the unincorporated areas east and south of the City of Oroville. LOAPUD provides service to approximately 12,000 people, which includes single and multiple family residences, a variety of commercial uses, and public facilities including schools and recreational facilities associated with nearby Lake Oroville. The LOAPUD SOI encompasses approximately 8,457 acres (13.2 square miles) ranging in elevation between approximately 200 feet and 1,000 feet above sea level.

LOAPUD provides service connections to approximately 4,436 customers. Customers include single and multiple family residences, a variety of commercial uses, and public facilities including schools and recreational facilities associated with nearby Lake Oroville. For purposes of record keeping and billing, LOAPUD converts non-residential customers to equivalent dwelling units (EDU). This adjusts larger wastewater customers to the equivalent number of residential customers, which generate the same quantity of wastewater. LOAPUD currently serves 6,014 EDUs according to LOAPUD records.

Using the total EDU count within LOAPUD of 6,014, the average daily flow per EDU is 141 gpd/EDU (846,705 gpd/6,014 EDU). Over the last ten years, LOAPUD has conducted an extensive infiltration/inflow (I/I) mitigation program that has reduced I/I flows into their system. Even during the dry weather periods, the district was seeing dry weather I/I. So, although the total EDU count for LOAPUD has increased by approximately 1,024 in the last ten years, the wastewater flows have remained steady. This can be attributed to LOAPUD's effective I/I program and also to conservation measures of LOAPUD customers.

LOAPUD's wastewater collection system is known to experience high rates of I/I during the wet weather months. This is not unusual considering the age and materials of much of the system. I/I is what accounts for the difference between dry weather flows and wet weather flows. Flows measured at the Sewerage Commission-Oroville Region (SC-OR) meter indicate peak wetweather flows are typically three to four times higher than dry-weather flows and can be as high as seven to eight times. These increases are directly attributable to I/I entering the system during wet weather conditions.

Since 2000, the District has reduced I/I flows through its I/I reduction program as evidenced by the history of flow patterns to the SCOR plant over the last 10 years. The flows from the LOAPUD service area to the SCOR plant have basically remained the same while the EDU count for the District has risen by approximately 1,000 EDU. Although the District has seen significant improvement in terms of decreased average flows, I/I is still a problem in many locations and the District has undertaken an aggressive I/I reduction program aimed at reducing peak wet weather flow at the collection system outfall and surcharging conditions in the collection system. Using television inspections, smoke testing, and in the field experience, the District has identified a number of I/I problem sections in the collection system including pipelines and manholes. District crews have repaired and rehabilitated some of the worst problem areas. The District also utilizes portable flow meters that help in locating and isolating

areas of high I/I. This will make the I/I reduction program more effective by concentrating efforts on areas that have been identified as having high I/I rates.

In 2009, the District adopted a lateral pipeline testing and replacement program. This program states that whenever a re-model building permit is issued or there is a change of ownership for a parcel that is being serviced by the District, the owner must test the sewer lateral and repair or replace the lateral if it does not meet the District standards. With this lateral replacement program, it is anticipated that more lateral service lines will be replaced in the future which will have significant impact on I/I reduction. However, the District has temporarily suspended implementation of the program pending additional outreach to landowners and realtors.

LOAPUD's current Sewer System Master Plan, which was adopted in 2010, is an evaluation of the District's wastewater collection system. The system is evaluated in terms of its ability to adequately convey current flows and, by estimating the future growth of the District's service area, in terms of its ability to accommodate additional future flows. The plan also identifies new collection system facilities that will be needed to allow the system to expand into new service territory.

#### Sewerage Commission-Oroville Region Facilities

Wastewater treatment for the project area is provided by the Sewerage Commission-Oroville Region (SC-OR). SC-OR was formed from a Joint Powers Agreement made between the City of Oroville, LOAPUD, and the Thermalito Water and Sewer District (TWSD), which are all located in the Oroville area. In accordance with this agreement, SC-OR provides wastewater treatment and disposal services, and each member entity pays a quarterly sewer usage charge to cover the costs of providing related services.

SC-OR provides wastewater treatment and disposal services for the incorporated and unincorporated areas in the Oroville area. SC-OR's wastewater treatment plant (WWTP) has a permitted capacity and design capacity of 6.5 million gallons per day (mgd) average dry weather flow<sup>6</sup>, and current wastewater flows of approximately 3.2 mgd, leaving a surplus capacity of approximately 3.3 mgd under average dry weather flow. Although the design average dry weather flow of the facility is 6.5 mgd, the treatment plant can temporarily handle influent flows up to 10.6 mgd. Influent flows from 2005 to 2009 typically did not exceed 8 mgd, however on December 30<sup>th</sup> and 31<sup>st</sup> 2005, daily flows were recorded as high as 10.88 mgd and 11.14 mgd respectively. In addition to treating wastewater from the member entities, SC-OR also accepts and treats approximately 1 million gallons per year of domestic septage from within their service area. Approved septage haulers licensed by Butte County and SC-OR pump residential septic tanks and dispose of the waste at the SC-OR WWTP for treatment and disposal. SC-OR voluntarily provides this service to the community and is under no obligation to continue this service.

SC-OR's office and wastewater treatment facility are located at 2880 S. 5th Avenue in the southern portion of the City of Oroville. In addition to the WWTP, SC-OR is responsible for 1.8

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<sup>&</sup>lt;sup>6</sup> California Regional Water Quality Control Board Central Valley Region Order No. R5-2010-0073, NPDES permit CA0079235.

miles of interceptor sewer trunk lines (East, West and Main) that includes a 0.5 mile force main, two pump stations (Ruddy Creek and Feather River), and the effluent outfall pipe and diffuser on the Feather River. SC-OR's responsibility for the collection system ends at the termination of its interceptor trunk line junctions with member agency facilities.

SC-OR's WWTP is an advanced secondary treatment facility that is capable of processing wastewater under current flow and loading conditions to maintain compliance with the parameters of its Waste Discharge Requirements. The treatment process at SC-OR's WWTP consists of screening for removal of large solids, grit removal, primary clarification, activated sludge treatment with secondary clarification, filtration, chlorination, and dechlorination. Sludge is aerobically treated, dried on site, and then disposed at the Neal Road Landfill. Effluent is conveyed and discharged to the Feather River.

The Butte LAFCo Wastewater MSR for SC-OR indicates that at the historical growth rate of approximately 227 EDUs per year, the SC-OR WWTP has approximately 12 years of dry weather capacity before expansion would be required. Based upon population growth estimates supplied by the member entities (LOAPUD, TWSD, and the City of Oroville), SC-OR has projected that their wastewater treatment plant will need to have treatment capacity for approximately 32,179 EDUs by 2030.

#### Projected Growth - LOAPUD

The 2010 LOAPUD Sewer Master Plan determined the potential wastewater flows in the year 2020, 2030 and under buildout conditions for both the existing service area and existing SOI. These projections are shown in Table 3-19 below. SC-OR only uses about 3.2 mgd of its permitted ADWF of 6.5 mgd under current conditions. Under the 2020 scenario for the existing SOI, the ADWF would increase from the current (2010) 1.276 mgd to 1.5 mgd and 1.713 mgd for the 2030 scenario. A 2020 increase of 0.224 mgd and a 2030 increase of 0.437 mgd and therefore not exceed the permitted ADWF of the SC-OR WWTP for either of these projections. However, under buildout conditions, the total ADWF within the service area boundary and the existing SOI is projected to be 3.385 mgd. This is an increase of 2.109 mgd. This increase, in and of itself, would not exceed the permitted capacity of the WWTP as it currently has an excess of approximately 3.3 mgd. However, because LOAPUD is not the only wastewater district serviced by SC-OR, it must be assumed that the other participating districts would increase in ADWF output as well. As such, under buildout conditions, the existing LOAPUD service area and SOI would add to the potential for SC-OR WWTP to exceed its permitted capacity requiring new additional capacity. It must be noted that the projected year for complete buildout of the existing SOI is not until 2337, far into the future.

TABLE 3-19	LOAPUD SERVICE AREA AND EXISTING SOI WASTEWATER FLOW PROJECTIONS										
2020				2030		BUILDOUT*					
ADDITIONAL ADWF (MGD)	Тотаl ADWF (мgd)	TOTAL AWWF (MGD)	ADDITIONAL ADWF (MGD)	Тотаl ADWF (мgd)	TOTAL AWWF (MGD)	ADDITIONAL ADWF (MGD)	Тотаl ADWF (мgd)	Total AWWF (мgd)			
Service Area											
0.121	1.397	1.664	0.216	1.492	1.777	1.120	2.396	2.854			
Existing SOI – Total Buildout year: 2337											
	0.203			0.221			0.989				
				Total							
1.500			1.713			3.385					

Source: LOAPUD Sewer Master Plan, Tables 2-3 and 2-5.

Note: \*Total buildout is estimated to occur in the year 2256 for the Service Area Boundary and the year 2337 for the existing SOI.

Based on the existing land uses in the SOI update area and the LOAPUD wastewater generation factors, a hypothetical maximum density scenario was developed to identify the potential wastewater flow from the SOI update area. This hypothetical scenario suggests that development in the SOI update could increase wastewater flow by 3,410,092.5 gpd or 3.41 mgd. Please note, however, this hypothetical scenario is speculative and is only included to illustrate the potential impact that development within the SOI update area could have on wastewater flows. Table 3-20 shows the calculations that were used to determine this flow.

TABLE 3-20 ESTIMATED MAXIMUM NEW WASTEWATER FLOW FOR SOI UPDATE									
GENERAL PLAN LAND USE	MAXIMUM DENSITY	ACRES	TOTAL UNITS*	WASTEWATER GENERATION FACTOR GPD/EDU	ESTIMATED  WASTEWATER FLOW  GPD				
Very Low Density Residential	1du/ac	3,150	3,150	210	661,500.0				
Low Density Residential	3 du / ac	415	1245	210	261,450.0				
Rural Residential	10 du/ac	1,935	387	210	81,270.0				
Foothill Residential	1du / 40 ac	1,312	32.8	210	6,888.0				
Mixed Use	20 du / ac	414	8280	210	1,738,800.0				
Industrial	-	422	-	600	253,200.0				
Retail and Office	-	87	-	600	52,200.0				
Public	-	178	-	-	-				
Agricultural	1 du /20 ac	1,589	79.45	210	16,684.5				
Medium Density Residential	6 du / ac	182	1092	210	229,320.0				
Resource Conservation	-	272	-	-					
Medium High Density Residential	14 du / ac	27	378	210	79,380.0				
Recreation Commercial	-	49	-	600	29,400.0				
Total			14,644		3,410,092.5				

Note: \* Maximum densities were used to establish a worst-case scenario. These densities do not take into account any environmental or developmental constraints that would decrease the actual units per acre.

To provide service to the updated SOI, LOAPUD will need to install new wastewater conveyance infrastructure, such as sewer lines and lift stations, and possibly upsize existing infrastructure, such as the District's State Line Interceptor, which may require approximately 45,525 feet to be replaced. The LOAPUD Sewer System Master Plan notes that new lift stations would be required to provide service to the Stringtown Mountain Specific Plan area, the Palermo area, and the Rio D'Oro Specific Plan area. LOAPUD's Sewer System Master Plan identifies the new infrastructure and upsizing needed to provide service to the updated SOI.

The costs of the future infrastructure improvements needed to provide service to the updated SOI will be borne by new development. Developers will be required to install the necessary wastewater conveyance infrastructure for their developments. If extension or modification of the District's sewer facilities is required to provide service, the developer is required to enter into a development agreement that outlines the terms and conditions of the required extension and/or modification to the sewer system. One-time connection fees and capacity charges are collected by LOAPUD for each new sewer connection.

#### <u>Projected Growth – SC-OR</u>

The SC-OR WWTP has adequate capacity to handle dry weather flows from the member entities including an expansion of the LOAPUD SOI. However, because the SOI update project would in fact increase the area for which wastewater would be integrated into existing SC-OR WWTP and the fact that AWWF has exceeded permitted capacity in the past and no expansion of facilities has occurred, it must be assumed that an increase in SOI size would increase the potential to exceed permitted wastewater flow at the SC-OR WWTP.

Project implementation by itself, an expansion of the LOAPUD SOI, would not result in the potential to exceed wastewater treatment requirements or capacity, or result in a determination by SC-OR that the WWTP does not have adequate capacity to serve existing commitments. However, as an indirect result of this expansion, existing and future development has the ability to connect to the existing wastewater treatment system resulting in additional demand. This in combination with future projects within the other two member agency jurisdictions (TWSD and City of Oroville) may result in a deficit of capacity warranting improvements to increase treatment capacity. The only mitigation for this impact would be for SC-OR to seek an expansion of its permitted wastewater treatment capacity which would most likely require an expansion of existing SC-OR facilities.

To ensure that there is adequate capacity to provide wastewater treatment services for the three SC-OR member agencies in the coming years, SC-OR will need to install new wastewater treatment infrastructure at the wastewater treatment plant and improvements to the SC-OR main interceptor sewer line. These capital improvements will be funded through the collection of the SC-OR regional facility charge, which is currently \$6,638 per EDU. In 2009, SC-OR adopted a policy that requires all proposed developments of twenty or more residential units, or commercial/industrial developments with equivalent wastewater flows, to prepare a site specific "Capacity Impact Study" to assess the impact of the proposed development on SC-OR's capacity. The study would also determine whether any necessary expansion or other modification or improvement of capacity in SC-OR's Regional Facilities are required as a result of the development's impacts. The developer would be required to enter into an agreement with

SC-OR to construct or finance any capacity improvements needed to SC-OR facilities as a result of the development.

#### SOI DETERMINATION 3-3: PRESENT AND FUTURE CAPACITY OF FACILITIES

A detailed review of the adequacy and capacity of LOAPUD's sewer services was performed in the 2009 Wastewater Service Providers-Oroville Region Municipal Service Review. The municipal service review indicates the District will have the capacity to provide sanitary sewer service to the District's updated SOI. As identified in the District's Sewer System Master Plan, the District will need to install new sewer infrastructure, such as sewer pipes and pump stations, in order to provide service to the updated SOI. Infrastructure improvements needed as a result of new development will be funded by the development.

The SC-OR wastewater treatment facility currently does not have the capacity to provide service for a full build-out scenario of LOAPUD's updated SOI, however, SC-OR has identified the infrastructure improvements needed to provide adequate wastewater treatment services for the three SC-OR member entities in the coming years. These infrastructure improvements needed as a result of new development will be identified as development is proposed in a Capacity Study and be funded by the new development.

