5. BECKWOURTH COUNTY SERVICE AREA

Beckwourth County Service Area (BCSA) provides wastewater collection and treatment.

AGENCY OVERVIEW

Background

Beckwourth County Service Area (CSA) was formed in 1967⁶² as a dependent special district of the County, governed by the Board of Supervisors. At that time, the community was served by deteriorating individual septic systems and leaching fields where leaching had surfaced in some areas and was running down ditches. In addition, some seepage was found from the leachfields in a few wells.⁶³ The CSA was given the power to establish a sanitary sewer collection system, treatment plant and domestic water supply system; however, the CSA has not initiated water services.⁶⁴

The principal act that governs the CSA is the County Service Area law.⁶⁵ The principal act authorizes county service areas to provide a wide variety of municipal services, including street maintenance, fire protection, extended police protection, water and sewer services.⁶⁶ A CSA may only provide those services authorized in its formation resolution unless the Board of Supervisors applies to and receives authorization from LAFCo for activation of a latent power.⁶⁷ Under LAFCo law, districts must apply and obtain LAFCo approval to exercise latent powers or, in other words, those services authorized by the principal act but not provided by the district at the end of 2000.⁶⁸

BCSA is located in the eastern part of Plumas County, and stretches to the east and west of Beckwourth Genessee Road and to the south of SR 70. The CSA is situated within the boundaries of Beckwourth FD. BCSA is the most eastern wastewater service provider in the

⁶² Board of Equalization.

⁶³ Beckwourth CSA, Engineering Report, Sewer Collection and Treatment System, 1969, p. 1.

⁶⁴ Board of Supervisors, Resolution 1790.

⁶⁵ California Government Code §25210.1-25211.3.

⁶⁶ California Government Code §25210.4 and 25210.4a.

⁶⁷ California Government Code §25213.5.

⁶⁸ Government Code §56824.10.

County. The closest neighboring wastewater service provider to the west is Grizzly Ranch CSD.

Boundaries

BCSA's boundary is entirely within Plumas County. The District's boundaries encompass approximately 0.3 square miles. ⁶⁹ There has been one annexation to the District since its formation. In 2003, BCSA annexed the Eicher property that consisted of about 40 acres. According to the annexation resolution, this annexation of uninhabited land was the logical extension of the boundary to the adjacent territories to which the District is already providing services.⁷⁰

Sphere of Influence

The District's SOI was first established in 1976, and included an area beyond its boundaries where growth was anticipated. The area was a commercial zone along SR 70.⁷¹ The SOI was last updated in 1982. ⁷² It was extended eastward to accommodate commercial and industrial growth along SR 70 and include parcels that were previously split, and also includes a large area north of the boundaries along Beckwourth Genessee Road.⁷³ The size of the current SOI is 0.9 square miles compared to 0.3 square miles of boundary area.

Extra-territorial Services

BCSA began providing extra-territorial services to one connection on the Hartwig property in 2004, a 54-acre territory at the end of Magpie Road, through an out-of-area service agreement (OASA). The District reported that it also provides services to nine additional industrial connections in that area along Industrial Way; although, there are no records on when services were extended there. The parcels where extra-territorial services are provided are shown in Figure 5-1.

In addition, the District will provide services through an OASA to the Fire Center that is currently being constructed by the airport, outside of the District's existing SOI. The facility will be a joint-use fire station located on County-owned and operated land. USFS will cover the costs of constructing a new main directly to the District's treatment ponds. Due to fee negotiations between the District and USFS an agreement has not been completed yet. A requirement of the agreement to provide services is eventual annexation of the territory to the District.

⁷³ Notice of Public Hearing, *Beckwourth CSA*, 1982, Attachment.

