

# 15. GRIZZLY RANCH COMMUNITY SERVICES DISTRICT

---

Grizzly Ranch Community Services District (GRCS D) provides retail water delivery, wastewater collection and disposal services, with the facilities to provide wastewater treatment as well. Services are provided through a contract with Pacific Environmental Resources Corporation. This is the first Municipal Service Review for the District.

## AGENCY OVERVIEW

---

### Background

---

Grizzly Ranch CSD was formed in 2003<sup>321</sup> as a dependent special district of the County. The formation was related to the specific subdivision development project, known as “Grizzly Ranch”. At that time, the territory of the proposed district was uninhabited. The purpose of the formation of the District was to provide “governance over the future community of Grizzly Ranch through an entity with all permitted powers/uses allowed under Community Services District law, and specifically to create powers to the provision of domestic community water delivery and sewer treatment services.”<sup>322</sup> The formation resolution indicated that the governing body was to be a Board of Directors consisting of five members elected to staggered four-year terms, but until there are sufficient registered voters in the CSD, the Commission appointed the Board of Supervisors as the initial Board of Directors.<sup>323</sup> Currently, the Board of Supervisors is still the governing body.

The principal act that governs the District is the State of California Community Services District Law.<sup>324</sup> CSDs may potentially provide a wide array of services, including water supply, wastewater, solid waste, police and fire protection, street lighting and landscaping, airport, recreation and parks, mosquito abatement, library services; street maintenance and drainage services, ambulance service, utility undergrounding, transportation, abate graffiti, flood protection, weed abatement, hydroelectric power, among various other services. CSDs are required to gain LAFCo approval to provide those services permitted by the principal act but not performed by the end of 2005 (i.e., latent powers).<sup>325</sup>

---

<sup>321</sup> Board of Equalization.

<sup>322</sup> Resolution 2003-020.

<sup>323</sup> Resolution 2003-020.

<sup>324</sup> Government Code §61000-61226.5.

<sup>325</sup> Government Code §61106.

GRCSO is located in the eastern part of Plumas County and serves the subdivision of Grizzly Ranch on Grizzly Road. The nearest water and wastewater utility service providers include the City of Portola to the west, Beckwourth CSA to the east and Grizzly Lake CSD to the north.

### Boundaries

GRCSO's boundary is entirely within Plumas County. The District's boundaries encompass approximately 1.6 square miles.<sup>326</sup>

There have been no annexations to or detachments from the District since its formation.

### Sphere of Influence

As a condition of approval of the District, the developer was to file an application to designate a Sphere of Influence within one year of formation. The developer never filed the application with Plumas LAFCo and the SOI for GRCSO was never adopted. LAFCo will need to adopt an SOI for the District during the SOI updates following the completion of this MSR.

LAFCo staff previously found that there were property owners outside of the District that reportedly experienced a loss of water due to the operations of the newly formed GRCSO. While a previous LAFCo Staff Report indicated that these properties may need to be included in the District's SOI, so they can be later annexed into the District,<sup>327</sup> the District reported that there have been no complaints regarding this issue since those received at the commencement of the development. The development permit for Grizzly Ranch stipulated that groundwater monitoring be completed over five year period. As a result of this requirement, a groundwater monitoring report was completed in 2010, which found that "significant groundwater withdrawals by Grizzly Ranch have resulted in no long-term reduction in aquifer storage...even in dry years." Additionally, it was found that there were no adverse effects on neighboring residential wells as a result of groundwater withdrawals at Grizzly Ranch. Consequently, it appears that drawdown on neighboring properties is not presently a concern.

### Extra-territorial Services

The District does not provide services outside of its boundaries.

### Areas of interest

The District did not identify any areas of interest.

---

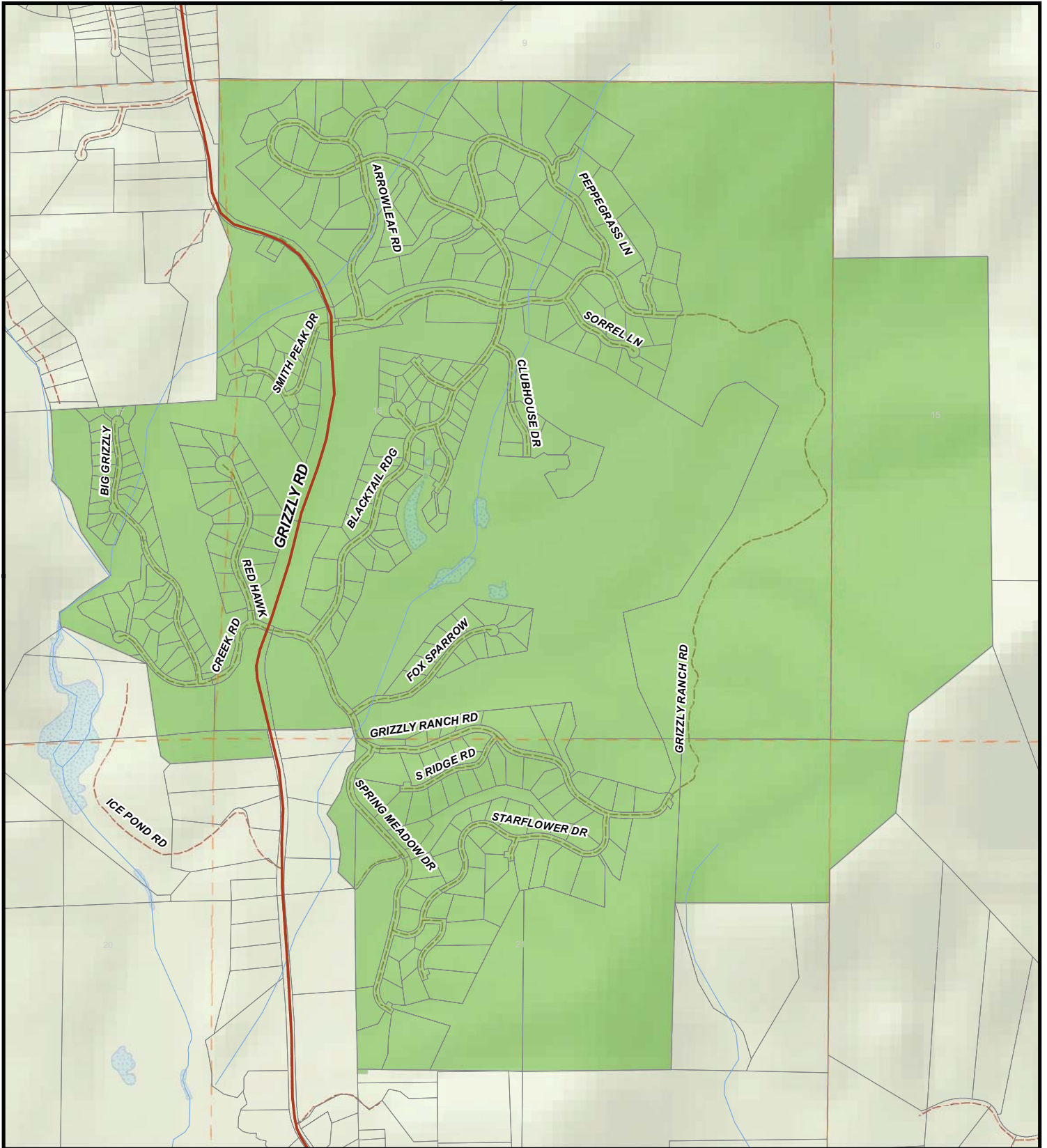
<sup>326</sup> Total agency area calculated in GIS software based on agency boundaries as of July 1, 2011. The data is not considered survey quality.