#### 3.4 THE EXISTENCE OF ANY SOCIAL AND ECONOMIC COMMUNITIES OF INTEREST

The majority of the existing LOAPUD SOI is located in the unincorporated, rural residential area east, south, and southwest of the City of Oroville. A small portion of the District is located within the City of Oroville. Unincorporated communities/neighborhoods within the existing LOAPUD SOI include South Oroville, Kelly Ridge, the Mooretown Rancheria, and the Feather Falls Rancheria.

The District proposes to add 1,826 parcels, totaling approximately 9,700 acres, to the District's existing SOI. All of the areas proposed to be added to the District's SOI are located within the unincorporated area of Butte County and include the proposed Rio D' Oro Specific Plan area along SR 70 south of Oroville, the Power House Hill Road/Lone Tree Road area, the unincorporated community of Palermo, the Miners Ranch Road area, and the Stringtown Mountain Specific Plan area.

#### SOI DETERMINATION 3-4: SOCIAL AND ECONOMIC COMMUNITIES OF INTEREST

The social and economic communities within the District include a small portion of the City of Oroville, and the unincorporated communities/neighborhoods of South Oroville, the Mooretown Rancheria, the Feather Falls Rancheria, and Kelly Ridge.

The areas proposed to be added to the District's SOI include the proposed Rio D' Oro Specific Plan area along SR 70 south of Oroville, the Power House Hill Road/Lone Tree Road area, the unincorporated community of Palermo, the Miners Ranch Road area, portions of the Stringtown Mountain Specific Plan area, and the proposed Whisper Ridge Golf Resort, located on a portion of the Stringtown Mountain Specific Plan area.

The proposed sphere has established substantive social and economic ties with the Oroville region given that is where the majority of residents of the updated SOI work and shop.

# 3.5 THE PRESENT AND PROBABLE NEED FOR THOSE PUBLIC FACILITIES AND SERVICES OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN THE EXISTING SPHERE OF INFLUENCE.

Large portions of LOAPUD's current SOI are identified as disadvantaged unincorporated communities. Additionally, large portions of the LOAPUD SOI Update areas, primarily SOI Addition Area No. 5, are also identified as disadvantaged unincorporated communities. Existing wastewater service connections are scattered throughout the disadvantaged community designated areas. In addition, the Palermo area, which relies on onsite wastewater systems, is an existing developed area that may require District wastewater services in the future. Therefore, there is a present and probable need for public sanitary sewer services within the areas designated as disadvantaged unincorporated communities.

# SOI DETERMINATION 3-5: THE PRESENT AND PROBABLE NEED FOR THOSE PUBLIC FACILITIES AND SERVICES OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN THE EXISTING SPHERE OF INFLUENCE

Large portions of LOAPUD's updated SOI are identified as disadvantaged unincorporated communities, including the unincorporated community of Palermo. The disadvantaged unincorporated communities within LOAPUD's SOI will require District sanitary sewer services in the future to replace poorly performing or failing septic systems, or to facilitate new development. Therefore, there is a present and probable need for public sanitary sewer services within the areas designated as disadvantaged unincorporated communities in LOAPUD's updated SOI.

#### 3.6 CONCLUSIONS AND RECOMMENDATIONS

The LAFCo staff has evaluated the proposed sphere of influence recommended by the Lake Oroville Area Public Utility District. As proposed, approximately 1,826 parcels totaling approximately 9,700 acres (including road, railroad, and utility right-of-way) would be added to the District's existing 10,000 acre Sphere of Influence, which represents almost a doubling of the District's current sphere. Most of the areas proposed to be added to the District's SOI have been designated by the Butte County General Plan for residential, commercial, and industrial uses on small parcels. These areas parcels will require public sanitary sewer services in order to develop at the densities specified by the Butte County General Plan.

Staff recommends that the Commission update the Sphere of Influence for the Lake Oroville Area Public Utility District by adding the areas shown on Figures 3-5, 3-8, 3-9, and 3-10 to the District's Sphere of Influence.

#### 4.0 FINAL SPHERE OF INFLUENCE PLAN ACTIONS

This Section includes the results of Butte LAFCO's final actions on this SOI Plan for the Lake Oroville Area Public Utility District.

**RESOLUTION NO. 11 2013/14** 

# RESOLUTION MAKING DETERMINATIONS FOR MUNICIPAL SERVICE REVIEW UPDATE AND APPROVING A SPHERE OF INFLUENCE PLAN/UPDATE FOR THE LAKE OROVILLE AREA PUBLIC UTILITY DISTRICT (LAFCO FILE NO. 11-02 MS) (State Clearinghouse # 2013012036)

WHEREAS, the Butte Local Agency Formation Commission ("Commission" or "LAFCo") is the sole entity authorized to approve a Sphere of Influence Update pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000: and

WHEREAS, pursuant to Government Code section 56425(a), in order to carry out its purposes and responsibilities 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, the Commission shall develop and determine the Sphere of Influence of each local governmental agency within the county;

WHEREAS, the Commission is required to review and update as necessary the Sphere of Influence for each local government agency within the county every five years;

**WHEREAS**, in determining the Sphere of Influence of each local governmental agency, the Commission shall consider and prepare a written statement of its determinations with respect to its approval of the Sphere of Influence;

**WHEREAS**, on June 29, 2010, the Lake Oroville Area Public Utility District ("LOAPUD" or "District") submitted an application to the Commission for an update to its Sphere of Influence ("SOI Update");

WHEREAS, a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the LOAPUD SOI Update was published in the *Oroville Mercury Register/Chico Enterprise Record* on January 14, 2013, which was also placed on the LAFCo webpage. A public scoping meeting was held on January 24, 2013, to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. No concerns were raised in response to the NOP during preparation of the Draft EIR;

WHEREAS, a Draft EIR (State Clearinghouse # 2013012036) was prepared and circulated for a 45-day public review and comment period starting May 9, 2013, and ending on June 24, 2013. A Notice of Availability for the Draft EIR was filed with the State Clearinghouse and with the Butte County Clerk's Office, and was published in the *Oroville Mercury Register/Chico Enterprise Record* on May 9, 2013. The Notice of Availability and the Draft EIR were placed on the LAFCo and LOAPUD web pages;

WHEREAS, the Municipal Service Review for LOAPUD (Section 5.0 of the Service Providers-Oroville Region Municipal Service Review, adopted by LAFCo on November 5, 2009) was updated to provide current and accurate data to support the LOAPUD SOI Update;

WHEREAS, the Commission held a noticed public meeting on June 6, 2013, to review, and receive public comments on, the Draft EIR, the Draft LOAPUD SOI Plan, and on the Draft MSR Update. No oral comments were presented and no written comments were received. The Commission continued the public hearing on these documents open until the Commission's July 10, 2013, meeting.

WHEREAS, a Final Environmental Impact Report ("Final EIR") that incorporated the Draft EIR by reference was prepared and distributed to the Commission, and available for public review, on July 3, 2013. No written comments were received in regards to the Draft EIR; therefore, the Final EIR does not contain any written comments or responses to comments;

**WHEREAS**, the Commission reviewed the Final EIR during its meeting on July 10, 2013, which was open to the public for comment on the Final EIR at that meeting;

**WHEREAS**, the Commission reviewed the Municipal Service Review Update, SOI Plan, Draft EIR, and the Final EIR during its meeting on July 10, 2013, and heard public comments on these documents;

**WHEREAS**, the Commission has, by means of Resolution No. No. 09 2013/14 approved the Findings of Fact and a Statement of Overriding Considerations;

**WHEREAS**, the Commission has, by means of Resolution No. 10 2013/14, concurrently certified that the Final EIR has been prepared in full compliance with the terms of the California Environmental Quality Act ("CEQA");

WHEREAS, the Commission has undertaken a comprehensive analysis of LOAPUD's SOI Update;

WHEREAS, the SOI Update evaluation and review process involved public participation and public hearings at which no written or oral comments were received;

WHEREAS, local jurisdictions, community groups, businesses, and other interested parties were provided the opportunity to provide testimony throughout the planning and evaluation process;

NOW, THEREFORE, THE BUTTE LOCAL AGENCY FORMATION COMMISSION does hereby find, determine, resolve and order as follows:

- Notice as required by law has been given.
- 2. The boundaries of the SOI Update area are represented in Exhibit "A" attached hereto and incorporated herein.
- The LOAPUD SOI Update will add approximately 9,700 acres, consisting
  of approximately 1,826 parcels to LOAPUD's current SOI boundary. Most
  of the area proposed to be added to the LOAPUD SOI are indentified for
  residential uses on parcels of one acre or less in size by the Butte County
  General Plan 2030.
- The Commission, through its Executive Officer, caused a Final EIR to be prepared, which was certified by the Commission as complying with CEQA, pursuant to Resolution No. 10 2013/14.

- The Commission concurrently adopts Resolution No. 09 2013/14, adopting Findings of Fact and a Statement of Overriding Considerations, consistent with the requirements of CEQA.
- 6. The Commission determines that the proposed LOAPUD SOI Update is consistent with the Commission's purpose and responsibility for planning, shaping and coordinating the logical and orderly development of local governmental agencies so as to advantageously provide for the present and future needs of the county and its communities. In making this determination, the Commission has considered:
  - a. The Executive Officer's report;
  - The LOAPUD MSR Update, which the Commission determines is consistent with Commission policies and is adequate;
  - The LOAPUD SOI Plan, which the Commission determines is consistent with Commission policies and is adequate;
  - d. The Draft EIR:
  - e. The Final EIR:
  - f. All oral and written public comments; and
  - g. Public agency comments, staff reports and other pertinent information in the Commission's Record of Proceedings, as defined in the Findings of Fact and Statement of Overriding Considerations adopted concurrently herewith.
- 7. The Commission has considered the policies set forth in Government Code section 56430. Pursuant to Government Code Section 56430, the Commission finds and determines that:

# PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

#### Determination 5-1: Sewer Lateral Program

The sewer lateral inspection program is a fundamental component of the District's overall efforts to increase system efficiency and reduce I&I levels. It is recognized that the inspection program may not yield significant results for many years considering the number of laterals and the criteria for conducting the inspections.

<u>Determination 5-2: Sanitary Sewer Collection and Conveyance System</u>
The District's sanitary sewer system, most of which has been constructed in the last 35 years, is generally in good condition. LOAPUD's collection system currently has no significant capacity issues. However, large development project may be required to upgrade the existing collection system downstream if additional capacity is required.

#### Determination 5-3: Sanitary Sewer Overflows

LOAPUD has had two minor sanitary sewer system overflows since mandatory reporting of SSOs began in 2007. This low number of SSOs is an indication that LOAPUD's sewer system is being adequately operated and maintained.

#### Determination 5-4: Sanitary Sewer Management Plan

LOAPUD has adopted all elements of its Sanitary Sewer Management Plan as required by the State Water Quality Control Board.

#### Determination 5-5: Sanitary Sewer System Capacities

Based on a system-wide average dry weather flow of 0.81 mgd, LOAPUD's sewer system has adequate capacity to handle existing and future wastewater flows. The District adds new lines and upgrades existing lines as needed.

<u>Determination 5-6: SC-OR East Interceptor Sewer Trunk Line Capacity</u>
The SC-OR East Interceptor trunk sewer line, which serves only LOAPUD's sanitary sewer system, has a current capacity of 15 mgd which is greater than LOAPUD's peak flow of 14 mgd projected for the year 2030.

Determination 5-7: SC-OR Main Interceptor Sewer Trunk Line Capacity Data provided by SC-OR shows that the Main Interceptor trunk sewer line may experience surcharge conditions during peak weather flows due to limitations on the influent pumping capacity at the WWTF. Due to this limited influent pumping capacity, the Main Interceptor has reached 92% of capacity during storm events. To address this concern, SC-OR is proposing to both increase the capacity of the Main Interceptor and increase the WWTF influent pumping capacity to 30 mgd, which will reduce the chance of surcharging and SSOs on the Main Interceptor. Additionally, SC-OR anticipates that I&I reduction programs recently implemented by the member entities is expected to reduce I&I flows into the WWTF.

#### Determination 5-8: Inflow and Infiltration Flows

During 2008, LOAPUD had an average dry weather flow of 0.81 mgd, but an average wet weather flow of 4.8 mgd, with a wet weather peaking factor of 9.0, all of which indicate that LOAPUD has excessive inflow and infiltration entering their sewage collection system.

#### <u>Determination 5-9: Sanitary Sewer System Inspection</u>

LOAPUD utilizes smoke testing, CCTV equipment, flow meters, and manhole inspections to help identify the locations of I&I which have resulted in numerous repairs to their collection system. LOAPUD should continue to use this approach to solving I&I in their collection system.

#### Determination 5-10: Sanitary Sewer System Inspection

LOAPUD currently cleans and inspects approximately 15 miles (21 percent) of their sewer system each year and should consider enhancing

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this program each year in a greater effort to reduce I&I and prevent sanitary sewer overflows. The clean and inspect program has been enhanced through the SC-OR pipe patching program.

Determination 5-11: Sewer Lateral Testing Program

LOAPUD recently adopted a comprehensive sewer lateral testing program that will help reduce I&I entering private sewer laterals and should consider assistance and outreach programs to landowners to encourage greater participation in this program.

#### FINANCIAL ABILITY OF AGENCY TO PROVIDE SERVICES

<u>Determination 5-12: Financial Ability of Agencies to Provide Services</u>
LOAPUD's primary source of revenue is service fees (85%) with additional revenue from connection charges, property taxes, and earned interest.

<u>Determination 5-13: Financial Ability of Agencies to Provide Services</u>
Current sewer service and connection charges, combined with income from other sources, are adequate to cover the costs of providing services; however, the District should continue to review and revise their sewer service and connection charges to recover operational and maintenance costs, build a capital reserve and reduce its reliance on revenue from property taxes. The District implemented a rate increase on July 1, 2011, which includes a \$1.00/month/EDU annual increase to sewer service rates for 5 years beginning July 1, 2012.

As the implementation of the new SSMP/SSO requirements proceed, it is likely that all of the SC-OR member entities will require rate increases to cover increased SSMP-related operating expenses (systematic sewer collection system cleaning, inspection, repair, and reporting costs).

The District submits its annual budget to the County Auditor in compliance with California Government Code Section 53901.