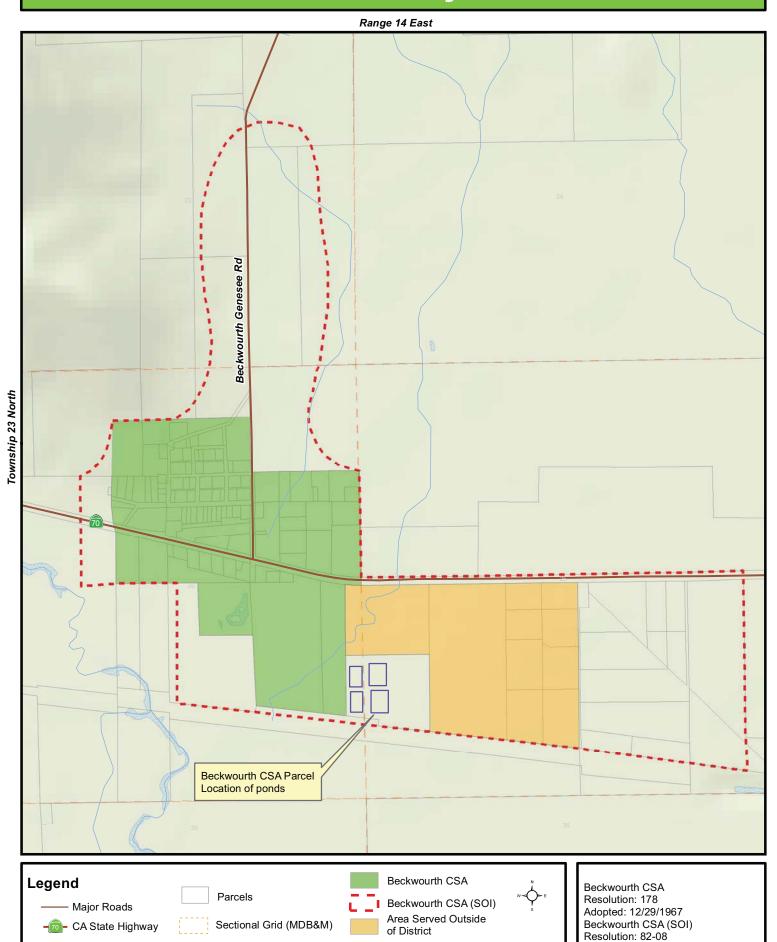


⁶⁹ Total agency area calculated in GIS software based on agency boundaries as of July 1, 2011. The data is not considered survey quality.

⁷⁰ Resolution 2003-014.

⁷¹ Plumas County LAFCo, Sphere of Influence Study for Beckwourth CSA, 1976.

⁷² Resolution 82-07.08.



Waterbodies

Stream / River

Adopted: 7/12/1982
Source: Plumas LAFCo Map Created 5/5/2011

1,320 Feet

Areas of Interest

The District did not identify any areas of interest.

Accountability and Governance

BCSA is governed by the County Board of Supervisors. Board members are elected by supervisorial district and serve staggered four-year terms. Current Supervisors are Terry Swofford, Robert Meacher, Sherrie Thrall, Lori Simpson, and Jon Kennedy.

The Board meets on the first three Tuesdays of every month at 10 in the morning in the Supervisor's Board Room. Board meeting agendas are posted on the County's website. Board meeting minutes are available on the County's website.

Figure 5-2: Beckwourth CSA Governing Body

Beckwourth CSA						
District Contact In	formation					
Contact:	Robert Perreault, Manager	•				
Address:	555 Main Street, Quincy, C	A 95971				
Telephone:	530-283-6222					
Fax:	N/A					
Email/website:	bobperreault@countyofpl	umas.com				
Board of Directors						
Member Name	Position	Term Expiration	Manner of Selection	Length of Term		
Terry Swofford	District 1	December 2012	Elected	4 years		
Robert Meacher	District 2	December 2012	Elected	4 years		
Sherrie Thrall	District 3	December 2014	Elected	4 years		
Lori Simpson	District 4	December 2012	Elected	4 years		
Jon Kennedy	District 5	December 2014	Elected	4 years		
Meetings						
Date:	First three Tuesdays of every month at 10am.					
Location:	Supervisors Board Room.					
Agenda Distribution:	Posted on the County's website.					
Minutes Distribution:	Posted on the County's website.					