<sup>327</sup> Plumas LAFCo Staff Report, *Initiating SOI/MSR for Grizzly Ranch*, 2004.

Range 14 East

Township 23 North

Township 22 North



### Legend

— Major Roads

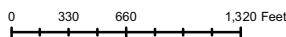
— Stream / River

Waterbodies

Parcels

Sectional Grid (MDB&M)

Grizzly Ranch CSD



Grizzly Ranch CSD  
 Resolution: 2003-020  
 Adopted: 8/25/2003

Grizzly Ranch (No SOI)  
 Resolution: None  
 Adopted:

Source: Plumas LAFCo Map Created 5/4/2011

---

## Accountability and Governance

---

Until there are sufficient registered voters in the District to assume governance responsibilities and elect the Board of Directors, GRCSO is governed by the County Board of Supervisors. Board members are elected by supervisorial district and serve staggered four-year terms. Current board members 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 15-2: Grizzly Ranch CSD Governing Body**

<b>Grizzly Ranch CSD</b>				
<b><i>District Contact Information</i></b>				
<b>Contact:</b>	Robert Perreault, Manager			
<b>Address:</b>	555 Main Street, Quincy, CA 95971			
<b>Telephone:</b>	530-283-6222			
<b>Fax:</b>	N/A			
<b>Email/website:</b>	bobperreault@countyofplumas.com			
<b><i>Board of Directors</i></b>				
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
<b><i>Meetings</i></b>				
<b>Date:</b>	First three Tuesdays of every month at 10am.			
<b>Location:</b>	Supervisors Board Room.			
<b>Agenda Distribution:</b>	Posted on the County's website.			
<b>Minutes Distribution:</b>	Posted on the County's website.			

The County makes available its budget, general plan, emergency operations plan and other documents on its website. Online CSD information includes financial information contained in the County budget and a webpage with a short description on the County website. The County reported that development of a separate website for GRCSO is a short-term goal. As part of its outreach efforts, GRCSO sends out the annually required consumer confidence report on the District's water quality.

If a customer is dissatisfied with the District's services, complaints may be submitted to the operator or to the clerk who would then refer customers to the operator. The District's general manager is notified of the complaints and oversees the process till complaints are resolved. Most of the complaints are about faulty equipment and bills. The District had two complaints in 2010.

Grizzly Ranch CSD 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 Plumas County Engineering Department manages the District. The Director of Public Works acts as the general manager of the District and is supported by two other county staff. The District contracts with Pacific Environmental Resources Corporation (PERC) for facility operation and maintenance. PERC maintains one manager and two field staff that handle the day-to-day operations of both the water and wastewater facilities.

County employees are evaluated at a minimum of once a year. The County employees track hours worked for GRCSO in a timesheet. PERC is evaluated informally every time the contract is renewed. PERC employees submit timesheets internally within the company. GRCSO reports that it does not perform formal evaluations of overall District performance, such as benchmarking or annual reports. The District is regulated by the Plumas County Public Health Agency – Environmental Health Division. Regular inspections are completed by the Division, which evaluate the District’s system and operations. The most recent inspection was completed in December 2009.

The District’s financial planning efforts include an annually adopted budget. The financial statements are done by the County and are not audited. The District provided the adopted budgets for FYs 09, 10, 11 and 12 and financial statements for FYs 09 and 10. Other planning documents regarding district services are the Potable Water Master Plan, Sewer Master Plan and Recycled Water Master Plan. In order to plan for capital improvements, the District plans to conduct a comprehensive engineering report with projections.

---

## Existing Demand and Growth Projections

---

The land uses within the District mainly include suburban, recreational and commercial.<sup>328</sup> The area within the District’s boundaries is approximately 1.6 square miles.

### Population

The District’s total build-out potential is 380 single family homes and 23 commercial units that include an 18-hole golf course, a golf clubhouse, and some limited commercial facilities such as small stores, shops and offices. When every single family home is constructed, based on an average household size throughout the County of 1.9 people, the estimated population of the subdivision will be 722.