### STATUS OF, AND OPPORTUNITIES FOR, COST AVOIDANCE AND SHARED FACILITIES

<u>Determination 5-14: Opportunities for Cost Avoidance and Shared</u> <u>Facilities</u>

While the District appears to utilize internal cost avoidance opportunities, facilities sharing efforts are not actively pursued. LOAPUD and the other SC-OR member entities should consider establishing a program to 1) share equipment, materials, personnel, expertise, and training and 2) consider purchasing supplies and materials in bulk.

The SC-OR-sponsored pipe patching program is a good example of the cooperation that has recently occurred between the SC-OR member entities, resulting in significant cost savings.

### ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

#### Determination 5-15: Governmental Structure

LOAPUD is governed by a five-member Board of Directors elected at large by voters within the District. LOAPUD holds meetings which are open and accessible to the public. LOAPUD maintains accountability and compliance in its governance, and public meetings appear to be held in compliance with Brown Act requirements.

#### Determination 5-16: Management Efficiencies

The Lake Oroville Area Public Utility District operates with minimal staff, and contracts for some services such as engineering consulting. The overall management structure of LOAPUD is sufficient to account for necessary services and to maintain operations in an efficient and effective manner. LOAPUD is adequately staffed at this time.

#### Determination 5-17: Website

LOAPUD maintains a website that contains useful public information. The District's website includes Board of Directors' meeting agendas, LOAPUD rules and regulations, fee schedules, improvement standards, budget, financial audit, the District's Master Plan, and the District's Sanitary Sewer Management Program. LOAPUD should also consider placing information on I&I and the District's sewer lateral testing program on their website.

8. The Commission makes the following determinations and findings in approving the LOAPUD SOI Update. The Commission considered the policies set forth in Government Code section 56425. Pursuant to Government Code section 56425, and based upon the entire record, the Commission makes the following determinations:

### Factor No. 1: The Present and Planned Land Uses in the Area, Including Agricultural and Open-Space Lands

The Lake Oroville Area Public Utility District serves an important role by providing wastewater collection and conveyance services to the mostly unincorporated territory south and east of Oroville. Uses within LOAPUDs existing and proposed SOI consists primarily of residential uses, along with public recreation uses, commercial uses, and industrial uses. LOAPUD's existing and proposed SOI is primarily designated by Butte County for relatively high levels of development, which may require connection to public sanitary sewer services to fully implement the County General Plan. Considering the existing and planned land uses in the area, LOAPUD is the logical sewer service provider to accommodate the planned growth.

### Factor No. 2: The Present and Probable Need for Public Facilities and Services in the Area

LOAPUD provides sanitary sewer collection and conveyance services to parcels within its existing jurisdictional boundaries. LOAPUD will provide sewer services to parcels within its existing SOI upon annexation of those parcels to LOAPUD.

As identified in the County of Butte and the City of Oroville's General Plans, future residential, commercial, and industrial development within LOAPUD's SOI, including the Rio D'Oro Specific Plan area, the South Ophir Specific Plan area, and the Stringtown Mountain Specific Plan area, will require connection to a sanitary sewer system to develop at the densities allowed by the General Plans. Absent other large scale alternatives, LOAPUD is the most logical sewer service provider to serve the unincorporated south and east Oroville area in a traditional collection and treatment wastewater system.

The unincorporated community of Palermo has numerous poorly performing or failing septic systems due to poor soils and high groundwater levels in the area. Parcels within the Palermo area will need the opportunity to utilize another method of wastewater treatment and the connection to a public sanitary sewer system would be an appropriate option to ensure the health and safety of area residents and to prevent surface and groundwater contamination. At present, LOAPUD represents a viable and logical option to serve the Palermo area.

# Factor No. 3: The Present Capacity of Public Facilities and Adequacy of Public Services that the Agency Provides or is Authorized to Provide

A detailed review of the adequacy and capacity of LOAPUD's sewer services was performed in the 2009 Wastewater Service Providers-Oroville Region Municipal Service Review. The municipal service review indicates the District will have the capacity to provide sanitary sewer service to the District's updated SOI. As identified in the District's Sewer System Master Plan, the District will need to install new sewer infrastructure, such as sewer pipes and pump stations, in order to provide service to the updated SOI. Infrastructure improvements needed as a result of new development will be funded by the development.

The SC-OR wastewater treatment facility currently does not have the reserve capacity to provide service for a full build-out scenario of LOAPUD's updated SOI, however, SC-OR has identified the infrastructure improvements needed to provide adequate wastewater treatment services for the three SC-OR member entities in the coming years. These infrastructure improvements needed as a result of new development will be identified as development is proposed in a Capacity Study and be funded by the new development.

# Factor No. 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.

The social and economic communities within the District include a small portion of the City of Oroville, and the unincorporated communities/neighborhoods of South Oroville, the Mooretown Rancheria, the Feather Falls Rancheria, and Kelly Ridge.

The areas proposed to be added to the District's SOI include the

proposed Rio D' Oro Specific Plan area along SR 70 south of Oroville, the Power House Hill Road/Lone Tree Road area, the unincorporated community of Palermo, the Miners Ranch Road area, portions of the Stringtown Mountain Specific Plan area, and the proposed Whisper Ridge Golf Resort, located on a portion of the Stringtown Mountain Specific Plan area.

The proposed sphere has established substantive social and economic ties with the Oroville region given that is where the majority of residents of the updated SOI work and shop.

Factor No. 5: The Present and Probable Need for those Public Facilities and Services of any Disadvantaged Unincorporated Communities Within the Existing Sphere of Influence.

Large portions of LOAPUD's updated SOI are identified as disadvantaged unincorporated communities, including the unincorporated community of Palermo. The disadvantaged unincorporated communities within LOAPUD's SOI will require District sanitary sewer services in the future to replace poorly performing or failing septic systems, or to facilitate new development. Therefore, there is a present and probable need for public sanitary sewer services within the areas designated as disadvantaged unincorporated communities in LOAPUD's updated SOI.

**FURTHERMORE**, the Commission makes the following determinations, findings, and conditions in approving the SOI Update. The Commission considered its own Policies and based upon the entire record, the Commission makes the following determinations:

- The Updated MSR for LOAPUD identifies types and adequacy of municipal services to be provided and identified existing and proposed facilities.
- 2. The LOAPUD SOI Plan identifies existing land uses and reasonable projection of land uses that may occur.
- The District's projected population growth and development patterns indicate that the SOI Update will facilitate future residential, commercial, and industrial uses as identified by the Butte County General Plan 2030.
- 4. The SOI Update area to be added is in the logical path of urban development and adjacent to developed land, which promotes orderly growth and discourages sprawl.
- 5. The LOAPUD SOI Update shall be subject to the following conditions:
  - a. All Commission fees must be paid in full prior to the new sphere of influence becoming effective.
  - b. No annexation to the District shall be approved which proposes urban development that will be adjacent to active agricultural production unless the proposal includes a buffer between the urban development and the agricultural uses. The buffer shall be substantially consistent

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- with Butte County agricultural buffer requirements. The buffer condition may provide for elimination of the buffer at such time as the adjacent farmland is converted to non-agricultural use.
- c. The Commission finds that the Final Environmental Impact Report for the Butte County General Plan 2030 and the Final Environmental Impact Report for the LOAPUD SOI Update are general policy level actions intended to provide a broad discussion of growth boundaries and potential impacts. The District and the County should not expect to solely rely on these two documents to support or mitigate all project specific impacts identified during any future annexations to LOAPUD.

WHEREAS, having reviewed and considered the findings as outlined above, the Commission determines to expand the Lake Oroville Area Public Utility District's existing sphere of influence by approximately 9,700 acres as shown in "Exhibit A" to this Resolution.

BE IT FURTHER RESOLVED that the Local Agency Formation Commission of the County of Butte, State of California, does hereby determine that the Lake Oroville Area Public Utility District shall indemnify, defend, and hold harmless the Local Agency Formation Commission of the County of Butte from any legal expense, legal action, or judgment arising out of the Commission's designation of the modified sphere of influence, including any reimbursement of legal fees and costs incurred by the Commission.

PASSED AND ADOPTED by this Local Agency Formation Commission of the County of Butte, on the 10<sup>th</sup> day of July 2013 by the following vote:

AYES: Commissioners Lotter, Duncan, Connelly, Fichter, Lambert and Chair Leverenz

NOES: None

**ABSENT:** Alternate Commissioner Gill

**ABSTAINS: None** 

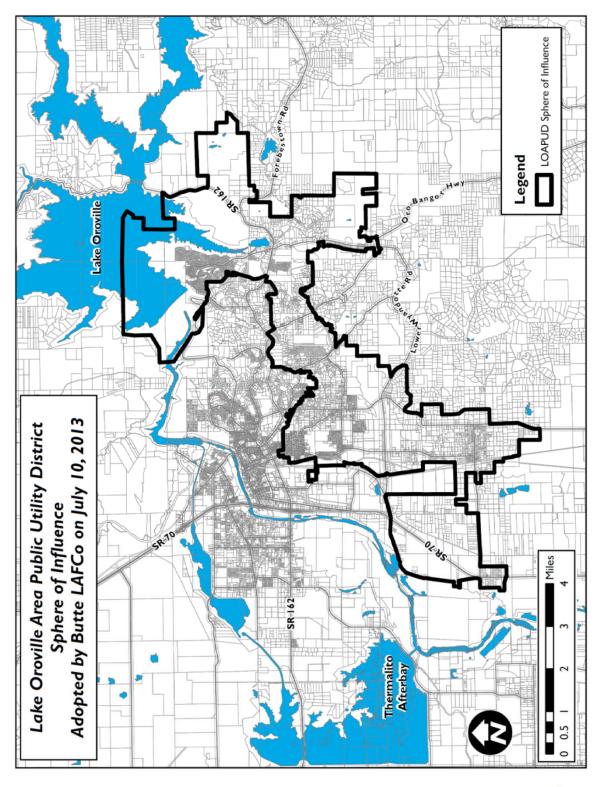
ATTEST:

Clerk of the Commission

CARL LEVERENZ, Chair

**Butte Local Agency Formation Commission** 

### RESOLUTION NO. 11 2013/14 **Exhibit A**



### Section 4.2 - Summary of Adopted MSR Determinations for the Lake Oroville Area Public Utility District

#### **DETERMINATION 5-1: SEWER LATERAL PROGRAM**

The sewer lateral inspection program is a fundamental component of the District's overall efforts to increase system efficiency and reduce I&I levels. It is recognized that the inspection program may not yield significant results for many years considering the number of laterals and the criteria for conducting the inspections.

#### DETERMINATION 5-2: SANITARY SEWER COLLECTION AND CONVEYANCE SYSTEM

The District's sanitary sewer system, most of which has been constructed in the last 35 years, is generally in good condition. LOAPUD's collection system currently has no significant capacity issues. However, large development project may be required to upgrade the existing collection system downstream if additional capacity is required.

#### **DETERMINATION 5-3: SANITARY SEWER OVERFLOWS**

LOAPUD has had two minor sanitary sewer system overflows since mandatory reporting of SSOs began in 2007. This low number of SSOs is an indication that LOAPUD's sewer system is being adequately operated and maintained.

#### **DETERMINATION 5-4: SANITARY SEWER MANAGEMENT PLAN**

LOAPUD has adopted all elements of its Sanitary Sewer Management Plan as required by the State Water Quality Control Board.

#### **DETERMINATION 5-5: SANITARY SEWER SYSTEM CAPACITIES**

Based on a system-wide average dry weather flow of 0.81 mgd, LOAPUD's sewer system has adequate capacity to handle existing and future wastewater flows. The District adds new lines and upgrades existing lines as needed.

#### DETERMINATION 5-6: SC-OR EAST INTERCEPTOR SEWER TRUNK LINE CAPACITY

The SC-OR East Interceptor trunk sewer line, which serves only LOAPUD's sanitary sewer system, has a current capacity of 15 mgd which is greater than LOAPUD's peak flow of 14 mgd projected for the year 2030.

#### DETERMINATION 5-7: SC-OR MAIN INTERCEPTOR SEWER TRUNK LINE CAPACITY

Data provided by SC-OR shows that the Main Interceptor trunk sewer line may experience surcharge conditions during peak weather flows due to limitations on the influent pumping capacity at the WWTF. Due to this limited influent pumping capacity, the Main Interceptor has reached 92% of capacity during storm events. To address this concern, SC-OR is proposing to both increase the capacity of the Main Interceptor and increase the WWTF influent pumping capacity to 30 mgd, which will reduce the chance of surcharging and SSOs on the Main Interceptor. Additionally, SC-OR anticipates that I&I reduction programs recently implemented by the member entities is expected to reduce I&I flows into the WWTF.

#### **DETERMINATION 5-8: INFLOW AND INFILTRATION FLOWS**

During 2008, LOAPUD had an average dry weather flow of 0.81 mgd, but an average wet weather flow of 4.8 mgd, with a wet weather peaking factor of 9.0, all of which indicate that LOAPUD has excessive inflow and infiltration entering their sewage collection system.

#### **DETERMINATION 5-9: SANITARY SEWER SYSTEM INSPECTION**

LOAPUD utilizes smoke testing, CCTV equipment, flow meters, and manhole inspections to help identify the locations of I&I which have resulted in numerous repairs to their collection system. LOAPUD should continue to use this approach to solving I&I in their collection system.

#### **DETERMINATION 5-10: SANITARY SEWER SYSTEM INSPECTION**

LOAPUD currently cleans and inspects approximately 15 miles (21 percent) of their sewer system each year and should consider enhancing this program each year in a greater effort to reduce I&I and prevent sanitary sewer overflows. The clean and inspect program has been enhanced through the SC-OR pipe patching program.

#### **DETERMINATION 5-11: SEWER LATERAL TESTING PROGRAM**

LOAPUD recently adopted a comprehensive sewer lateral testing program that will help reduce I&I entering private sewer laterals and should consider assistance and outreach programs to landowners to encourage greater participation in this program.

#### DETERMINATION 5-12: FINANCIAL ABILITY OF AGENCY TO PROVIDE SERVICES

LOAPUD's primary source of revenue is service fees (85%) with additional revenue from connection charges, property taxes, and earned interest.

#### DETERMINATION 5-13: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

Current sewer service and connection charges, combined with income from other sources, are adequate to cover the costs of providing services; however, the District should continue to review and revise their sewer service and connection charges to recover operational and maintenance costs, build a capital reserve and reduce its reliance on revenue from property taxes. The District implemented a rate increase on July 1, 2011, which includes a \$1.00/month/EDU annual increase to sewer service rates for 5 years beginning July 1, 2012.