The County makes available its budget, general plan, emergency operations plan and other documents on its website. Online CSA information includes financial information contained in the County budget and a webpage with a brief description on the County website. The County reported that development of a separate website for BCSA is a short-term goal. No other CSA public outreach efforts were identified. The County is not required to notify the public prior to performing necessary maintenance activities within a CSA.

If a customer is dissatisfied with the District's services, complaints may be submitted to the wastewater system operator or CSA manager. A majority of the complaints are regarding the age of the system, pump failures and sewer overflows; however, the District reported that they have had few complaints in the past.

Beckwourth CSA demonstrated accountability and transparency in its disclosure of information and cooperation with Plumas LAFCo. The District responded to the questionnaires and cooperated with the document requests.

Planning and Management Practices

The District is managed by the County Engineering Department. The Director of Public Works acts as the District's general manager. The day-to-day operations of the District are managed by three employees who contribute ten hours a month each. In addition, there is one operator who is employed by contract and compensated at a flat rate.

County employees are evaluated at a minimum of once a year. The County employees track hours worked for BCSA in a timesheet. Performance and accountability of the system operator are measured by the operation of the wastewater system and timeliness of responses to requests. The workload of the contract operator is not tracked. Beckwourth CSA reports that it does not perform formal evaluations of overall District performance, such as benchmarking or annual reports.

The District's financial planning efforts include an annually adopted budget. The financial statements are done by the County. The District provided the adopted budget for FY 10-11 and financial statement for FY 09-10. In addition, BCSA plans its capital improvements through a required engineer's report on present and future conditions. The District's goal is to make it more comprehensive in the future.

Existing Demand and Growth Projections

Land uses within the District are primarily residential, suburban, and commercial. ⁷⁴ The area within the District's boundaries is approximately 0.3 square miles.

Population

The District has a small system that serves 70 accounts, of which 54 are residential. Based on average household size throughout the County of 1.9 people, the estimated population of BCSA is 103.

Existing Demand

The District reported that it has observed no significant change in service demand in the last few years. Presently, the District provides services to 70 accounts.⁷⁵ Between 2006 and 2010, the District has added one connection to the system.

_

⁷⁴ Plumas County Parcel Application.

 $^{^{75}}$ It was reported by the District that some parcels may have multiple connections, and at present the exact number of connections is unknown.

Projected Growth and Development

The District anticipates some growth in population and similarly in service demand in the next few years; however, no formal population projections have been made by the District.

The State Department of Finance (DOF) projects that the population of Plumas County will grow by five percent in the next 10 years. Thus, the average annual population growth in the County is anticipated to be approximately 0.5 percent. Based on these projections, the District's population would increase from 114 in 2010 to approximately 120 in 2020. It is anticipated that demand for service within the District will increase minimally based on the DOF population growth projections through 2020.

Any new development in the area will likely require connection to the BCSA system. Private septic systems, in the form of septic tanks and leachfields have been allowed in the past. But due to the presence of high groundwater in the area, this type of disposal is now discouraged.⁷⁶

The District staff reported that to their knowledge there are minimal planned developments that it anticipates serving. It is anticipated that growth within the CSA will be concentrated on Hawley Road, where there are plans for an industrial park. The District will also serve the Fire Center that is being built on North Industrial Way, outside of District's SOI, through an OASA.

As these development projects are constructed and connect to the wastewater system demand for BCSA services will increase. There is sufficient treatment capacity to serve the anticipated increase in demand, as the BCSA treatment facility has four treatment ponds, and presently, only one is in use. However, the District reported that there is a need for upgrade of the facilities to continue providing adequate services.