---

<sup>328</sup> Plumas County Parcel Application.

Presently, 46 homes have been built, and 12 commercial facilities, which equates to an estimated population of 87.

### Existing Demand

The District reported that historically growth in population and service demand had been about one percent annually. Presently, the District provides services to 58 water and wastewater connections and one recycled water connection. Between 2006 and 2010, the District has added 23 connections to the system. Demand is higher in the summer when there is a higher rate of occupancy.

### Projected Growth and Development

The District anticipates growth in population and similarly in service demand in the next few years, as the economy recovers; 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 87 in 2010 to approximately 91 in 2020. It is anticipated that demand for service within the District will increase minimally based on the DOF population growth projections through 2020.

The District reported that Grizzly Ranch subdivision has the potential to experience high growth, but the recent recession stalled the development. Empty lots are located throughout the property. Presently, development is concentrated around the golf course.

The District anticipates an increase in demand for services if construction resumes, but reports that there is plenty of capacity to serve it. Grizzly Ranch is a new system that was designed to serve build-out of the entire area.

### 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.

GRCSD does not have an SOI proposal for the Commission's consideration at this time.

There are limited opportunities for expansion of the District's boundaries, particularly given that the system was designed for build-out of the Grizzly Ranch subdivision alone. Neighboring areas are primarily lower density areas with private water and septic systems. The District indicated that there may be a potential to grow into Dixie Valley.

---

## Financing

---

The District reported that the current financing level is adequate to deliver services; however, the District's revenue has recently waned due to the recession. Due to a slowdown in new development, the District has experienced a decline in connection fee revenue.

The District operates out of a single fund for administration costs and both water and wastewater services. The District's primary revenue source is a benefit assessment (96 percent) on each parcel. Other revenue sources in FY 09-10 included interest on investments (two percent) and connection fees (two percent). The District does not receive revenue from property taxes.

The District charges a benefit assessment on each developed and undeveloped parcel regardless of use, which was first assessed in FY 04-05 and increases four percent annually. In FY 09-10, the assessment was \$1,328.52 per lot. Based on the budget prepared to determine the assessment, \$506.12 is anticipated to be used for water services and \$822.40 is anticipated to be used for wastewater services, assuming administration costs are split evenly between the two utilities.<sup>329</sup> Since the District operates out of a single fund for both utilities, actual expenditures by service type are not available.

The District charges a combined connection fee of \$6,000 for hookup to the District's system for both water and wastewater services. In FY 09-10, there was one new connection to the system.

**Figure 15-3: GRCS D Revenues and Expenditures**

<i>Income/Expenses</i>	<i>FY 09-10 Budgeted</i>		<i>FY 09-10 Actual</i>		<i>FY 10-11 Budgeted</i>	
<b><i>Income</i></b>						
Special Assessment	\$300,000	76%	\$386,995	96%	\$300,000	76%
Use of Money	\$17,000	4%	\$9,955	2%	\$17,000	4%
Connection Fees	\$80,000	20%	\$6,000	2%	\$80,000	20%
<b>Total Income</b>	<b>\$397,000</b>	<b>100%</b>	<b>\$402,950</b>	<b>100%</b>	<b>\$397,000</b>	<b>100%</b>
<b><i>Expenses</i></b>						
Salaries & Benefits	\$5,000	1%	\$0	0%	\$5,000	1%
Services & Supplies	\$394,500	85%	\$358,300	100%	\$394,500	85%
Contingencies	\$63,198	14%	\$0	0%	\$63,198	14%
<b>Total Expense</b>	<b>\$462,698</b>	<b>100%</b>	<b>\$358,300</b>	<b>100%</b>	<b>\$462,698</b>	<b>100%</b>
<b>Net Income</b>	<b>-\$65,698</b>		<b>\$44,650</b>		<b>-\$65,698</b>	

<sup>329</sup> GRCS D, *Proposed Budget*, March 3, 2003, p. 16.

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, which includes a shortfall of \$65,698, regardless of the previous year's expenditures.

The District's expenditures in FY 09-10 were \$358,300. The District's primary expenditures consisted of payments to the contract service provider (93 percent) and other services and supplies (seven percent). In FY 09-10, no expenditures were attributed to administration of the District by county staff.

The monthly charges paid by the District to PERC for operations are \$8,998 in 2011. The monthly charges are adjusted annually. There are supplementary services that were identified in the addendum to the contract. The cost of these supplementary services varies depending on the number of hours the contractor puts in each month. In June 2011, the District was billed an additional \$4,080.

Any necessary capital expenditures are financed through the benefit assessment. Short-term capital improvements are planned for in the District's annual budget. Overall capital needs through build-out of the subdivision are outlined in the District's master plans for the sewer and water systems.

The District did not have any long-term debt at the end of FY 09-10.

The District does not have a reserve goal, but currently maintains about \$695,616 in its reserve, which is approximately two years in operating expenditures.

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



## WATER SERVICES

---

### Service Overview

---

GRCSO provides retail water services consisting of groundwater extraction, treatment and distribution to scattered developed lots throughout the Grizzly Ranch subdivision.

Water system operation and maintenance are provided by a contract operator. The operator dedicates approximately 40 hours to the GRCSO water system each week. The contract operator has a certification level of D1 for distribution and T4 for treatment, which exceeds the required certification levels of the system.

---

### Facilities and Capacity

---

The District's water system infrastructure includes a treatment plant, three wells, a storage tank, and approximately six miles of pipelines. All of the infrastructure has been constructed since 2004 and is considered to be in excellent condition.

The construction of the water system for the subdivision has been split into eight separate units, of which four have been completed. The remaining four units will be developed as demand warrants.