As the implementation of the new SSMP/SSO requirements proceed, it is likely that all of the SC-OR member entities will require rate increases to cover increased SSMP-related operating expenses (systematic sewer collection system cleaning, inspection, repair, and reporting costs).

The District submits its annual budget to the County Auditor in compliance with California Government Code Section 53901.

#### DETERMINATION 5-14: OPPORTUNITIES FOR COST AVOIDANCE AND SHARED FACILITIES

While the District appears to utilize internal cost avoidance opportunities, facilities sharing efforts are not actively pursued. LOAPUD and the other SC-OR member entities should consider establishing a program to 1) share equipment, materials, personnel, expertise, and training and 2) consider purchasing supplies and materials in bulk.

The SC-OR-sponsored pipe patching program is a good example of the cooperation that has recently occurred between the SC-OR member entities, resulting in significant cost savings.

#### **DETERMINATION 5-15: GOVERNMENTAL STRUCTURE**

LOAPUD is governed by a five-member Board of Directors elected at large by voters within the District. LOAPUD holds meetings, which are open and accessible to the public. LOAPUD maintains accountability and compliance in its governance, and public meetings appear to be held in compliance with Brown Act requirements.

#### **DETERMINATION 5-16: MANAGEMENT EFFICIENCIES**

The Lake Oroville Area Public Utility District operates with minimal staff, and contracts for some services such as engineering consulting. The overall management structure of LOAPUD is sufficient to account for necessary services and to maintain operations in an efficient and effective manner. LOAPUD is adequately staffed at this time.

#### **DETERMINATION 5-17: WEBSITE**

LOAPUD maintains a website that contains useful public information. The District's website includes Board of Directors' meeting agendas, LOAPUD rules and regulations, fee schedules, improvement standards, budget, financial audit, the District's Master Plan, and the District's Sanitary Sewer Management Program. LOAPUD should also consider placing information on I&I and the District's sewer lateral testing program on their website.

### Section 4.3 - Summary of Adopted SOI Determinations for the Lake Oroville Area Public Utility District

#### SOI DETERMINATION 3-1: PRESENT AND PLANNED LAND USE

The Lake Oroville Area Public Utility District serves an important role by providing wastewater collection and conveyance services to the mostly unincorporated south Oroville area. Uses within LOAPUDs existing and proposed SOI consists primarily of residential uses, along with public recreation uses, commercial uses, and industrial uses. LOAPUD's existing and proposed SOI is primarily designated by Butte County for relatively high levels of development, which may require connection to public sanitary sewer services to fully implement the County General Plan. Considering the existing and planned land uses in the area, LOAPUD is the logical sewer service provider to accommodate the planned growth.

#### SOI DETERMINATION 3-2: PRESENT AND PROBABLE NEED FOR PUBLIC SERVICES AND FACILITIES

LOAPUD provides sanitary sewer collection and conveyance services to parcels within its existing jurisdictional boundaries. LOAPUD will provide sewer services to parcels within its existing SOI upon annexation of those parcels to LOAPUD.

As identified in the County of Butte and the City of Oroville's General Plans, future residential, commercial, and industrial development within LOAPUD's SOI, including the Rio D'Oro Specific Plan area, the South Ophir Specific Plan area, and the Stringtown Mountain Specific Plan area, will require connection to a sanitary sewer system to develop at the densities allowed by the General Plans. Absent other large scale alternatives, LOAPUD is the most logical sewer service provider to serve the unincorporated south and east Oroville area in a traditional collection and treatment wastewater system.

The unincorporated community of Palermo has numerous poorly performing or failing septic systems due to poor soils and high groundwater levels in the area. Parcels within the Palermo area will need the opportunity to utilize another method of wastewater treatment and the connection to a public sanitary sewer system would be appropriate to ensure the health and safety of area residents and to prevent surface and groundwater contamination. At present, LOAPUD represents a viable and logical option to serve the Palermo area.

#### SOI DETERMINATION 3-3: PRESENT AND FUTURE CAPACITY OF FACILITIES

A detailed review of the adequacy and capacity of LOAPUD's sewer services was performed in the 2009 Wastewater Service Providers-Oroville Region Municipal Service Review. The municipal service review indicates the District will have the capacity to provide sanitary sewer service to the District's updated SOI. As identified in the District's Sewer System Master Plan, the District will need to install new sewer infrastructure, such as sewer pipes and pump stations, in order to provide service to the updated SOI. Infrastructure improvements needed as a result of new development will be funded by the development.

The SC-OR wastewater treatment facility currently does not have the capacity to provide service for a full build-out scenario of LOAPUD's updated SOI, however, SC-OR has identified the infrastructure improvements needed to provide adequate wastewater treatment services for the three SC-OR member entities in the coming years. These infrastructure improvements needed as a result of new development will be identified as development is proposed in a Capacity Study and be funded by the new development.

#### SOI DETERMINATION 3-4: SOCIAL AND ECONOMIC COMMUNITIES OF INTEREST

The social and economic communities within the District include a small portion of the City of Oroville, and the unincorporated communities/neighborhoods of South Oroville, the Mooretown Rancheria, the Feather Falls Rancheria, and Kelly Ridge.

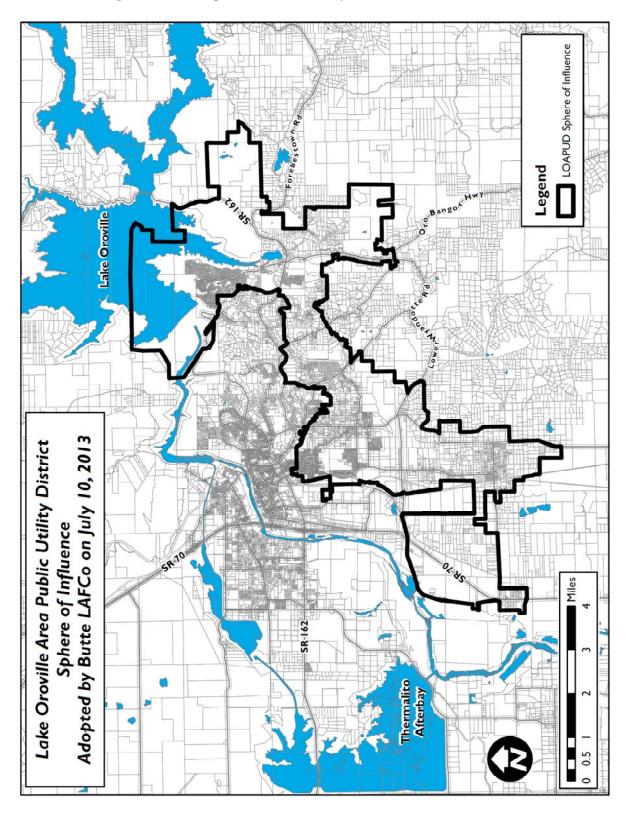
The areas proposed to be added to the District's SOI include the proposed Rio D' Oro Specific Plan area along SR 70 south of Oroville, the Power House Hill Road/Lone Tree Road area, the unincorporated community of Palermo, the Miners Ranch Road area, portions of the Stringtown Mountain Specific Plan area, and the proposed Whisper Ridge Golf Resort, located on a portion of the Stringtown Mountain Specific Plan area.

The proposed sphere has established substantive social and economic ties with the Oroville region given that is where the majority of residents of the updated SOI work and shop.

SOI DETERMINATION 3-5: THE PRESENT AND PROBABLE NEED FOR THOSE PUBLIC FACILITIES AND SERVICES OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN THE EXISTING SPHERE OF INFLUENCE

Large portions of LOAPUD's updated SOI are identified as disadvantaged unincorporated communities, including the unincorporated community of Palermo. The disadvantaged unincorporated communities within LOAPUD's SOI will require District sanitary sewer services in the future to replace poorly performing or failing septic systems, or to facilitate new development. Therefore, there is a present and probable need for public sanitary sewer services within the areas designated as disadvantaged unincorporated communities in LOAPUD's updated SOI.

**Section 4.4 - Figure 4-1: Adopted SOI Boundary for LOAPUD** 



#### **5.0** ACRONYMS AND DEFINITIONS

TERM	DEFINITION
AAF	Average Annual Flow. The amount of wastewater generated annually.
ADWF	Average Dry Weather Flow – ADWF consists of average daily sewage flows and groundwater infiltration (GWI). ADWF is the average flow that occurs on a daily basis with no evident reaction to rainfall.
Annexation	The inclusion, attachment, or addition of a territory to a city of district.
AWWF	Average Wet Weather Flow – AWWF are wastewater flows that occur during periods when the groundwater table is high and the highest precipitation occur. The wet weather flow period is normally from October to May.
Base flow	Wastewater flow (including a reasonable amount of inflow and infiltration) originating from residential, commercial and industrial sources.
BCAG	Butte County Association of Governments
Board of Directors	The legislative body or governing board of a district.
CEQA	The California Environmental Quality Act (CEQA) is intended to inform governmental decision-makers and the public about potential environmental effects of a project, identify ways to reduce adverse impacts, offer alternatives to the project, and disclose to the public why a project was approved. CEQA applies to projects undertaken, funded, or requiring issuance of a permit by a public agency.
CIP	Capital Improvement Program. A plan for expenditures taking into consideration the fundamental strategic goals for a utility system, including growth, expansion, renewal and replacement, regulatory compliance, and stakeholder service needs.
City	Any charter or general law city, including any city the name of which includes the word "town."
СКН	The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000.
Collection System	The first element of a wastewater collection system used to collect and carry wastewater from one or more building sewer laterals to a main sewer.
Collectors	Small sewer pipes measuring twelve inches or less in diameter.
Cost Avoidance	Actions to eliminate unnecessary costs derived from, but not limited to, duplication of service efforts, higher than necessary administration/operation cost ratios, use of outdated or deteriorating infrastructure and equipment, underutilized equipment or buildings or facilities, overlapping/inefficient service boundaries, inefficient purchasing or budgeting practices, and lack of economies of scale.
CIPP	Cured-in-place pipe A liner that provides a seamless corrosion resistant, jointless "pipe-within-a-pipe." CIPP is installed through the existing manholes and does not require extensive digging.

TERM	DEFINITION
Design Storm	A rainstorm used in the design of wastewater systems. A particular storm may be selected as a design storm because adequate data exist to allow a calibration of a computer model being used to simulate the behavior of the sewer system during that storm.
District or Special District	An agency of the state, formed pursuant to general law or special act, for the local performance of governmental or proprietary functions within limited boundaries. "District" or "special district" includes a county service area.
Dry Weather Flow	Flow in a sanitary sewer during periods of dry weather in which the sanitary sewer is under minimum influence of inflow and infiltration.
Diurnal Flow	Fluctuation of wastewater flows over a 24 hour period.
Effluent	Treated, or partially treated, municipal wastewater flowing from a lagoon, tank, treatment process, or treatment plant.
EDU	Equivalent Dwelling Unit. SC-OR Policy # 7510 states that one EDU is equal to 260 gallons per day. For commercial users, SC-OR Policy # 7210 says that 16 fixture units equals one EDU. EDUs must be in whole numbers, fractional EDUs are not allowed.
Enabling Legislation	Legal statute authorizing the creation of the agency or district considered.
Enterprise Fund	Services for which a city charges customers a fee. Cities can use enterprise funds to account for its sewer, electric, and non-major (water and solid waste funds. Enterprise funds are the same as its business-type activities, but provide more detail and additional information.
Excessive Infiltration/Inflow	The quantities of infiltration/inflow that are less costly to remove by sewer system rehabilitation than to transport and treat at the receiving facility, when both capital costs of increased sewerage facilities capacity and resulting operating costs are included.
FAR	Floor-to-Area Ratio. The total square feet of a building divided by the total square feet of the lot the building is located on.
Force Main	A pipeline that carries wastewater from a pump station to other pipes further along in a sewer system. The word "force" refers to the fact that the pipeline is under pressure, rather than relying on gravity to move wastewater.
Formation	The formation, incorporation, organization, or creation of a district.
Function	Any power granted by law to a local agency or a county to provide designated governmental or proprietary services or facilities for the use, benefit, or protection of all persons or property.
Functional Revenues	Revenues generated from direct services or associated with specific services, such as a grant or statute, and expenditures.
FY	Fiscal year
General Plan	A document containing a statement of development policies including a diagram and text setting forth the objectives of the plan. The general plan must include certain state mandated elements related to land use, circulation, housing, conservation, open-space, noise, and safety.
General Revenues	Revenues not associated with specific services or retained in an enterprise fund.
gpd	Gallons per day

TERM	DEFINITION
I&I	Infiltration and Inflow. The wastewater component caused by an infall-dependent infiltration/inflow (RDI/I) and groundwater infiltration (GWI).
Independent Special District	Any special district having a legislative body all of whose members are elected by registered voters or landowners within the district, or whose members are appointed to fixed terms, and excludes any special district having a legislative body consisting, in whole or in part, of ex officio members who are officers of a county or another local agency or who are appointees of those officers other than those who are appointed to fixed terms. "Independent special district" does not include any district excluded from the definition of district contained in §56036.
Infrastructure Needs and Deficiencies	The term "infrastructure" is defined as public services and facilities, such as water supply systems, other utility systems, and roads (General Plan Guidelines). Any area needing or planned for service must have the infrastructure necessary to support the provision of those services. The term "infrastructure needs and deficiencies" refers to the status of existing and planned infrastructure and its relationship to the quality and levels of service that can or need to be provided.
Infiltration	Groundwater that infiltrates pipeline and manhole defects located below the ground surface. Groundwater infiltration is separate and distinguished from inflow resulting from storm events. Infiltration is a steady 24-hour flow that usually varies during the year in relation to the groundwater levels above the sewers. Infiltration rates are normally estimated from wastewater flows measured in the sewers during the early morning hours when water use is at a minimum and the flow is essentially infiltration.
Inflow	Water other than wastewater that enters a wastewater system and building sewer from sources such as roof leaders, cellar drains, yard drains, area drains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm drains and sanitary sewers, catch basins, cooling towers, stormwaters, surface runoff, street wash waters, or drainage. (Inflow does not include infiltration.)
Influent	Untreated wastewater – the wastewater that flows into a treatment plant
Interceptors	Large diameter sewer pipes designed to convey wastewater from a collector sewer system to the treatment plant.
Interested Agency	Each local agency, which provides facilities or services in the affected territory that a subject agency would provide.
LAFCo	Local Agency Formation Commission. A state mandated local agency that oversees boundary changes to cities and special districts, the formation of new agencies including incorporation of new cities, and the consolidation of existing agencies. The broad goals of the agency are to ensure the orderly formation of local government agencies, to preserve agricultural and open space lands, and to discourage urban sprawl.