Growth Strategies

The District is not a land use authority, and does not hold primary responsibility for implementing growth strategies. The land use authority for unincorporated areas is the County.

The potential for expansion of BCSA will largely depend on land use designations as defined in the General Plan update that is underway. The District reported that there may be the potential to annex the Nervino Airport property, including parcels south of SR 70, adjacent to Industrial Way and Hawley Road, and the industrial park.⁷⁷

The District is also considering taking on water services in the community. The industrial park developers have expressed interest in getting water service from the CSA

⁷⁷ BCSA, Application for Approval of an Out-of-Area Service Agreement, 2011, pp. 1-2.



⁷⁶ USFS, OASA Application to LAFCO, 2004, p. 2.

should it initiate water retail. Extension of water services to the industrial park would require annexation of the territory.

Financing

The District reports that its financing levels are not adequate to provide services to its existing territory. The wastewater treatment equipment, particularly the pumps, is aged and present revenues are not sufficient to finance needed improvements and updates. The District did not identify any impacts from the recent recession.

The District's total revenues for FY 09-10 were \$15,330. Primary revenue sources were income from taxes (57 percent) and proceeds from fees (36 percent).

· (5)						
Income/Expenses	FY 09-10 Bı	ıdgeted	geted FY 09-10 Actual		FY 10-11 Budgeted	
Income						
Tax revenue	\$3,994	42%	\$8,788	57%	\$3,994	42%
Use of Money	\$2,270	24%	\$916	6%	\$2,270	24%
State & Federal Aid	\$11	0%	\$76	0%	\$11	0%
Charges for Services	\$3,325	35%	\$5,551	36%	\$3,325	35%
Total Income	\$9,600	100%	\$15,330	100%	\$9,600	100%
Expenses						
Salaries & Benefits	\$12,000	13%	\$14,442	55%	\$12,000	13%
Services & Supplies	\$77,821	87%	\$11,087	42%	\$77,821	87%
Other charges	\$0	0%	\$761	3%	\$0	0%
Total Expense	\$89,821	100%	\$26,290	100%	\$89,821	100%
Net Income	-\$80,221		-\$10,959		-\$80,221	

Figure 5-3: Beckwourth CSA Revenues and Expenditures

Based on the District's budgets for FY 09-10 and FY 10-11, the District assumes the same expenditures each year for budgeting purposes, regardless of the previous year's expenditures.

The District charges its residents sewer fees that were last updated in 1983. BCSA rates for wastewater service are as follows:

- \$12.75 per quarter for private residences;
- ❖ \$33 per quarter for bars, restaurants and lodge halls;
- \$ \$18 per quarter for grocery stores, gas stations and garages;
- ❖ \$3 per quarter per room at a hotel or per trailer space in a trailer park; and
- * \$33 per quarter for public agencies.

The District's expenditures in FY 09-10 were \$26,290. The District's primary expenditures consisted of salaries and benefits (55 percent) and services and supplies (42 percent). In FY 09-10, the District's expenditures exceeded revenues by \$10,959. Reserve funds are used to cover any excess expenditures in any given year.

Capital improvement projects are described in a required engineer's report that gives an overview of present and future conditions. Funding for capital improvement projects is not adequate to fix or replace failing equipment.

The District has no goal or policy regarding financial reserves, but has maintained a fund balance from year to year. There is \$184,000 in the reserve fund, which is sufficient for operating contingencies, but inadequate to cover capital needs.

The District does not participate in any joint power authorities (JPAs) or joint financing mechanisms.

WASTEWATER SERVICES

Service Overview

BCSA provides wastewater collection and treatment through four oxidation ponds.

Services are presently provided throughout the District's boundary and to 10 connections outside of its bounds. There are no private septic systems within the District's bounds.

The system is operated by one contract employee who devotes seven hours per week to maintenance and operation activities and is on call at all times. The contract employee has a Wastewater Operator Grade 1 certification, which meets the requirements of the system.