The District straddles the Sierra Valley Groundwater Basin and an undefined groundwater aquifer. The Department of Water Resources estimates storage capacity of the Sierra Valley Basin to be 7.5 million acre-feet to a depth of 1000 feet.<sup>330</sup> Groundwater extraction for agricultural, municipal and industrial uses is estimated to be 3,510 acre-feet annually. Deep percolation of applied water is estimated to be 2,100 acre-feet, meaning that the amount pumped by users is not fully replaced by groundwater recharge. Increases in groundwater development in the mid to late 1970s resulted in the cessation of flow in many artesian wells and large pumping depressions. Since the 1990's, groundwater levels in the basin have recovered to mid-1970 levels.<sup>331</sup> As previously mentioned, a groundwater monitoring report was completed in 2010, which indicated that there had been no long-term reduction in aquifer storage as a result of significant groundwater withdrawals by Grizzly Ranch.

The poorest quality groundwater from the Sierra Valley Basin is found in the central west side of the valley where fault-associated thermal waters and hot springs yield water with high concentrations of boron, fluoride, iron, and sodium. Several wells in this area also

---

<sup>330</sup> DWR, *Sierra Valley Basin - Groundwater Bulletin 118*, 2004, p. 1.

<sup>331</sup> DWR, *Sierra Valley Basin - Groundwater Bulletin 118*, 2004, p. 2.

have high arsenic and manganese concentrations.<sup>332</sup> Due to high-levels of iron, manganese and arsenic in the District's groundwater, it treats for these minerals.

The District owns three wells; however, at present only one well is online and included in the District's permit. Well 3P2 is currently the District's single operational permitted source of water supply. The well has a maximum pumping capacity of 225 gpm and a reliable safe yield (and permitted capacity) of 115 gpm. As part of a study related to aquifer in hardrock, DWR revised the capacity of the well to 20 gpm, which defines the well's current maximum pumping allowed.<sup>333</sup> The revised well yield was set to see how the aquifer responds to the recommended extraction rates and recharge. DWR stated that the permit capacity for Well 3P2 could be increased depending on how the aquifer responds to the recommended extraction rates and recharge.<sup>334</sup>

Well 1P is no longer in use, as it is a challenge to dispose of arsenic contaminated filter backwash water. Well 1P has a maximum pumping capacity of 200 gpm and a reliable safe yield (and permitted capacity) of 30 gpm. DWR has revised the capacity of the well to 135 gpm based on a 90-day sustained yield.

Until recently, Well 9M was not connected to the District's system. When Well 1P was taken offline due to arsenic levels in the treatment backwash, the District needed to find an additional water source to come into compliance with permit requirements. Well 9M was recently connected to the system to ensure adequate source capacity, but was not yet permitted, as of the drafting of this report. The capacity as assigned by DWR is 135 gpm for Well 9M.

Average daily demand is approximately 27 gpm, which equates to 135 percent of the Well 3P2's revised pumping capacity. Once Well 9M is permitted, the average daily flow will be approximately 17 percent of the combined capacity of Wells 3P2 and 9M.

The treatment plant provides injection of a sodium hypochlorite solution followed by treatment for iron, manganese and arsenic. Iron, manganese and arsenic are removed by a two-stage filtration process; the first stage is an iron and manganese oxidation and filtration process, and the second stage is an arsenic filtration process. The plant was constructed in 2004 and is considered to be in excellent condition. The plant has the capacity to treat 0.36 mgd. Presently, average daily demand is 0.039 mgd and peak day demand is 0.13 mgd, which is well within the plant's capacity.

The storage tank is composed of welded steel with a capacity of 675,000 gallons. There is sufficient storage to provide two hours of fire flow (240,000 gallons), plus operational

---

<sup>332</sup> Ibid.

<sup>333</sup> Plumas County Public Health Agency, *Public Water System Inspection Report*, 2009, p. 1.

<sup>334</sup> Correspondence from DWR, Dan McManus, Groundwater Section – Chief, May 3, 2007.

(275,000 gallons) and emergency (160,000 gallons) storage for the currently approved 185 connections.<sup>335</sup>

The distribution system is composed of 6.2 miles of steel and PVC piping.

---

## Infrastructure Needs

---

The primary infrastructure need related to water services is an added water source to replace Well 1P and add capacity for full build-out of the subdivision. Discontinuing use of Well 1P limits the available water sources to only Well 3P2, which is not compliant with the District's operating permit conditions.<sup>336</sup> During the Plumas County Public Health Agency's most recent inspection, the Agency reported that "the CSD must provide and maintain at least two sources of drinking water by either restoring the use of Well 1P or in coordination with an amended water system operating permit, add one or more sources." Options to address this issue include 1) arsenic treatment changes to reduce arsenic concentrations in backwash water, and 2) connecting Well 9M as a replacement or additional water source. The District has elected to connect Well 9M to the system, but the well is not yet permitted.

During the most recent inspection by the Plumas County Public Health Agency, several needs and deficiencies for both wells were identified. For Well 1P the following deficiencies were recognized:

- ❖ Install a casing vent that opens downward with a fine mesh metal screen;
- ❖ Provide at least a 100 ft. separation from the well to the water feature pond and stream, and the recycled water irrigation system; and
- ❖ Modify or replace the enclosure shed to allow for access to maintenance and monitoring equipment and to effectively exclude animals.

Needs and deficiencies for Well 1P identified by the Plumas County Public Health Agency include:

- ❖ Provide at least a 100 ft. separation from the recycled water irrigation system; and
- ❖ Modify or replace the enclosure shed to allow for access to maintenance and monitoring equipment and to effectively exclude animals.

Of these needs and deficiencies, the District reported that all had been adequately addressed by the developer since the inspection in 2009.

---

<sup>335</sup> Plumas County Public Health Agency, *Public Water System Inspection Report*, 2009, p. 9.

<sup>336</sup> *Ibid*, p.4.