TERM	DEFINITION
Lateral	A lateral is defined as a sewer "branch line" that reaches from the main sewer line to individual properties/buildings. It can be further divided into upper and lower laterals. Upper laterals are the section of the branch line that connects to the building and extends to the property line. Lower laterals are the remaining section of the branch line, which runs from the property line to the sewer main.
Lift Station	(a.k.a. "pump station") A pumping facility that conveys wastewater flow, from an area that would not naturally drain to the wastewater treatment plant, into the gravity sewer system for delivery and treatment.
Local Accountability and Governance	The term "local accountability and governance" refers to public agency decision making, operational and management styles that include an accessible staff, elected or appointed decision-making body and decision making process, advertisement of, and public participation in, elections, publicly disclosed budgets, programs, and plans, solicited public participation in the consideration of work and infrastructure plans; and regularly evaluated or measured outcomes of plans, programs or operations and disclosure of results to the public.
Local Agency	A city, county, or special district or other public entity, which provides public services.
LOAPUD	Lake Oroville Area Public Utility District
Main Line	Collector sewers located in the street, or for backyards, in the utility easement. Typically six to twelve inches in diameter, but can refer to larger diameter pipes as well.
Management Efficiency	The term "management efficiency" refers to the organized provision of the highest quality public services with the lowest necessary expenditure of public funds. An efficiently managed entity (1) promotes and demonstrates implementation of continuous improvement plans and strategies for budgeting, managing costs, training and utilizing personnel, and customer service and involvement, (2) has the ability to provide service over the short and long term, (3) has the resources (fiscal, manpower, equipment, adopted service or work plans) to provide adequate service, (4) meets or exceeds environmental and industry service standards, as feasible considering local conditions or circumstances, (5) and maintains adequate contingency reserves.
mg	Million gallons—measurement of water and wastewater volume.
mgd	Million gallons per day. A unit of flow commonly used for wastewater discharges. One mgd is equivalent to 1.547 cubic feet per second over a 24 hour period.
Municipal Services	The full range of services that a public agency provides, or is authorized to provide, except general county government functions such as courts, special services and tax collection. As understood under the CKH Act, this includes all services provided by special districts under California law.

TERM	DEFINITION
Municipal Service Review (MSR)	A study designed to determine the adequacy of governmental services being provided in the region or sub-region. Performing service reviews for each city and special district within the county may be used by LAFCO, other governmental agencies, and the public to better understand and improve service conditions.
Non-Enterprise Activity	A non-enterprise activity, such as fire protection, is an activity that has an accounting system organized on a governmental fund basis.
Out-of-Agency Contract	A contract to provide services outside of an agency's boundaries.
Overlapping Territory	Territory which is included within the boundaries of two or more districts or within one or more districts and a city or cities.
Peak Flow	The maximum flow that occurs over a specific length of time (e.g., daily, hourly, instantaneous).
Peaking Factor	The peaking factor is the ratio of a maximum flow to the average flow, such as maximum hourly flow or maximum daily flow to the average daily flow. The wet weather peaking factor can be determined by dividing the PDWF by the ADWF.
Prime Agricultural Land	An area of land that has not been developed for a use other than agriculture and meets certain criteria related to soil classification or crop and livestock carrying capacity.
Principal act	The sections of state law under which authority a district was formed and now operates. The Cortese-Knox-Hertzberg Local Government Reorganization Act provides for formation process, but is not the principal act under which districts operate. An example of a principal act is the Recreation and Park District Law, commencing with Section 5780 of the Public Resources Code.
Public Agency	The state or any state agency, board, or commission, any city, county, city and county, special district, or other political subdivision, or any agency, board, or commission of the city, county, city and county, special district, or other political subdivision.
Publicly Owned Treatment Works (POTW)	A treatment system, as defined by the Clean Water Act (Section 212) that is owned by a state or municipality, including special districts. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant.
PWWF	Peak Wet Weather Flow – PWWF consists of the average dry weather flow plus inflow and infiltration and is the highest measured hourly flow that occurs during wet weather. Peak Wet Weather Flow (PWWF) = Average Dry Weather Flow (ADWF) x Peak Factor
Rainfall-Dependent Infiltration/Inflow (RDI/I)	RDI/I consists of rainfall that enters the collection system through direct connections (roof leaders, manholes, etc.) and causes an almost immediate increase in wastewater flow.
RWQCB	Regional Water Quality Control Board

TERM	DEFINITION
Sanitary Sewer Overflow (SSO)	A sanitary sewer overflow is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. A sanitary sewer system is any system of pipes, pump stations, sewer lines, or other conveyances, which is owned or operated by a public entity, used to collect and convey wastewater to a treatment facility. SSOs do not include overflows from privately-owned service laterals when these overflows are caused by blockages or other problems within the privately-owned lateral. SSOs do include overflows from privately-owned laterals when the cause is a problem within the publicly-owned sanitary sewer system.
Sanitary Sewer System	A wastewater collection system designed to carry sanitary sewage, consisting solely of domestic, commercial, and industrial wastewater, and to which storm water, surface water and groundwater are not intentionally admitted.
Satellite Collection System	Satellite collection systems are owned by a municipality, agency, or utility that does not own a wastewater treatment facility. These collection systems discharge into another municipality's wastewater collection or treatment system for treatment and disposal.
SC-OR	Sewerage Commission-Oroville Region
Service	A class established within, and as a part of, a single function, as provided by regulations adopted by the commission pursuant to CKH Chapter 5 (commencing with §56821) of Part 3.
Service Fee	A fee, usually paid monthly, by landowners and businesses for receiving sanitary sewer services. The service fee reimburses the jurisdiction or agency for the operation and maintenance costs associated with providing sewer services.
Service Review	A study and evaluation of municipal service(s) by specific area, sub-region or region culminating in written determinations regarding nine specific evaluation categories.
Sewage	A combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments.
Special District	A local governmental agency formed pursuant to general law of the state or special act of the Legislature.
Sphere of influence (SOI)	A plan for the probable physical boundaries and service area of a local agency, as determined by the LAFCo.
Sphere of Influence Determinations	In establishing a sphere of influence, the Commission must consider and prepare written determinations related to present and planned land uses, need and capacity of public facilities, and existence of social and economic communities of interest.
Stakeholder	Refers to LAFCos, members of the public, affected and interested agencies, and other entities interested in, and affected by, service(s) being reviewed.
Storm Event	The probability of the occurrence of a given precipitation event. A 5-year storm event has a 20% (1 in 5) statistical probability of occurring during any given 12-month period. A 100-year storm event has a 1% (1 in 100) statistical probability of occurring during any given 12-month period.

TERM	DEFINITION
Subject agency	Each district or city for which a change of organization is proposed or provided in a reorganization or plan of reorganization.
Surcharged Flow	Surcharging occurs when the amount of flow trying to get through a pipe exceeds the maximum capacity of the pipe thus building up pressure in the pipe. When pressure builds up it seeks to relieve itself through any means possible, potentially resulting in a sanitary sewer overflow.
Trunk Lines	Sewer pipes generally measuring more than 12 inches in diameter and having a capacity of 1 to 10 million gallons per day that connect smaller sewer pipes, or collectors, to the largest transport pipes, or interceptors.
TWSD	Thermalito Water and Sewer District
Wastewater	A combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments.
Wet Weather Flow	Wastewater flows that occur during periods when the groundwater table is high and the highest precipitation occur. The wet weather flow period is normally from October to May.
WWTF	Wastewater treatment facility. A facility containing a series of tanks, screens, filters, and other processes by which pollutants are removed from water.
Zoning	The primary instrument for implementing the general plan. Zoning divides a community into districts or "zones" that specify the permitted/prohibited land uses.

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### **ATTACHMENT 1**

### 1985 LOAPUD SPHERE OF INFLUENCE PLAN\*

\*LOAPUD was formerly named the "North Burbank Public Utility District"

#### NORTH BURBANK PUBLIC UTILITY DISTRICT

#### 1. Main Office/Mailing Address:

1960 Elgin Street Oroville 95965

#### 2. Year Established:

1936

#### 3. General Location:

South Oroville-Kelly Ridge

#### 4. Land Area within Agency Boundary:

Approximately 2700 acres

#### 5. Population within Agency Boundary:

Approximately 10,000

#### 6. Legal Authority:

California Public Utilities Code Sections 11501 et seq.

#### 7. Services Currently Provided:

Sewage collection, treatment and disposal.

#### 8. Description of Services and Facilities:

North Burbank Public Utility District provides sewage collection service to an extended area from South Oroville to Kelly Ridge. The District currently has 3550 connections (or 3630 equivalent dwelling units). Less than ten percent of these are commercial and non-residential connections. The District generates dry weather flows of approximately .65 million gallons per day (MGD) and wet weather flows as high as 6.8 MGD, far exceeding the 3.7 MGD limit specified in North Burbank PUD's agreement with SCOR. The District's system has one main trunkline extending from the SCOR treatment plant to Kelly Ridge. There are seven major pump stations in the system with another two planned. The sewage is treated at the SCOR treatment plant on Fifth Avenue.

#### 9. Major Service Issues:

The District has maintained an ongoing program of trunkline improvements. As a consequence, the main trunkline, except for one short section east of Mount Ida Road and La Mirada Road, has ample capacity to

serve expected growth within the service area of the existing line. Improvements to the portion of the line with restricted capacity have been funded and will be undertaken as soon as demand dictates.

#### 10. Sphere of Influence:

The adopted sphere of influence for the North Burbank Public Utility District is depicted in Figure 4. The sphere follows closely the Primary Sphere of Influence adopted by North Burbank PUD Board of Directors in June 1984. On the north and west the sphere of influence generally follows the secondary Sphere of Influence Boundary adopted by the North Burbank PUD in June 1984. On the southwest the sphere line follows the Southern Pacific Railroad line to its conjunction with the sphere line west of Lincoln Boulevard. From this point the sphere line continues east following the urban residential boundary proposed in the Butte County General Plan. On the east the sphere includes Kelly Ridge, The Oaks and other areas designated for low density urban development. On the south and east the North Burbank PUD Sphere of Influence is identical to the City of Oroville Sphere of Influence.

LAFCo proposes to undertake a study of the feasibility of consolidating the sewage collection systems of the City of Oroville, North Burbank PUD, and TID and the SCOR treatment plant under a single regional sewage agency.

#### Determinations:

1. Present and Planned Land Uses in the Area.

Present land use in the area is predominately residential. The City and County General Plans provide for increased residential and in a few areas increased commercial development. The sphere includes no lands under Williamson Act contract.

2. Present and Probable Need for Public Facilities and Services in the Area.

Area residents are generally well served by the existing sewage collection and treatment system, but increasing urbanization will require extension of trunklines and ultimately expansion of treatment capacity.

3. Present Capacity of Public Facilities and Adequacy of Public Services which the Agency Provides or Is Authorized to Provide.

Increasing urbanization will require extension of trunklines and ultimately expansion of treatment capacity.

4. Social or Economic Communities of Interest in the Area.

The area includes formerly distinct communities that have now become part of the Oroville urban and housing market area.

### **ATTACHMENT 2**

# UPDATE OF SECTION 5.0 OF THE WASTEWATER SERVICE PROVIDERS-OROVILLE REGION MUNICIPAL SERVICE REVIEW

ADOPTED BY BUTTE LAFCO ON JULY 10, 2013



#### 5.0 – LAKE OROVILLE AREA PUBLIC UTILITY DISTRICT

#### **AGENCY OVERVIEW**

The Lake Oroville Area Public Utility District (LOAPUD/district) provides sanitary sewer collection and conveyance services for the unincorporated areas east and south of the City of Oroville (see Figure 5-1) as well as a small area within the incorporated City of Oroville. LOAPUD collects wastewater from its customers and coveys it to Sewerage Commission-Oroville Region (SC-OR) facilities for treatment and disposal. The District's sewer system is considered to be a "satellite collection system" to SC-OR.

The District currently provides service to approximately 12,000 people, which represents approximately 5,939 equivalent dwelling units (EDUs). Customers include single and multiple family residences, a variety of commercial uses, and public facilities including schools and recreational facilities associated with nearby Lake Oroville.

The District was formed in 1938 and was originally called the North Burbank Public Utility District. Until 1977, this district owned and operated a wastewater treatment plant on South 5<sup>th</sup> Avenue that provided treatment and disposal services in addition to collection services. With the creation of the Sewerage Commission-Oroville Region Joint Powers Authority in 1971, the district ceased providing wastewater treatment services. In 1988, the district name was changed to Lake Oroville Area Public Utility District to better describe the entire service area.