Facilities and Capacity

The District operates and maintains four oxidation ponds and 2.8 miles of collection system.

The oxidation ponds were built in 1973 and 1974 and consist of photosynthetic treatment and oxidation and evaporation in two ponds. The District operates primarily out of two ponds and uses the other two ponds as backup. Each pond has the capacity to hold one acre foot of effluent. The District reported that the ponds are generally in fair to poor condition.

The District is subject to waste discharge requirements (Order No. 96-135) adopted by the RWQCB. According to the WDRs, the 30-day average daily dry weather flows may not exceed 20,000 gallons. Average dry weather flow to the system in 2010 was 5,016 gpd, which consists of 25 percent of the system's permitted capacity. The peak week wet weather flow to the system in 2010 was 20,063 gpd. On average, flows are well below the capacity of the ponds, which allows for additional pond capacity during rain events.

The collection system is composed of asbestos cement piping dating from 1969, which was identified as also being in fair to poor condition. Based on the peak wet weather flow in 2010, the system has a peaking factor of four, meaning the system has relatively weak structural integrity and there is a moderate to high rate of infiltration and inflow during rain events.

Infrastructure Needs

The District reported that the system is aged and the pumps occasionally fail and need to be replaced. Replacement of the pumps would reduce maintenance costs.

The District has had several violations related to excessive weeds in the treatment ponds in 2005, 2006, and 2008. The excessive vegetation was removed from ponds 1 and 2

in August 2008. Vegetation in ponds 3 and 4 still needs to be removed; however these ponds are not in use.

Based on the District's peaking factor, infiltration and inflow increase significantly during rainy periods. As there are no records of an inspection of the collection system since it was constructed in 1969, it is recommended that the District complete an overall assessment of the system to determine the cause and extent of the infiltration and inflow and any other needs or deficiencies.

There is a plan to construct 6,000 feet of new four-inch low pressure sewer main from the USFS facility to the District's ponds. The main will be fed by septic tank effluent at the Fire Center. USFS is providing the necessary financing for the project. It is estimated that construction of the pipeline will occur over the spring and summer of 2011.

Challenges

The District reported that the most significant challenge to providing adequate services is the lack of sufficient funds for capital needs. There is also a concern that more stringent waste discharge requirements would be a financial drain on the District by putting more demand on staff for monitoring purposes.

Service Adequacy

This section reviews indicators of service adequacy, including regulatory compliance, treatment effectiveness, sewer overflows and collection system integrity.

While the District has had no formal enforcement actions taken by RWQCB and no priority violations since 2005, the District has had seven non-priority violations during that time. The violations were a result of excess vegetation in the ponds and challenges with filing reports with the State, specifically, SSMP elements in 2010, the collection system questionnaire in 2007, and a no spill report in 2007. Seven violations equates to approximately 68 violations per 1,000 population served. By comparison, other wastewater providers in the eastern region of the County averaged 38 violations per 1,000 population served.

Wastewater treatment providers are required to comply with effluent quality standards under the waste discharge requirements determined by RWQCB. The District reported that in 2010, it was never out of compliance with effluent quality requirements. Other wastewater providers in the eastern region of Plumas County were out of compliance on average nine days in 2010.

Wastewater agencies are required to report sewer system overflows (SSOs) to SWRCB. Overflows reflect the capacity and condition of collection system piping and the effectiveness of routine maintenance. The sewer overflow rate is calculated as the number of overflows per 100 miles of collection piping. The District reported no overflows during

the period from 2008 thru 2010, and consequently the overflow rate is zero. Other providers in the region averaged an SSO rate of 3.8 per 100 miles of collection piping.

There are several measures of integrity of the wastewater collection system, including peaking factors, efforts to address infiltration and inflow (I/I), and inspection practices. As discussed previously, the District has a peaking factor of four resulting from moderate to high I/I. Other wastewater providers in the region have an average peaking factor of 4.3.