---

## Challenges

---

The District presently has a particular challenge with arsenic in excess of permitted levels in backwash from treatment that is discharged to the irrigation storage pond. The District has addressed this issue by taking Well 1P offline, and connecting Well 9M in order to come into compliance with the District’s permit conditions. The District has yet to formally add Well 9M to the District’s permit.

---

## Service Adequacy

---

This section reviews indicators of service adequacy, including the Plumas County Public Health Agency system evaluation, drinking water quality, and distribution system integrity.

**Figure 15-4: GRCSO Water Service Adequacy Indicators**

<b>Water Service Adequacy and Efficiency Indicators</b>			
<b>Service Adequacy Indicators</b>			
Connections/FTE	59	O&M Cost Ratio <sup>1</sup>	6,063,538
MGD Delivered/FTE	0.04	Distribution Loss Rate	10%
Distribution Breaks & Leaks (2010)	1	Distribution Break Rate <sup>2</sup>	16
Water Pressure	36+ psi	Total Employees (FTEs)	1
Customer Complaints CY 2010:	Odor/taste (0), leaks (0), pressure (0), other (2)		
<b>Drinking Water Quality Regulatory Information<sup>3</sup></b>			
	#	Description	
Health Violations	0	NA	
Monitoring Violations	0	NA	
DW Compliance Rate <sup>4</sup>	100%		
Notes:			
(1) Operations and maintenance costs (exc. purchased water, debt, depreciation) per volume (mgd) delivered.			
(2) Distribution break rate is the number of leaks and pipeline breaks per 100 miles of distribution piping.			
(3) Violations since 2000, as reported by the U.S. EPA Safe Drinking Water Information System.			
(4) Drinking water compliance is percent of time in compliance with National Primary Drinking Water Regulations in 2010.			

The County Public Health Agency is responsible for the enforcement of the federal and California Safe Drinking Water Acts and the operational permitting and regulatory oversight of public water systems of 199 connections or less. These systems are subject to inspections by the County Public Health Agency. During the Agency’s most recent annual inspection in 2009, the Agency reported that GRCSO’s water system appears to be generally in good condition and overall well managed.<sup>337</sup> The inspection report did note a need to update the treatment operations plan to include the elements as specified in the operating permit and create a distribution operations plan.

---

<sup>337</sup> Department of Public Health, *Letter to the District Re: Annual Inspection Report*, April 25, 2008, p. 1.

Drinking water quality is determined by a combination of historical violations reported by the EPA since 2000 and the percent of time that the District was in compliance with Primary Drinking Water Regulations in 2010. Since 2000, the District has had no health violations at the wells. By comparison, the other water providers in the eastern region of the County had a median of 21 violations per 1,000 connections served during that same time frame. The median water service provider in the region was in compliance 96 percent of the time in 2010. The District was in compliance with drinking water regulations 100 percent of the time, which was above the regional average.

Indicators of distribution system integrity are the number of breaks and leaks in 2010 and the rate of unaccounted for distribution loss. The District reported 16 breaks and leaks per 100 miles of pipe lines in 2010, while other providers in the region had a median rate of 12 breaks per 100 pipe miles. The District loses approximately 10 percent of water between the water source and the connections served, which was relatively high compared to other providers in the area that averaged seven percent distribution losses.

**Figure 15-5: GRCS D Water Service Tables**

<b>Water Service Configuration &amp; Infrastructure</b>				
<i>Water Service</i>	<i>Provider(s)</i>	<i>Water Service</i>	<i>Provider(s)</i>	
Retail Water	GRCS D	Groundwater Recharge	None	
Wholesale Water	None	Groundwater Extraction	GRCS D	
Water Treatment	GRCS D	Recycled Water	GRCS D	
<i>Service Area Description</i>				
Retail Water	Scattered developed properties throughout the District's boundaries.			
Wholesale Water	NA			
Recycled Water	Grizzly Creek Golf Course			
<i>Water Sources</i>		<i>Supply (Acre-Feet/Year)</i>		
Source	Type	Average	Maximum <sup>2</sup>	Safe/Firm <sup>3</sup>
Sierra Valley Basin	Groundwater	44	32	1,032
<i>System Overview</i>				
Average Daily Demand		38,906 gpd	Peak Day Demand	
			126,000 gpd	
<i>Major Facilities</i>				
Facility Name	Type	Capacity	Condition	Yr Built
GRCS D Treatment Plant	Treatment	0.36 mgd	Excellent	2004
Well 1P	Well	135 gpm <sup>4</sup>	Out of service	2004
Well 3P2	Well	20 gpm <sup>4</sup>	Excellent	2004
Well 9M	Well	135 gpm <sup>4</sup>	Excellent	2005
<i>Other Infrastructure</i>				
Reservoirs	1	Storage Capacity (mg)	0.68 mg	
Pump Stations	1	Pressure Zones	3	
Production Wells	2	Pipe Miles	6	
<i>Facility-Sharing and Regional Collaboration</i>				
<b>Current Practices:</b> Administration for the District is provided by the County, which operates out of county facilities with other county departments.				
<b>Opportunities:</b> No further opportunities to share facilities were identified.				
Notes:				
(1) NA means Not Applicable, NP means Not Provided, mg means millions of gallons, af means acre-feet.				
(2) Maximum supply with only Well 3P2 in operation based on revised permitted capacity by DWR.				
(3) Based on the estimated groundwater recharge rate reported in the District's Potable Water Master Plan.				
(4) Revised capacity by DWR in a letter to CDPH dated May 3, 2007.				