**District Size:** 8,423 acres

**2009** Estimated Population Served: 12,000

Office Location: 1960 Elgin Street, Oroville, CA 95966

**Services:** Wastewater collection and conveyance

Employees: 8 full-time

**Date of Formation:** June 7, 1938

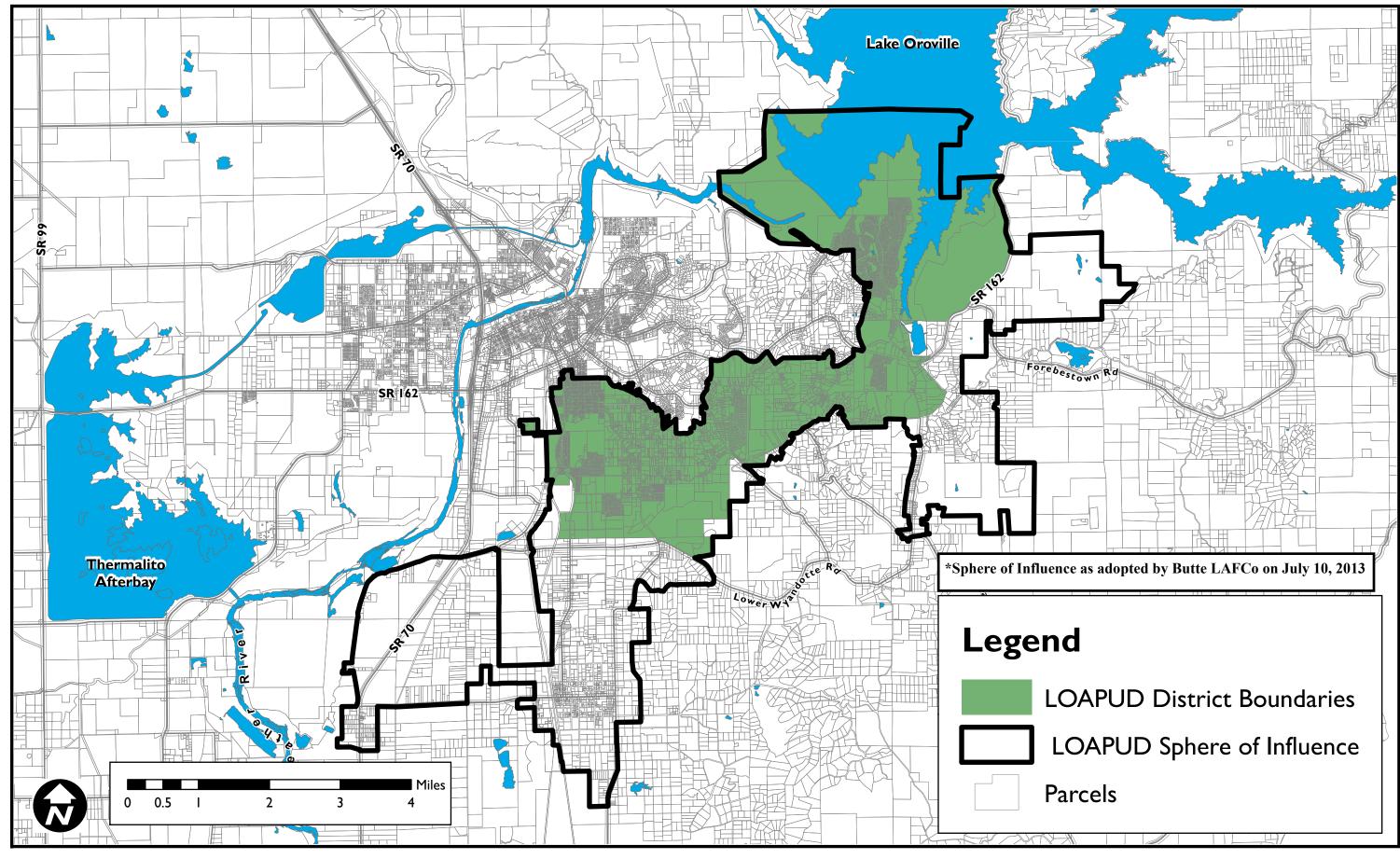
Enabling Legislation: Public Utilities Code

### PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

#### **GENERAL**

The Lake Oroville Area Public Utility District owns and operates a sanitary sewer collection and conveyance system that primarily serves the unincorporated areas in east and south Oroville. The District has 4,436 sewer connections and serves approximately 12,000 people. Most of this population resides in unincorporated areas of Butte County east and south of the City of Oroville, with a small portion of the population residing within the southern boundary of the City of Oroville. LOAPUD's service boundary encompasses approximately 8,423 acres while the District's Sphere of Influence (SOI) encompasses approximately 10,503 acres. A large portion

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Valy 10, 2013 Final Municipal Service Review Page 5-2 Wastewater Service Providers – Oroville Region – LOAPUD Section



Lake Oroville Area Public Utility District

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of the District's current SOI in the eastern foothills overlaps significantly with the City of Oroville's SOI.

LOAPUD's administrative office, system monitoring and control office, and maintenance shop are located at 1960 Elgin Street in the unincorporated area of Oroville. The District has an equipment storage and gas pumping facility at 1945 Elgin Street.

LOAPUD provides sewer service to parcels within the District's service area. For proposed developments less than 20 EDU's, LOAPUD will provide a Sewer Availability letter. For projects of 20 EDU's and over a Capacity Study and Pre-Annexation Agreement must be paid for by the developer and prepared by SC-OR. Upon completion of the study, the District will issue a Sewer Availability letter to the developer addressing treatment plant expansion costs to obtain a Developer Agreement with SC-OR.

If extension or modification of the District's sanitary sewer facilities is required to provide service to new development, the landowner is required to enter into a Development Agreement with LOAPUD that outlines the terms and conditions of extensions and/or modifications to the collection system.

# SANITARY SEWER COLLECTION AND CONVEYANCE SYSTEM INFRASTRUCTURE

LOAPUD's sanitary sewer collection system was originally built in the 1930's, but only approximately 2% of the system is of that age. In the 1970's the construction of the State Line main trunk interceptor was completed, which allowed LOAPUD's system to expand significantly. Approximately 90% of the current system has been constructed since the 1960's. Table 5-1 below provides a breakdown of the age of LOAPUD's sewer system.

Table 5-1.    LOAPUD Sewer System Age		
Date of Construction Percentage of System		
2000-present	10%	
1980-1999	25%	
1960-1979	58%	
1940-1959	5%	
1920-1939	2%	
Before 1919	0%	

LOAPUD's sewer system is predominately a gravity flow system, although the District's system includes 4.5 miles of forced mains and nine pump stations to move wastewater. Gravity collection systems are designed to use as few pumps as possible Figure 5-2 shows the District's facilities. Table 5-2 provides data on LOAPUD's sewer system.

Table 5-2.    LOAPUD Sewer System	n Data
Length of forced mains	4.5 miles
Length of gravity sewers	74 miles
Number of manholes	1,547
Number of pump stations	9
Number of service laterals	4,436
Length of service laterals	70 miles
Number of Equivalent Dwelling Units	6,014

There are approximately 4,436 private and commercial service laterals connected to LOAPUD's sewer system representing 70 miles of pipe, roughly equivalent to the 78.5 miles of District mains and collectors. The service laterals are the small diameter sewer lines that extend from the customer's dwelling or business to LOAPUD's sewer mains, which are normally located in the adjacent street. Currently, maintenance of a sewer lateral is the responsibility of the landowner. However, LOAPUD recently adopted, but not yet implemented, a sewer lateral testing and replacement program that under specified circumstances (sale of property, new connections, structural remodels, changes of use of structure or District Manager determination that an inspection is necessary to address a public health or safety concern) would allow the District to assume maintenance of inspected and tested lower laterals (that portion of the lateral extending from the sewer main to the property line). Maintenance of upper laterals (that portion of the lateral extending from the property line to a structure) would continue to be the responsibility of the landowner.

The pipelines in LOAPUD's collection system consist of several different materials. Most of the older pipe in the system is vitrified clay pipe, while the newer pipe is constructed almost exclusively with PVC. Other materials in the collection system include steel, ductile iron, asbestos-cement, and concrete. The condition of the collection system is generally good and any identified lines that require service are being maintained by the District.

Wastewater collected by LOAPUD is conveyed to LOAPUD's 30-inch-diameter interceptor sewer, which discharges into SC-OR's East Interceptor sewer trunk line approximately 1,550 feet east of South 5th Avenue, just northeast of the SC-OR wastewater treatment facility (WWTF). Figure 5-3 shows the location of SC-OR's East and Main Interceptor sewer trunk lines. The East Interceptor, which serves only LOAPUD, is a 24-inch-diameter reinforced concrete pipe. Wastewater conveyed by SC-OR's East Interceptor discharges into SC-OR's Main Interceptor on South 5<sup>th</sup> Avenue, which then flows into SC-OR's WWTF.

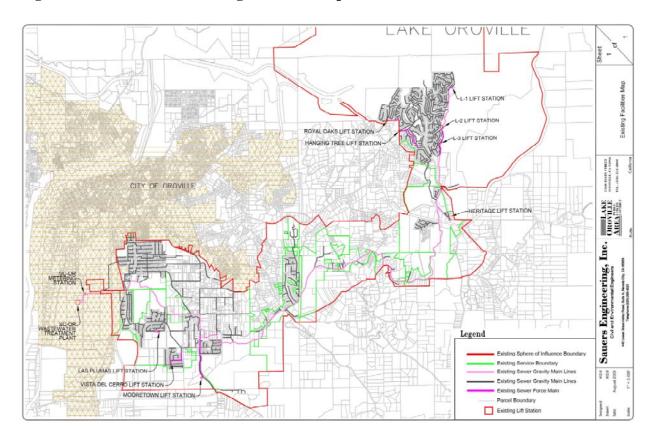


Figure 5-2 LOAPUD Existing Facilities Map

Lake Oroville Area Public Utility District		
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Figure 5-3. Location of SC-OR East Interceptor Sewer Trunk Line

#### **DETERMINATION 5-1: SEWER LATERAL PROGRAM**

The sewer lateral inspection program is a fundamental component of the District's overall efforts to increase system efficiency and reduce I&I levels. It is recognized that the inspection program may not yield significant results for many years considering the number of laterals and the criteria for conducting the inspections.

#### DETERMINATION 5-2: SANITARY SEWER COLLECTION AND CONVEYANCE SYSTEM

The District's sanitary sewer system, most of which has been constructed in the last 35 years, is generally in good condition. LOAPUD's collection system currently has no significant capacity issues. However, large development project may be required to upgrade the existing collection system downstream if additional capacity is required.

# **Sanitary Sewer Overflows**

LOAPUD reports that they have had four sanitary sewer overflows (SSOs) in the last ten years: one in 2005, one in 2006 (which resulted in a claim against the District), one in 2008, and one in 2010. A sanitary sewer overflow is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. A sanitary sewer system

is any system of pipes, pump stations, sewer lines, or other conveyances, which is owned or operated by a public entity, used to collect and convey wastewater to a treatment facility. SSOs do not include overflows from privately-owned service laterals when these overflows are caused by blockages or other problems within the privately-owned lateral. These overflows are known as private lateral sewage discharges (PLSDs). SSOs do include overflows from privately-owned laterals when the cause is a problem within the publicly-owned sanitary sewer system.

The State Water Resources Control Board (SWRCB) maintains an online database, the California Integrated Water Quality System (CIWQS), where permit violations and SSOs are reported. Mandatory SSO reporting for SC-OR and the SC-OR member entities began on May 2, 2007. A check of the CIWQS webpage<sup>1</sup> confirms that LOAPUD has had two reported sanitary sewer overflow since mandatory SSO reporting began. Details of the two SSOs are as follows:

CIWQS SSO Event ID: 712754

SSO Type: Category  $2^2$ 

On February 10, 2008, a SSO occurred from a manhole, with a total spill volume of approximately 735 gallons, all of which was recovered. The spill did not flow into any waterway. The SSO was caused by operator error.

CIWQS SSO Event ID: 752254

SSO Type: Category 2

On April 23, 2010, a SSO occurred due to a mainline blockage of debris, which caused the sewer service lateral to back up and spill in a bathroom of a private residence. Total spill volume was approximately 50 gallons, all of which was recovered. The spill did not flow into any waterway.

# Sanitary Sewer Management Plan (SSMP)

The State Regional Water Quality Control Board requires that all wastewater treatment and conveyance agencies prepare and adopt a Sanitary Sewer Management Plan (SSMP). A SSMP is a comprehensive plan which includes provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, a SSMP must contain a spill response plan that establishes standard procedures for immediate response to a SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.

The SSMP documents an agency's program to properly operate and maintain its sanitary sewer

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system.

<sup>&</sup>lt;sup>1</sup> http://www.waterboards.ca.gov/water\_issues/programs/ciwqs/chc\_sso.shtml

<sup>&</sup>lt;sup>2</sup>SSO Category 2 – All discharges of sewage resulting from a failure in an Enrollee's sanitary sewer system not meeting the definition of Category 1. A Category 1 SSO is defined as follows: All discharges of sewage resulting from a failure in an Enrollee's sanitary sewer system that: A. Equal or exceed 1000 gallons; or B. Result in a discharge to a drainage channel and/or surface water; or C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer

system. Each SSMP should address the following elements:

- 1) Goals,
- 2) Organization,
- 3) Legal Authority,
- 4) Operation and Maintenance Program,
- 5) Design and Performance Provisions,
- 6) Overflow Emergency Response Plan,
- 7) Fats, Oils, and Grease (FOG) Control Program,
- 8) System Evaluation and Capacity Assurance Plan,
- 9) Monitoring, Measurement, and Program Modifications,
- 10) SSMP Program Audits, and
- 11) Communication Program.

Agencies are required to certify that the final SSMP and its constituent subparts are in compliance with the Sanitary Sewer Order (Water Quality Order No. 2006-0003) within the required time frames. Agencies are also required to obtain their governing board's approval of the SSMP Development Plan and Schedule, and final SSMP at a public hearing prior to certification of the SSMP as complete and in compliance. LOAPUD has adopted of all the SSMP elements in advance of their May 2, 2010 deadline.

#### **DETERMINATION 5-3: SANITARY SEWER OVERFLOWS**

LOAPUD has had two minor sanitary sewer system overflows since mandatory reporting of SSOs began in 2007. This low number of SSOs is an indication that LOAPUD's sewer system is being adequately operated and maintained.

# **DETERMINATION 5-4: SANITARY SEWER MANAGEMENT PLAN**

LOAPUD has adopted all elements of its Sanitary Sewer Management Plan as required by the State Water Quality Control Board.

#### SANITARY SEWER COLLECTION AND CONVEYANCE CAPACITIES

The District collects an average of 384 mg (million gallons) of wastewater annually, with an ADDW (Average Daily Dry Weather) flow of approximately 0.81 mgd (million gallons per day) as reported by SC-OR. Table 5-3 below provides information on LOAPUD system capacities.

Table 5-3.	LOAPUD Sewer Syst	em Flows - 2008
Average Dry	Weather Flow <sup>3</sup>	0.81 mgd
	t Weather Flow <sup>4</sup>	4.8 mgd
Peak Wet W	eather Flow <sup>5</sup>	7.3 mgd
Wet Weather	r Peaking Factor <sup>6</sup>	9.0

LOAPUD's collection system has adequate capacity to handle existing and future wastewater flows, which is anticipated to be approximately 14 mgd by 2030. The District accepts new main line extensions and upgrades existing lines as needed, usually as a result of new development.