Figure 5-4: Beckwourth CSA Wastewater Service Adequacy Indicators

Wastewater Service Adequacy and Efficiency						
Regulatory Compliance Rec	ord, 2005-10)				
Formal Enforcement Actions	0	Informal Enforcement Actions	3			
Formal Enforcement Action Type		Description of Violations				
NA						
Total Violations, 2005-10						
Total Violations	7	Priority Violations	0			
Service Adequacy Indicator	'S					
Treatment Effectiveness Rate ²	100%	Sewer Overflows 2009 - 2010 ³	0			
Total Employees (FTEs)	0.2	Sewer Overflow Rate ⁴	0			
MGD Treated per FTE	0.027	Customer Complaints CY 10: Odor (0),	spills (0), other (0)			
		_				

Source Control and Pollution Prevention Practices

The District does not practice any source control or pollution prevention, as there are no particularly large dischargers or dischargers with unique loads.

Collection System Inspection Practices

BCSA has no adopted inspection practices and there are no records of the system ever being inspected.

Notes

- (1) Order or Code Violations include sanitary sewer overflow violations.
- (2) Total number of compliance days in 2010 per 365 days.
- (3) Total number of overflows experienced (excluding those caused by customers) from 2008 to 2010 as reported by the agency.
- (4) Sewer overflows from 2009 to 2010 (excluding those caused by customers) per 100 miles of collection piping.

Figure 5-5: Beckwourth CSA Wastewater Profile

I Iguite 5 5. Deckwoo	i tii tii tii tii tii tii tii tii tii t	1 I UIIIC					
Waste	water Service	Configurat	ion and Dem	and			
Service Configure	ation						
Service Type Service Provider(s)							
Wastewater Collection		BCSA					
Wastewater Treatment		None					
Wastewater Disposal		BCSA					
Recycled Water		None					
Service Area							
Collection:		Collection services are are provided throughout the District's bounds and to 10 connections outside of bounds.					
Treatment:		NA					
Recycled Water:		NA					
Service Demand							
	Connections (2010)			Flow (gpd)			
Туре	Total	Inside Bounds	Outside Bounds	Average			
Total	70	62	8	4,658			
Residential	54	54	0	Unknown			
Commercial	8	8	0	Unknown			
Industrial	8	0 8 Unknown					
Historical and Projected Demand (AADF in gallons per day) ²							
2005	2010	2015	2020	2025			
Unknown ³	4,658	4,658 4,823 4,896					

Note:

- (1) NA: Not Applicable; NP: Not Provided.
- (2) The District projects no growth through 2015, projections thereafter are based on the 0.05 percent annual average growth rate projected by DOF for the entire County.
- (3) The lift station was not metered until 2007.

Wastewater Infrastructure Wastewater Collection, Treatment & Disposal Infrastructure

System Overview

Treatment level: Primary

Facility Name	Capacity	Condition	Year Built
Four treatment ponds	20,000 gpd	Fair to Poor	1973/1974

Collection & Distribution Infrastructure

Sewer Pipe Miles 2.8 Sewage Lift Stations 1

Treatment Plant Daily Flow (mgd)

ADWF (mgd)	% of ADWF Capacity in Use	Peak Wet (mgd)	Peaking Factor
5,016	25%	20,063	4.00

Infiltration and Inflow

Based on the District's peaking factor, infiltration and inflow increase significantly during rainy periods.

Infrastructure Needs and Deficiencies

The District reported that the system is aged and the pumps occasionally fail and need to be replaced. Replacement of the pumps would reduce maintenance costs. Vegetation from ponds 3 and 4 needs to be removed. Additionally, there is a need for an updated engineer's report for the entire system.

Wastewater Facility Sharing

Facility Sharing Practices

Administration for the District is provided by the County Department of Engineering, which shares county facilities with other county departments.

Facility Sharing Opportunities

The District did not identify any further opportunities related to facility sharing.