<b>Water Demand and Supply</b>							
<i>Service Connections</i>	<i>Total</i>		<i>Inside Bounds</i>		<i>Outside Bounds</i>		
Total	59		59		0		
Irrigation/Landscape	0		0		0		
Domestic	46		46		0		
Commercial/Industrial/Institutional	12		12		0		
Recycled	1		1		0		
Other	0		0		0		
<i>Average Annual Demand Information (Acre-Feet per Year)</i>							
	2000	2005	2010	2015	2020	2025	2030
Total	NA	NP	39	40	41	42	43
Residential	NA	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>
Commercial/Industrial	NA	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>
Irrigation/Landscape	NA	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>
Other	NA	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>	NP <sup>1</sup>
<i>Supply Information (Acre-feet per Year)</i>							
	2000	2005	2010	2015	2020	2025	2030
Total	NA	NP	44	45	46	47	48
Imported	NA	0	0	0	0	0	0
Groundwater	NA	NP	44	45	46	47	48
Surface	NA	0	0	0	0	0	0
Recycled <sup>1</sup>	NA	0	0	NP	NP	NP	NP
<i>Drought Supply and Plans</i>							
Drought Supply (af) <sup>3</sup>	Year 1: No change		Year 2: No change		Year 3: No change		
Storage Practices	Storage is for short-term emergency supply only.						
Drought Plan	None.						
<i>Water Conservation Practices</i>							
CUWCC Signatory	No						
Metering	No						
Conservation Pricing	No						
Other Practices	The Declaration of Covenants, Conditions, and Restrictions for Grizzly Ranch set forth minimum requirements for the landscaping of areas of the homesite. Generally, enhanced vegetation zones are the only areas that may receive permanent irrigation systems, and owners are encouraged to minimize irrigated areas on their home sites. The use of traditional spray type systems will generally be limited to turf areas, and drip irrigation systems will be required in most landscape situations.						
Notes:							
(1) The connections are not metered, and demand by connection type is unknown.							
(2) The amount of recycled water that is provided in the future will depend on wastewater flows meeting the threshold necessary to turn on the recycled water facility.							
(3) The District has not estimated available supply during a three year drought. During past droughts, the District reported that it has experienced little difference in groundwater levels.							

<b>Water Rates and Financing</b>				
<b>Residential Water Rates-Ongoing Charges FY 10-11</b>				
	Rate Description	Avg. Monthly Charges	Consumption <sup>1</sup>	
Developed and undeveloped lots (regardless of use)	Flat water and sewer assessment per lot served of \$1,328.52, of which water services are planned to account for 38 percent of expenditures.	\$ 42.18	7,600 gal/month	
<b>Rate-Setting Procedures</b>				
Most Recent Rate Change	7/1/10	Frequency of Rate Changes	Annually	
<b>Water Development Fees and Requirements</b>				
Fee Approach	The District's benefit assessment was established in 2004 to cover the estimated budgeted costs of operation and maintenance of the water and wastewater systems. The assessment was calculated to cover operational, capital replacement and administration costs.			
Connection Fee Amount	The District charges a flat hook-up fee of \$6,000 for both water and sewer services.			
<b>Water Enterprise Revenues, FY 09-10</b>			<b>Operating Expenditures, FY 09-10</b>	
Source	Amount	%		Amount
Total	\$153,511	100%	Total	\$236,478
Rates & charges	\$0	0%	Administration	\$0
Property tax	\$0	0%	O & M	\$236,478
Grants	\$0	0%	Capital Depreciation	NP
Interest	\$3,792	2%	Debt	\$0
Connection Fees	\$2,286	1%	Purchased Water	\$0
Other - Benefit Assessment	\$147,433	96%	Other	\$0
Notes:				
(1) Water use assumptions were used to calculate average monthly bills. Assumed use levels are consistent countywide for comparison purposes.				



## WASTEWATER SERVICES

---

### Service Overview

---

The District maintains facilities to provide wastewater services in the form of collection, treatment, and disposal, as well as recycled water for irrigation purposes; however, presently, the District does not provide treatment services, as influent flows do not meet the threshold level needed to turn on the District's treatment facility. All sewage is pumped and hauled out to a separate facility for treatment by a contractor. Once flows have reached 6,000 gpd, which the District is reportedly nearing during high demand periods in the summer, the treatment facility will be operational.

The system is operated by a contract provider with one manager and two field staff who contribute 20 hours per week to the District's wastewater operations and maintenance. While it is not in the contractor's agreement, the company presently inspects, maintains and repairs the grinder pumps and force main as a courtesy to the District. The District and the contractor are in the process of adding these services to the contract. The chief operator maintains a Grade III Certification for the treatment facility, which exceeds the required certification level of the system.

---

### Facilities and Capacity

---

Constructed facilities include a wastewater treatment/recycled water facility, an emergency storage pond, an irrigation storage pond, and 5.8 miles of collection pipeline. As the facilities have all been constructed since 2004, they are all considered to be in excellent condition.

The Grizzly Ranch development has been designed in eight units or phases. The low pressure collection system is constructed and operable in units one through five. The sewer system in unit six has been designed but not constructed. The sewer systems for units seven and eight have been neither designed nor built; however, the flow contribution from these two units has been accounted for in the sizing of the system. The system is designed to serve the community to build-out.

The District operates under an NPDES permit (Order No. R5-2005-0170). The order expired in November 2010, but a new permit has not yet been issued. The District is in the process of applying for renewed permit. The owners of the golf course operate under separate requirements for use and management of the recycled water on the golf course.

As previously mentioned the treatment facility is not presently in operation, due to low influent flows, and all effluent is collected and hauled to a treatment facility by a contractor. The WWTP has a design capacity of 81,000 gpd, and according to the NPDES permit, the 30-day average daily dry weather discharge flow to Big Grizzly Creek shall not exceed 81,000 gpd. Average daily flows in 2010 were 2,500 gpd, which is approximately three percent of the facility's permitted capacity. Peak flows are not correlated to wet weather,

but instead are highest during summer months when the occupancy rate is higher. The peak monthly average daily flow is: 3,600 gallons per day (August 2010), or four percent of the facility's permitted capacity.