According to SC-OR, their East Interceptor sewer trunk line, which serves only LOAPUD's collection system, has a current capacity of 15 mgd with surcharged flow and 4 feet of freeboard. SC-OR states that the East Interceptor is currently at about 66 percent of peak hydraulic capacity. The current capacity on the East Interceptor sewer trunk line is greater than LOAPUD's peak flows projected for the year 2030, which is projected to be 14 mgd. No expansion activities are required for the East Interceptor.<sup>7</sup>

SC-OR's Main Interceptor sewer trunk line conveys wastewater from all of the SC-OR member entities' sanitary sewer systems. Data provided by SC-OR shows that the Main Interceptor may experience surcharge conditions during peak weather flows due to limitations on the influent pumping capacity at the WWTF, which is currently 25 mgd. Due to this limited influent pumping capacity, the Main Interceptor has reached 92% of capacity during storm events. To address this concern, SC-OR is proposing to both increase the capacity of the Main Interceptor and increase the WWTF influent pumping capacity to 30 mgd, which will reduce the chance of surcharging and SSOs on the Main Interceptor. Additionally, SC-OR anticipates that I&I reduction programs recently implemented by the member entities is expected to reduce I&I flows into the WWTF. Since the Main Interceptor is owned and operated by SC-OR, the capacity issue on this line is analyzed in detail in the SC-OR section of this MSR (Chapter 3.0) and a determination to address this issue is found in that chapter. Since the potential lack of future capacity on the Main Interceptor impacts LOAPUD, the determination regarding capacity on the Main Interceptor is included in this section as well.

# **DETERMINATION 5-5: SANITARY SEWER SYSTEM CAPACITIES**

Based on a system-wide average dry weather flow of 0.81 mgd, LOAPUD's sewer system has adequate capacity to handle existing and future wastewater flows. The District adds new lines and upgrades existing lines as needed.

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<sup>&</sup>lt;sup>3</sup> ADWF is the flow for an average day during the dry weather months of May through October, and represents the baseline of sewage flow for the service area. The ADWF includes sewage discharges plus the average amount of groundwater infiltration (base GWI) which occurs throughout the dry season.

<sup>&</sup>lt;sup>4</sup> AWWF is the average daily flow during the wet weather season.

<sup>&</sup>lt;sup>5</sup> PWWF is the highest measured flow that occurs during wet weather season.

<sup>&</sup>lt;sup>6</sup> WWPF is the ratio of peak wet weather flow to average dry weather flow (PF = PWWF/ADWF)

<sup>&</sup>lt;sup>7</sup> SC-OR Master Planning and Financial Assistance Study, February 2009

#### DETERMINATION 5-6: SC-OR EAST INTERCEPTOR SEWER TRUNK LINE CAPACITY

The SC-OR East Interceptor trunk sewer line, which serves only LOAPUD's sanitary sewer system, has a current capacity of 15 mgd which is greater than LOAPUD's peak flow of 14 mgd projected for the year 2030.

#### DETERMINATION 5-7: SC-OR MAIN INTERCEPTOR SEWER TRUNK LINE CAPACITY

Data provided by SC-OR shows that the Main Interceptor trunk sewer line may experience surcharge conditions during peak weather flows due to limitations on the influent pumping capacity at the WWTF. Due to this limited influent pumping capacity, the Main Interceptor has reached 92% of capacity during storm events. To address this concern, SC-OR is proposing to both increase the capacity of the Main Interceptor and increase the WWTF influent pumping capacity to 30 mgd, which will reduce the chance of surcharging and SSOs on the Main Interceptor. Additionally, SC-OR anticipates that I&I reduction programs recently implemented by the member entities is expected to reduce I&I flows into the WWTF.

#### SANITARY SEWER IMPROVEMENTS

According to LOAPUD, there are no current plans for expansion of District infrastructure other than developer driven main line extensions on a case-by-case basis. The District has completed Phase I of the State Line Sewer Replacement Project, which replaced and up-sized the State Line Interceptor from the tie-in at the SC-OR East Interceptor, easterly across the U.P.R.R. and Lincoln Blvd. to Myers Street. The District has secured funding for the State Line Sewer Replacement Project 2009 Phase II and has awarded the construction contract for that project. The Phase II improvements will continue easterly from the end of the Phase 1 work at Myers Street, and replaces and up-sizes approximately 500 feet of the interceptor. Phase III of the State Line Sewer Replacement Project will replace all the remaining deficiencies in the State Line Interceptor as addressed in LOAPUD's Sewer System Master Plan. The estimate for the Phase III work is \$3.6 Million and the project is on the priority list for Federal Stimulus Funding. This year the District plans to start the first phase of the Villa Verona STEP (Septic Tank Effluent Pump) System Replacement Project, upgrading that system to a conventional gravity system.

# **INFLOW AND INFILTRATION (1&I)**

During wet weather conditions a large amount of I&I enters LOAPUD's sewer system. This flow, combined with wet weather flows from the other two member entities' collection systems, has a significant impact on the SC-OR WWTF which must treat and dispose of the excess flows regardless of the source. LOAPUD's average dry weather flow is 0.81 mgd, but the District's average wet weather flow is 4.8 mgd, with a wet weather peaking factor of 9.0, indicating that large and excessive amounts of stormwater runoff and/or groundwater are entering the District's sewer system.

LOAPUD has taken steps to reduce I&I in their system and has implemented an I&I reduction program that focuses on locating and repairing the defective areas. The District inspects and cleans approximately 15 miles (21 percent) of their sewer system each year which does not include private lateral connections. LOAPUD repairs approximately 5,000 lineal feet of their sewer system each year. According to the District, they have spent over \$5.5 million over the last ten years on repairs to their sewer system. The District's 2008-09 budget includes \$200,000 in expenditures for sewer system improvements. Table 5-4 below provides information on LOAPUD's I&I expenditures for the period 2004-2009.

Beginning in 2010, SC-OR has sponsored a pipe patch program for all JPA entities. SC-OR has reimbursed member entities half of the purchase cost of pipe patches installed in a given year, up to \$15,000. Over the life of this three-year program, the District has spent \$36,600 in labor and \$89,855 in materials to install 245 pipe patches throughout the District. SC-OR has reimbursed the District \$44,903 over the term of the program with solar power proceeds.

Table 5-4. LOAPUD's Schedule of I&I Costs 2004-2009

SCHEDULE OF "I I" COSTS FOR THE PERIOD 2004-2009				
	WAGES & MATERIALS	EQUIPMENT	REHAB	Annually
2004/05	15,615.05	12,208.20		27,823.25
2005/06 LINCOLN CROSSING	24,801.56	14,702.20	75,000.00	39,503.76 75,000.00
2006/07	28,413.76	23,496.00		51,909.76
2007/08 OAKVALE COURT	11,134.15	1,506.40 79,020.00	175,600.00	12,640.55 254,620.00
2008/09 YTD	20,269.48	1,994.80		22,264.28
TOTAL	100,234.00	132,927.60	250,600.00	483,761.60

#### SEWER SERVICE LATERALS

As mentioned earlier in this section, the District adopted a sewer lateral testing program in May 2009 that, depending on the circumstances, requires testing and maintenance, and repair and replacement if necessary, to private sewer laterals and appurtenances. The District Board directed that the implementation of the testing and repair program be temporarily postponed to obtain input on the program from realtors and contractors.

The purpose of LOAPUD's lateral testing and repair program is to ensure that sewer service laterals are tested, maintained, and repaired or replaced if necessary to reduce I&I entering the District's sewer system and help maintain compliance of the Waste Discharge Permit (WDR) issued to the District by the State Water Quality Control Board and the WDR issued to SC-OR. Testing of a sewer lateral will be required in the following instances:

- Connection of a new structure to the District's sewer system.
- Remodeling of a house, building or property served by the District.
- Change of use of a house, building or property served, for example, from residential to commercial, or from office and professional to restaurant, or from garage to apartment.
- Upon repair or replacement of all or part of the building or lateral sewer lines.
- Prior to the close of escrow upon the sale of a house, building or property served by the District, or by private transfer of a house, building or property served, unless the house, building or property served has been tested within the previous seven (7) years as evidenced by certificate of passing inspection.
- Where inflow or infiltration is suspected, or if a defect in the lateral sewer is suspected based upon observation by the District.
- Upon determination by the District General Manager that the cleaning and testing is required for the protection of the public health, safety or welfare.

Presently the maintenance of both the lower lateral (that portion of the sewer lateral from the property line to LOAPUD's sewer line) and the upper lateral (that portion of a sewer lateral from the property line to a structure) are the responsibility of the property owner. With adoption of this program, the District will assume the maintenance of all newly constructed lower laterals. As existing laterals are tested and certified, the District will issue a Certificate of Passing Inspection and assume maintenance of the lower lateral.

# **DETERMINATION 5-8: INFLOW AND INFILTRATION FLOWS**

During 2008, LOAPUD had an average dry weather flow of 0.81 mgd, but an average wet weather flow of 4.8 mgd, with a wet weather peaking factor of 9.0, all of which indicate that LOAPUD has excessive inflow and infiltration entering their sewage collection system.

# **DETERMINATION 5-9: SANITARY SEWER SYSTEM INSPECTION**

LOAPUD utilizes smoke testing, CCTV equipment, flow meters, and manhole inspections to help identify the locations of I&I which have resulted in numerous repairs to their collection system. LOAPUD should continue to use this approach to solving I&I in their collection system.

### **DETERMINATION 5-10: SANITARY SEWER SYSTEM INSPECTION**

LOAPUD currently cleans and inspects approximately 15 miles (21 percent) of their sewer system each year and should consider enhancing this program each year in a greater effort to reduce I&I and prevent sanitary sewer overflows. The clean and inspect program has been enhanced through the SC-OR pipe patching program.

#### **DETERMINATION 5-11: SEWER LATERAL TESTING PROGRAM**

LOAPUD recently adopted a comprehensive sewer lateral testing program that will help reduce I&I entering private sewer laterals and should consider assistance and outreach programs to landowners to encourage greater participation in this program.

#### FINANCIAL ABILITY OF AGENCY TO PROVIDE SERVICES

The Lake Oroville Area Public Utility District is a public agency formed and existing under the laws of the State of California, and as such is a non-profit, tax-exempt district. The District accounts for its operations and activities as a utility enterprise fund. The enterprise fund is operated in a manner similar to private business enterprises where the intent of the governing body is that costs (expenses, including depreciation) of providing goods or services on a continuing basis be financed or recovered primarily through user service charges.

The District distinguishes *operating* revenues and expenses from *non-operating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. Principal operating revenues of the District are charges to customers for sales and services including operating charges collected through special assessments on certain property tax rolls. Operating expenses for the District include salaries and benefits, supplies and other services, and insurance premiums.

Revenues and expenses are recognized on the accrual basis. Revenues are recognized in the accounting period in which they are earned and expenses are recognized in the period incurred, regardless of when the related cash flows actually take place. When both restricted and unrestricted resources are available for use, it is the District's policy to use restricted resources first, then unrestricted resources as needed.

LOAPUD has three primary sources of operating revenue:

- Service fees
- Property taxes
- Earned interest

Current LOAPUD fees are found in Table 5-5.8 Connection fees and capacity charges for industrial uses are determined on a case by case basis. In addition to these service charges, LOAPUD also collects line extension fees and inspection fees.

Table 5-5. LOAPUD Service Charges for 2012-13

Type of Service Charge	Service Rate
Service Charge (Primary System)	\$12.55/EDU/month
RDA Debt Service (Primary System)	\$4.90/EDU/month
Pumping Charge (Primary System)	\$4.35/EDU/month
KRE Pumping Charge (Primary System)	\$1.87/EDU/month
STEP Service Charge	\$17.40/EDU/month
Residential/Commercial Connection Fee	\$793.00/EDU
Residential/Commercial Capacity Charge	\$3,383.00/EDU
Annexation Fee	\$765.00/acre

Annual audit reports for FYs ending 2011 and 2012 and financial statements for the District were reviewed to determine fiscal viability, suitability of current funding practices, and potential fiscal impacts resulting from new legislation.

In accordance with Government Code Section 53901, every local agency shall file a copy of its annual budget with the County Auditor of the County in which it conducts its principal operations unless exempted by the County Auditor 60 days after the beginning of its fiscal year. The District submits its budget resolution to the County annually in July and its financial statement in November.

The Auditor's Report for FY 2012 for the District noted two material weaknesses in financial reporting or operations. A material weakness is a condition in which one or more of the internal control components does not ensure accuracy in financial statements or provide adequate internal oversight. The material weaknesses identified in the Auditor's Report include: 1) the hiring of an accountant or CPA to compile full disclosure financial statements; and 2) purchasing fixed asset software or designing a spreadsheet to maintain the District's fixed assets and to compute depreciation and estimate useful lives for the District's fixed assets.

During the year ended June 30, 2012, the District's net assets decreased \$352,848 (3.6%), from \$9,800,000 to \$9,400,000. The District's operating revenues increased \$248,700 (33%) while operating expenses decreased \$12,089 (0.7%). Equity invested in capital assets, net of related debt, decreased \$540,247 from \$8.3 million to \$7.7 million. Restricted net assets decreased \$109,754. Table 5-6 below summarizes LOAPUD's net assets for the 2011 and 2012 fiscal years.

<sup>&</sup>lt;sup>8</sup> LOAPUD 2009-10 Fee Schedule, effective July 1, 2009, Resolution 4-09 adopted June 9, 2009

<sup>&</sup>lt;sup>9</sup> Auditor's Report, prepared by David Hammon & Co, October 1, 2008

**Table 5-6. LOAPUD Net Assets – FY 2011 & 2012** 

Lake Oroville Area Public Utility District's Net Assets (In Thousands of Dollars)		
	2012	2011
Current and other assets Restricted and noncurrent assets Capital assets	\$508 1,505 12,320	\$233 1,613 12,925
Total Assets	14,333	14,771
Long-term debt Other Liabilities	4,539 386	4,616 394
Total Liabilities	4,925	5,010
Net Assets: Invest in capital assets, net of debt Restricted Unrestricted	7,726 1,296 386	8,266 1,406 <u>89</u>
Total Net Assets	\$9,408	\$9,761

During the fiscal year 2012, 85% of the District's operating revenue came from sewer service charges, up from 84% during the fiscal year 2011. The District's operating expenses decreased 0.7% to \$1,831,692, primarily due to a mid-year reduction in administration overhead costs. The District's non-operating revenues, net of non-operating expenses, decreased 4.5% to \$478,447.

The District incurred a \$831,295 operating loss during fiscal year 2012, and a \$1,092,084 loss in year 2012. These operating losses are offset by the funds received from non-operational revenues. Table 5-7 provides a breakdown of LOAPUD's changes in equity for the 2011 and 2012 fiscal years.