Wastewater Rates and Financing								
Wastewater Rates-Ongoing Charges FY 10-11 ¹								
	Rate Des	scription	Avg. Monthly Charges		•	Demand ²		
Residential	Flat quarterly fee of \$12.75 for residnetial connections.			\$4.25		250 gpd		
Rate Zones								
None								
Rate-Setting Procee	dures							
Last Rate Change	7/6/1983 Frequency of Rate Changes Rates have not been updated for 30 years					d for		
Wastewater Develo	pment Fees an	d Require	ments					
Fee Approach	There are no records to determine how the fee was adopted in 1983.							
Connection Fee Amount	\$5 per from and \$250 pe		erty to b	e served	with a mi	nimum charge of \$	500,	
Wastewater Enterp	rise Revenues,	FY 09-10	Opera	iting E	xpendit	ures, FY 09-1	0	
Source	Amoui	nt		Amount				
Total	\$15,331	100%	Total			\$26,290		
Rates & Charges	\$5,434	35%	Adminis	Administration		\$14,442		
Property Tax	\$8,788	57%	0 & M			\$11,087		
Grants	\$0	0%	Capital Depreciation NR		NR			
Interest	\$916	6%	Debt \$0		\$0			
Connection Fees	\$117	1%	Other			\$761		
Other	\$76	1%						
Notes:								

- (1) Rates include wastewater-related service charges and strength and flow charges. Average monthly charges calculated based on average consumption. Rates are rounded for presentation.
- (2) Wastewater use assumptions by customer type were used to calculate average monthly charges. Assumed use levels are 250 gallons per home per day, and are consistent countywide for comparison purposes.
- (3) Connection fee amount is calculated for a single-family home.

BECKWOURTH CSA DETERMINATIONS

Growth and Population Projections

- ❖ The District's estimated population is 103.
- There has been no significant change in service demand in the last few years.
- Minimal growth in population and similarly in service demand is expected in the next few years if planned developments are constructed.

Present and Planned Capacity of Public Facilities and Adequacy of Public Services, Including Infrastructure Needs and Deficiencies

- ❖ There is sufficient treatment capacity to serve current needs and the anticipated increase in demand.
- ❖ The system is aged and the pumps occasionally fail and need to be replaced.
- ❖ BCSA plans its capital improvements through a required engineer's report on present and future conditions, which needs to be updated, as it was last completed in 1969.
- ❖ Based on the District's peaking factor, infiltration and inflow increase significantly during rainy periods. As there are no records of an inspection of the collection system since it was constructed in 1969, it is recommended that the District complete an overall assessment of the system to determine the cause and extent of the infiltration and inflow and any other needs or deficiencies.

Financial Ability of Agencies to Provide Services

- ❖ The District's financing levels are not adequate to provide services to its existing territory.
- ❖ Funding for capital improvement projects is not adequate to fix or replace failing equipment.
- ❖ Wastewater rates are the lowest of the providers in the region and were last updated in 1983. It is recommended that the District update its rates so that they are comparable to other service providers and in order to finance necessary capital improvements.

Status of, and Opportunities for, Shared Facilities

- ❖ The District operates out of county facilities with other county departments.
- ❖ No further opportunities for facility sharing were identified.

Accountability for Community Service Needs, Including Governmental Structure and Operational Efficiencies

- ❖ BCSA demonstrated accountability and transparency by disclosing financial and service related information in response to LAFCo requests.
- ❖ Development of a website for BCSA to keep its constituents better informed is a short-term goal.
- ❖ There may be the potential to annex the Nervino Airport property, including parcels south of SR 70, adjacent to Industrial Way and Hawley Road, and the industrial park, but it will largely depend on land use designations as defined in the General Plan update that is underway.
- ❖ Annexation of BCSA extraterritorial service areas is an option that would promote logical boundaries. The District currently provides service outside of its bounds to 10 industrial connections.
- ❖ The District is considering taking on water services in the community.