According to the District's NPDES permit, the District shall cease wastewater pumping and hauling from the facility, and begin operation of the facility, no later than the date at which the monthly average dry weather flow to the facility reaches 6,000 gallons per day.

Once the treatment facility is operating, treated effluent may be disposed of in the Big Grizzly Creek or the irrigation storage pond for use at the Grizzly Creek Golf Course. Between November 16<sup>th</sup> and the last Saturday in April, when dilution requirements can be met, effluent may be discharged into the Big Grizzly Creek. When dilution requirements cannot be met, and from the last Saturday in April to November 15<sup>th</sup>, reuse of the treated effluent (recycled water) for golf course irrigation may be practiced.

Backwash water from the water treatment facility is discharged to the irrigation pond. The NPDES permit requires the Discharger to monitor the backwash water to assure excessive arsenic is not being discharged. On several occasions, arsenic levels have exceeded permitted concentrations. The District has had 17 violations due to arsenic level exceedances between 2008 and 2010. The District has ceased use of Well 1P and disconnected it from the system in order to lower arsenic levels in the backwash.

The collection system is composed of 5.8 miles. The collection system is a sealed "Low Pressure Collection System" and is pressurized to the wastewater facility via household grinder pump stations. A pressurized sewer system has the additional advantage of reduced inflow and infiltration from rainfall, runoff and groundwater. The peak wet weather flow to the treatment plant is therefore less from a low pressure sewer system than from a gravity sewer. Low pressure sewers provide a more consistent strength of wastewater during heavy rainfall events.

---

## Infrastructure Needs

---

As the facilities are new, there are few infrastructure needs. The primary need identified is a means to keep arsenic levels in the water treatment backwash within permitted levels. Options to address this issue include 1) arsenic treatment changes to reduce arsenic concentrations in backwash water, and 2) connecting Well 9M as a replacement or additional water source with lower arsenic levels. Presently, the District has disconnected the well with the highest arsenic content from the system, and has elected to connect Well 9M.

---

## Challenges

---

The District presently has a particular challenge meeting permitted arsenic levels in backwash from treatment that is discharged into the irrigation storage pond. It is anticipated that as a result of the replacement of Well 1P with Well 9M, that arsenic levels will no longer pose a challenge to services.

---

## Service Adequacy

---

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

**Figure 15-6: GRCSO Wastewater Service Adequacy Indicators**

<b>Wastewater Service Adequacy and Efficiency</b>			
<b>Regulatory Compliance Record, 2005-10</b>			
Formal Enforcement Actions	0	Informal Enforcement Actions	2
		<b>Description of Violations</b>	
NA			
<b>Total Violations, 2005-10</b>			
Total Violations	18	Priority Violations	0
<b>Service Adequacy Indicators</b>			
Treatment Effectiveness Rate <sup>1</sup>	NA <sup>2</sup>	Sewer Overflows 2008 - 2010 <sup>3</sup>	0
Total Employees (FTEs)	0.5	Sewer Overflow Rate <sup>4</sup>	0
MGD Collected per FTE	0.005	Customer Complaints CY 10: Odor (0), spills (0), other (0)	
<b>Source Control and Pollution Prevention Practices</b>			
None.			
<b>Collection System Inspection Practices</b>			
The collection system is not inspected as it is all pressurized. Grinder stations are inspected annually.			
Notes:			
(1) Total number of compliance days in 2010 per 365 days.			
(2) The wastewater facility is not in operation and does not monitor water quality as there is no effluent produced. All sewage is pumped and hauled to a separate facility for treatment.			
(3) Total number of overflows experienced (excluding those caused by customers) from 2008 to 2010 as reported by the agency.			
(4) Sewer overflows from 2008 to 2010 (excluding those caused by customers) per 100 miles of collection piping.			

GRCSO has been issued 18 violations between 2005 and 2010, 17 of which were for exceedances of arsenic levels in discharged backwash. None of the violations were considered priority violations. The violations resulted in two informal enforcement actions by the RWQCB. Eighteen violations equates to approximately 206 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. As described, the District is making efforts to remain in compliance with permit requirements regarding arsenic levels.

Wastewater treatment providers are required to comply with effluent quality standards under the waste discharge requirements determined by RWQCB. As the District is not presently treating sewage, it does not track the quality of the effluent.

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, peak demand periods are not related to wet weather flows as the system is pressurized, which minimizes infiltration and inflow into the system. Additionally, as the system is all new, there is little need to address infiltration and inflow at this point.

**Figure 15-7: GRCS D Wastewater Profile**

<b>Wastewater Service Configuration and Demand</b>				
<b>Service Configuration</b>				
<b>Service Type</b>		<b>Service Provider(s)</b>		
Wastewater Collection		GRCS D		
Wastewater Treatment		GRCS D - as the facility is not yet operational, sewage is pumped and hauled by a contractor to another treatment facility.		
Wastewater Disposal		GRCS D		
Recycled Water		GRCS D		
<b>Service Area</b>				
Collection:		The District serves all developed parcels within its boundaries, which are scattered throughout the District.		
Treatment:		The District serves all developed parcels within its boundaries, which are scattered throughout the District.		
Recycled Water:		The District provides recycled water for irrigation purposes to the golf course.		
<b>Service Demand</b>				
<b>Type</b>	<b>Connections (2010) Total</b>	<b>Inside Bounds</b>	<b>Outside Bounds</b>	<b>Flow (mgd) Average</b>
Total	58	58	0	0.0025
Residential	46	46	0	NP
Commercial	12	12	0	NP
Industrial	0	0	0	-
<b>Historical and Projected Demand (Average annual daily flow in mgd) <sup>2</sup></b>				
<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
0.00002	0.0025	0.0026	0.0026	0.0027
Note:				
(1) NA: Not Applicable; NP: Not Provided.				
(2) Projections are based on the 0.05 percent annual average growth rate projected by DOF for the entire County.				