Table 5-7. LOAPUD Changes in Equity – FY 2011 & 2012

Lake Oroville Area Public Utility District's Changes in Equity (In Thousands of Dollars)		
Revenues: Charges for services Taxes Interest	\$ 1166 272 40	2011 \$924 291 38
Loss on Abandonment of Equipment  Total Revenues  Expenses	0	0
Administration and general Sewage collection and services Depreciation	629 573 630	694 530 <u>620</u>
Total Expenses  Change In Net Assets	<u>1,832</u> <u>\$(353)</u>	

Overall, LOAPUD is financially stable and is capable of providing sewer collection and conveyance services to District customers. LOAPUD should continue to review and revise their sewer service and connection charges to recover operational and maintenance costs, build capital reserves and implement the lateral replacement program. As the implementation of the new SSMP/SSO requirements proceed, it is likely that all of the SC-OR member entities will require rate increases to cover increased SSMP-related operating expenses (systematic sewer collection system cleaning, inspection, and repair). The revenue received by LOAPUD from property tax is being reduced (and may likely be phased out) in future years because of the increased requirements for special district financial contributions to reduce the State's debt. In anticipation of this, LOAPUD should consider increasing its service fees and connection charges in order to reduce its reliance on property taxes. The District implemented a rate increase on July 1, 2011. Sewer service rates were increased by \$3.00/month/EDU and the Kelly Ridge Estates (KRE) pumping charge increased by \$0.47/month/EDU. This rate increase also includes a \$1.00/month/EDU annual increase to sewer service rates for 5 years beginning July 1, 2012.

#### DETERMINATION 5-12: FINANCIAL ABILITY OF AGENCY TO PROVIDE SERVICES

LOAPUD's primary source of revenue is service fees (85%) with additional revenue from connection charges, property taxes, and earned interest.

#### DETERMINATION 5-13: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

Current sewer service and connection charges, combined with income from other sources, are adequate to cover the costs of providing services; however, the District should continue to review and revise their sewer service and connection charges to recover operational and maintenance costs, build a capital reserve and reduce its reliance on revenue from property taxes. The District implemented a rate increase on July 1, 2011, which includes a \$1.00/month/EDU annual increase to sewer service rates for 5 years beginning July 1, 2012.

As the implementation of the new SSMP/SSO requirements proceed, it is likely that all of the SC-OR member entities will require rate increases to cover increased SSMP-related operating expenses (systematic sewer collection system cleaning, inspection, repair, and reporting costs).

The District submits its annual budget to the County Auditor in compliance with California Government Code Section 53901.

# STATUS OF, AND OPPORTUNITIES FOR, COST AVOIDANCE AND SHARED FACILITIES

LOAPUD is a part of the Sewerage Commission-Oroville Region (SC-OR) Joint Powers Authority, along with the City of Oroville and the Thermalito Water & Sewer District, each of which provides only wastewater collection and conveyance systems. LOAPUD currently does not share facilities or maintenance resources with any other public entity.

The District utilizes several cost avoidance measures in its operations. The District is exposed to various risks of losses related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees and natural disasters. The District transfers risks that may arise from these and other events through the purchase of liability insurance. The District recently installed supervisory control and data acquisition (SCADA) systems in their larger pump stations, which has resulted in reduced systems monitoring activities by District staff. Additionally, the District is exploring the installation of alternate energy sources, such as solar energy, to help reduce their electrical utility bills.

Given the large cost of capital improvements, a careful planning process is a crucial means of cost avoidance. The District plans for future funding of necessary improvements utilizing budgetary tools such as rate structure, connection fees, and property tax revenues. Other cost avoidance measures include applying for grants, sharing safety training costs with the South Feather Water and Power Agency, the City of Oroville, and the Thermalito Water and Sewer District, and utilizing a small crew for smaller projects.

The District does not have plans to share personnel for regular operations and maintenance activities. Sharing or jointly purchasing specialized equipment should be evaluated for possible cost savings. The District staff and equipment is always available to serve for mutual aid assistance in the event of an emergency.

There are significant opportunities for shared facilities with the other SC-OR entities, which could result in savings to the districts' ratepayers. As an example, the SC-OR member entities could share operations and maintenance personnel, equipment for construction efforts, pipe inspection and repair, and tools. There is currently no formal program established between the member entities to foster the sharing of equipment or personnel. There is also an opportunity for the member agencies to order supplies and materials in bulk, which has the potential to result in significant cost savings.

Beginning in 2010, SC-OR sponsored a pipe patch program for all JPA entities. Using funds from their solar power project, SC-OR matches up to \$15,000 of the cost to purchase pipe patches. Additionally, the entities have shared equipment and expertise during the installation of these patches. This SC-OR-sponsored pipe patch program is a good example of cooperation among the JPA.

# DETERMINATION 5-14: OPPORTUNITIES FOR COST AVOIDANCE AND SHARED FACILITIES

While the District appears to utilize internal cost avoidance opportunities, facilities sharing efforts are not actively pursued. LOAPUD and the other SC-OR member entities should consider establishing a program to 1) share equipment, materials, personnel, expertise, and training and 2) consider purchasing supplies and materials in bulk.

The SC-OR-sponsored pipe patching program is a good example of the cooperation that has recently occurred between the SC-OR member entities, resulting in significant cost savings.

# ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

The Lake Oroville Area Public Utility District operates under the oversight and guidance of a Board of Directors that includes five voting members. The Directors are elected at large and serve staggered four-year terms. The Board of Directors is responsible for setting policy and general administrative procedures for the District, and establishes and regulate rates, fees, service and capacity charges. The policies and procedures set by the Board are administered by the District General Manager. The LOAPUD Board of Directors meet in regular session once monthly on the second Tuesday of each month at 2:00 p.m. at the District Office located at 1960 Elgin Street, Oroville. Special meetings are held as needed.

LOAPUD's Board members receive a \$400/month stipend. LOAPUD appears to comply with all applicable provisions of the Brown Act, including noticing meetings, which are posted at least 72 hours in advance at the District office and on the District's website (http://www.loapud.com).

LOAPUD has eight full-time employees as shown on LOAPUD's organizational chart (Figure 5-4). The only activities performed by outside contractors are engineering, surveying, auditing, and legal services.

The LOAPUD Board of Directors appoints the General Manager. The ratio of managers to workers is appropriate; LOAPUD is not top heavy in managers. LOAPUD has various policies and procedures related to personnel, provision of services, customer relations, operations and maintenance, relationships with other agencies, and the like.

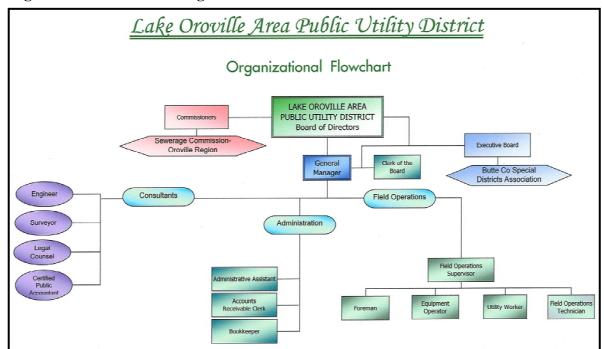


Figure 5-4. LOAPUD Organizational Flowchart

The management structure of LOAPUD is relatively simple and is well suited to the type of operations undertaken by the District. No alternative structures or reorganizations of staff would result in more efficient operations, and the existing structure is considered appropriate. As the LOAPUD collection system increases in size and connection, LOAPUD should add professional and technical staff as needed to ensure that operational and maintenance needs are met.

LOAPUD maintains a website that contains information on the District. Meeting agendas, meeting minutes, LOAPUD's and SC-OR's fee schedules, and links to other public agencies are placed on the District's website. Additionally, District customers can make payments using the District's website. LOAPUD should consider placing staff reports, staff memorandums, and environmental review documents on their website to ensure that the public has easy access to these documents. The District should also consider placing information on I&I and the District's lateral repair and replacement program on their website.

LOAPUD anticipates expanding its boundaries to accommodate new development as it occurs and is currently working towards submitting a sphere of influence (SOI) update request to LAFCo . According to the District, expansion of the SOI will generally be to the south and east of the existing SOI as these areas are identified by the County General Plan Update 2030 for growth.

#### **DETERMINATION 5-15: GOVERNMENTAL STRUCTURE**

LOAPUD is governed by a five-member Board of Directors elected at large by voters within the District. LOAPUD holds meetings which are open and accessible to the public. LOAPUD maintains accountability and compliance in its governance, and public meetings appear to be held in compliance with Brown Act requirements.

#### **DETERMINATION 5-16: MANAGEMENT EFFICIENCIES**

The Lake Oroville Area Public Utility District operates with minimal staff, and contracts for some services such as engineering consulting. The overall management structure of LOAPUD is sufficient to account for necessary services and to maintain operations in an efficient and effective manner. LOAPUD is adequately staffed at this time.

#### **DETERMINATION 5-17: WEBSITE**

LOAPUD maintains a website that contains useful public information. The District's website includes Board of Directors' meeting agendas, LOAPUD rules and regulations, fee schedules, improvement standards, budget, financial audit, the District's Master Plan, and the District's Sanitary Sewer Management Program. LOAPUD should also consider placing information on I&I and the District's sewer lateral testing program on their website.

# ANY OTHER MATTER RELATED TO EFFECTIVE OR EFFICIENT SERVICE DELIVERY, AS REQUIRED BY COMMISSION POLICY

An analysis of the SC-OR Joint Powers Agreement, of which LOAPUD is a member, is discussed in detail in Chapter 2.0 of this MSR.

#### SUMMARY OF DETERMINATIONS

# **DETERMINATION 5-1: SEWER LATERAL PROGRAM**

The sewer lateral inspection program is a fundamental component of the District's overall efforts to increase system efficiency and reduce I&I levels. It is recognized that the inspection program may not yield significant results for many years considering the number of laterals and the criteria for conducting the inspections.

### DETERMINATION 5-2: SANITARY SEWER COLLECTION AND CONVEYANCE SYSTEM

The District's sanitary sewer system, most of which has been constructed in the last 35 years, is generally in good condition. LOAPUD's collection system currently has no significant capacity issues. However, large development project may be required to upgrade the existing collection system downstream if additional capacity is required.

#### **DETERMINATION 5-3: SANITARY SEWER OVERFLOWS**

LOAPUD has had two minor sanitary sewer system overflows since mandatory reporting of SSOs began in 2007. This low number of SSOs is an indication that LOAPUD's sewer system is being adequately operated and maintained.

#### **DETERMINATION 5-4: SANITARY SEWER MANAGEMENT PLAN**

LOAPUD has adopted all elements of its Sanitary Sewer Management Plan as required by the State Water Quality Control Board.

#### **DETERMINATION 5-5: SANITARY SEWER SYSTEM CAPACITIES**

Based on a system-wide average dry weather flow of 0.81 mgd, LOAPUD's sewer system has adequate capacity to handle existing and future wastewater flows. The District adds new lines and upgrades existing lines as needed.

#### DETERMINATION 5-6: SC-OR EAST INTERCEPTOR SEWER TRUNK LINE CAPACITY

The SC-OR East Interceptor trunk sewer line, which serves only LOAPUD's sanitary sewer system, has a current capacity of 15 mgd which is greater than LOAPUD's peak flow of 14 mgd projected for the year 2030.

#### DETERMINATION 5-7: SC-OR MAIN INTERCEPTOR SEWER TRUNK LINE CAPACITY

Data provided by SC-OR shows that the Main Interceptor trunk sewer line may experience surcharge conditions during peak weather flows due to limitations on the influent pumping capacity at the WWTF. Due to this limited influent pumping capacity, the Main Interceptor has reached 92% of capacity during storm events. To address this concern, SC-OR is proposing to both increase the capacity of the Main Interceptor and increase the WWTF influent pumping capacity to 30 mgd, which will reduce the chance of surcharging and SSOs on the Main Interceptor. Additionally, SC-OR anticipates that I&I reduction programs recently implemented by the member entities is expected to reduce I&I flows into the WWTF.

#### **DETERMINATION 5-8: INFLOW AND INFILTRATION FLOWS**

During 2008, LOAPUD had an average dry weather flow of 0.81 mgd, but an average wet weather flow of 4.8 mgd, with a wet weather peaking factor of 9.0, all of which indicate that LOAPUD has excessive inflow and infiltration entering their sewage collection system.

#### **DETERMINATION 5-9: SANITARY SEWER SYSTEM INSPECTION**

LOAPUD utilizes smoke testing, CCTV equipment, flow meters, and manhole inspections to help identify the locations of I&I which have resulted in numerous repairs to their collection system. LOAPUD should continue to use this approach to solving I&I in their collection system.

#### **DETERMINATION 5-10: SANITARY SEWER SYSTEM INSPECTION**

LOAPUD currently cleans and inspects approximately 15 miles (21 percent) of their sewer system each year and should consider enhancing this program each year in a greater effort to reduce I&I and prevent sanitary sewer overflows. The clean and inspect program has been enhanced through the SC-OR pipe patching program.

#### **DETERMINATION 5-11: SEWER LATERAL TESTING PROGRAM**

LOAPUD recently adopted a comprehensive sewer lateral testing program that will help reduce I&I entering private sewer laterals and should consider assistance and outreach programs to landowners to encourage greater participation in this program.

# DETERMINATION 5-12: FINANCIAL ABILITY OF AGENCY TO PROVIDE SERVICES

LOAPUD's primary source of revenue is service fees (85%) with additional revenue from connection charges, property taxes, and earned interest.

#### DETERMINATION 5-13: FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

Current sewer service and connection charges, combined with income from other sources, are adequate to cover the costs of providing services; however, the District should continue to review and revise their sewer service and connection charges to recover operational and maintenance costs, build a capital reserve and reduce its reliance on revenue from property taxes. The District implemented a rate increase on July 1, 2011, which includes a \$1.00/month/EDU annual increase to sewer service rates for 5 years beginning July 1, 2012.

As the implementation of the new SSMP/SSO requirements proceed, it is likely that all of the SC-OR member entities will require rate increases to cover increased SSMP-related operating expenses (systematic sewer collection system cleaning, inspection, repair, and reporting costs).

The District submits its annual budget to the County Auditor in compliance with California Government Code Section 53901.

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The SC-OR-sponsored pipe patching program is a good example of the cooperation that has recently occurred between the SC-OR member entities, resulting in significant cost savings.

# **DETERMINATION 5-15: GOVERNMENTAL STRUCTURE**

LOAPUD is governed by a five-member Board of Directors elected at large by voters within the District. LOAPUD holds meetings, which are open and accessible to the public. LOAPUD maintains accountability and compliance in its governance, and public meetings appear to be held in compliance with Brown Act requirements.

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# **DETERMINATION 5-17: WEBSITE**

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