<b>Wastewater Infrastructure</b>			
<b>Wastewater Collection, Treatment &amp; Disposal Infrastructure</b>			
<b>System Overview</b>			
Treatment level: Tertiary			
<i>Facility Name</i>	<i>Capacity</i>	<i>Condition</i>	<i>Year Built</i>
WWTP	0.081 mgd	Excellent	2004
<b>Collection &amp; Distribution Infrastructure</b>			
Sewer Pipe Miles	5.8	Sewage Lift Stations	51
<b>Treatment Plant Daily Flow (mgd)</b>			
<i>AAF (mgd)</i>	<i>% of AAF Capacity in Use</i>	<i>Peak Wet (mgd)</i>	<i>Peaking Factor</i>
0.0025	3%	NA <sup>1</sup>	NA
<b>Infiltration and Inflow</b>			
The District reported that the collection system is a sealed low pressure collection system and is pressurized all the way to the wastewater facility via household grinder pump stations; consequently, there are no concerns of infiltration and inflow.			
<b>Infrastructure Needs and Deficiencies</b>			
The primary need identified is a means to keep arsenic levels in the water treatment backwash within permitted levels.			
<b>Wastewater Facility Sharing</b>			
<b>Facility Sharing Practices</b>			
Administration for the District is provided by the County, which operates out of county facilities with other county departments.			
<b>Facility Sharing Opportunities</b>			
No further facility sharing opportunities were identified.			
Note: (1) Peak flows are not correlated with wet weather as the system is sealed and pressurized to the treatment facility.			

<b>Wastewater Rates and Financing</b>				
<b>Wastewater Rates-Ongoing Charges FY 10-11 <sup>1</sup></b>				
	Rate Description	Charges	Demand <sup>2</sup>	
Developed and undeveloped lots (regardless of use)	Flat water and sewer assessment per lot served of \$1,328.52, of which wastewater services are planned to account for 62 percent of expenditures.	\$68.53	250 gpd	
<b>Rate Zones</b>				
None				
<b>Rate-Setting Procedures</b>				
Last Rate Change	7/1/2010	Frequency of Rate Changes	Annually	
<b>Wastewater Development Fees and Requirements</b>				
Fee Approach	The District's benefit assessment was established in 2004 to cover the estimated budgeted costs of operation and maintenance of the water and wastewater systems. The assessment was calculated to cover operational, capital replacement and administration costs.			
Connection Fee Amount	The District charges a flat hook-up fee of \$6,000 for both water and sewer services.			
<b>Wastewater Enterprise Revenues, FY 09-10</b>		<b>Operating Expenditures, FY 09-10</b>		
Source	Amount		Source	Amount
Total	\$249,438	100%	Total	\$118,239
Rates & Charges	\$0	0%	Administration	\$0
Property Tax	\$0	0%	O & M	\$118,239
Grants	\$0	0%	Capital Depreciation	NP
Interest	\$6,162	2%	Debt	\$0
Connection Fees	\$3,714	1%	Other	\$0
Assessment	\$239,562	96%		
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.				

## GRIZZLY RANCH CSD DETERMINATIONS

---

### Growth and Population Projections

---

- ❖ Presently, 46 homes have been built, and 12 commercial facilities, which equates to an estimated population of 87.
- ❖ Based on DOF projections, the District's population would increase to approximately 87 in 2020; however, the DOF's projections may be low given the development potential in the area.
- ❖ When every single family home is constructed, the estimated population of the subdivision will be 722.

---

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

---

- ❖ Average daily demand for water is approximately 27 gpm, which equates to 135 percent of the Well 3P2's revised pumping capacity. Once Well 9M is permitted, average daily demand will comprise approximately 17 percent of total source capacity.
- ❖ The District should work with DWR to get the revised pumping capacity of Well 3P2 increased.
- ❖ The District presently has a particular challenge with arsenic in excess of permitted levels in backwash from water treatment that is discharged to the irrigation storage pond. The District has addressed this issue by taking Well 1P offline and connecting Well 9M. Well 9M is not yet included in the District's permit.
- ❖ All connections lack meters; consequently, the District is unable to charge rates based on water use, track water delivered, and accurately identify any water loss from the distribution systems.
- ❖ Average daily wastewater flows in 2010 were 2,500 gpd, which is approximately three percent of the facility's permitted capacity. Peak flows are not correlated to wet weather, but instead are highest during summer months when the occupancy rate is higher. The peak monthly average daily flow is: 3,600 gallons per day (August 2010), or four percent of the facility's permitted capacity.
- ❖ As the facilities are new, there are few infrastructure needs. The primary wastewater infrastructure need identified is a means to keep arsenic levels in the water treatment backwash within permitted levels according to the District's Waste Discharge Requirements.

---

## Financial Ability of Agencies to Provide Services

---

- ❖ The District reported that the current financing level is adequate to deliver services; however, the District's revenue has recently waned due to the recession. Due to a slowdown in new development, the District has experienced a decline in connection fee revenue.
- ❖ GRCSO rates were last updated in 2010 and are in line with the average water and wastewater rates charged by other providers in the region.
- ❖ It is recommended that the District separate water and wastewater expenditures to enhance transparency.

---

## Status of, and Opportunities for, Shared Facilities

---

- ❖ The District is administered by county staff, which operate out of county facilities shared with other county departments.
- ❖ There is an opportunity to share specialized equipment (i.e., CCTV) among other small water and wastewater providers in the area.

---

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

---

- ❖ GRCSO demonstrated accountability and transparency by disclosing financial and service related information in response to LAFCO requests.
- ❖ Development of a website for GRCSO to keep its constituents better informed is a short-term goal.
- ❖ One potential governance structure option may be transferring governance from the County Board of Supervisors to an independent Board of Directors, as the population of the subdivision has grown significantly since its inception may now meet the threshold population needed to conduct business independently from the County.