25. RIVER PINES PUBLIC UTILITY DISTRICT

River Pines Public Utility District (RPPUD) provides retail water delivery, wastewater collection and wastewater treatment and disposal services.

AGENCY OVERVIEW

Background

RPPUD was formed on July 24, 1961, as an independent special district.[494] RPPUD was formed to provide water services to the River Pines community. The sewer system was completed in 1988, 1988 to address public health hazards from failing private septic systems. LAFCO authorized water and sewer related services in 2012 in conjunction with adopting a sphere of influence for the district.

The principal act that governs the District is the Public Utility District Act.[495] The principal act empowers the District to acquire, construct, own, operate, control, or use works for supplying light, water, power, heat, transportation, telephone service, or other means of communication, or means for the disposal of garbage, sewage, or refuse matter.[496] In addition, the District may acquire, construct, own, complete, use, and operate a fire department, street lighting system, public parks and other recreation facilities, and provide for the drainage of roads, streets, and public places.[497] Districts must apply and obtain LAFCO approval to exercise services authorized by the principal act but not already provided (i.e., latent powers) by the district at the end of 2000.[498]

Boundary

The RPPUD boundary area encompasses the community of River Pines, which is located in northern Amador County. The boundary area encompasses the portion of the community zoned for low-density residential uses, and excludes outlying parcels zoned for suburban-residential use. The boundary extends north to the South Fork of the Cosumnes River, east to Meadow View Road, south to include parcels on Spring Land and Circle Avenue, and west to include parcels on Pigeon Trail and Emigrant Trail Roads. The District has a boundary area of approximately 84 acres. The district is known to provide service to two parcels outside its boundaries within Amador County and to approximately 13 properties in El Dorado County. There are no known records for the El Dorado County service extension in the Amador or El Dorado LAFCO files.

[494] Formation date is from Board of Equalization records.

[495] Public Utilities Code §15501-17501.

[496] Public Utilities Code §16461.

[497] Public Utilities Code §16463.

[498] Government Code §56824.10.

Sphere of Influence

The District's sphere of influence (SOI) was first adopted by LAFCO in 1976. The current SOI, which was last updated in 2012,[499] includes all territory within district boundaries plus parcels outside the boundaries within Amador County. Parcels located within El Dorado County, which are receiving service from the District are not included in the sphere of influence and are not anticipated for annexation in the near future. The District's SOI consists of two non-contiguous areas, the western portion of which is outside of the District's boundaries.

Local Accountability and Governance

RPPUD is governed by a five-member board of directors. Directors are elected, although they are occasionally appointed if necessary to fill vacancies. The most recent contested election was held in 2007.

Figure 25-1: RPPUD Governing Body

River Pines Public Utility District			
Governing Body			
Members	**Name**	**Position**	**Term Ends**
	Cathy Landgraf	Chair	December 2013
	Vacant	Vice Chair	N/A
	Vince Hugs	Director	December 2015
	Patricia Duneldey	Director	December 2015
	Michael Gordrer	Director	December 2013
Manner of Selection	Members are elected at large via biennial elections in odd numbered years.		
Length of Term	4 years.		
Meetings	Second Wednesday of each month at 6:30 p.m. at Piver Pines Community Center at 22900 Canyon Way		
Agenda Distribution	Posted at the post office bulletin board in town		
Minutes Distribution	Available upon request		
Contact			
Contact	Office clerk		
Mailing Address	P.O. Box 70, River Pines, CA 95675		
Phone	209-245-6723		
Email/Website	rppud@rppud.org		

The District informs constituents of its activities by word of mouth. Candidates for a board position typically conduct outreach by visiting constituents in person. The District does not maintain a website where public documents can be accessed.

With regard to customer service, the District reported that complaints are most often related to water quality and billing. Complaints may be submitted to the office clerk via mail, phone, fax, email, or in person. The District reported that the number of complaints received in 2012 was unknown.

[499] LAFCO Resolution 2012-03.

The District reported that it had no prosecuted Brown Act violations in recent history. However, in the past, there have been decisions within the scope of the District's responsibilities made without accompanying board actions. Several board members were recalled and voted out of office in 2005.

The District demonstrated partial accountability in its disclosure of information and cooperation with LAFCO. The District was marginally cooperative with the MSR process and was ultimately unable to provide some of the requested information.

Management

District staff includes a temporary office clerk and chief plant operator who works 40 hours a week. The office clerk dedicates about 24 hours per week on Mondays, Wednesdays and Fridays to district management. The District does not employ a general manager.

To improve operational efficiency, the District has reduced the number of its personnel. Remaining independent of AWA is a District's goal to promote lower customer rates. The primary management challenge remains the difficulty recruiting qualified employees to a small community.

The District did not report any performance evaluation practices, such as tracking workload, monitoring productivity, or evaluating operations.

RPPUD conducts employee evaluations annually, and evaluates new employees after they complete their first three months.

The District's planning efforts are minimal. The District does not have a master plan for its water or wastewater system, and does not prepare a capital improvement plan. RPPUD is actively in the process of applying for a grant to repair water storage delivery system.

District financial planning efforts include annual preparation of budgets. The District conducts financial audits on an occasional basis. RPPUD was unable to provide its most recent audit; the year when the District's statements were last audited is unknown.

Management practices include risk management. The District's insurance includes liability coverage of the buildings and property.

Service Demand and Growth

Existing land uses in the District's boundary are primarily low-density residential (i.e., three units per acre on average) with four commercial properties located on Shenandoah Road, three public service properties, and vacant parcels scattered throughout the community.

Economic activity in the District's service area includes retail and governmental services. Employers include the River Pines Market and RPPUD.

There are approximately 219 water connections within the District bounds. The estimated population within district bounds is 504.[500] The District's population density is 3,877 per square mile, compared to the countywide density of 64.

The District reported that service demand had been stable in recent years. The number of connections has increased by 19 (10 percent) since 2008.

Future growth is expected to be limited, because there are only a few undeveloped properties within the District's bounds. There were 52 standby accounts within District bounds in 2013 and no standby accounts outside bounds. There are no proposed or planned development projects within the District. The District is not interested in expanding its service area, indicating that facilities are undersized for serving the existing customer base, the cost to connect is prohibitively expensive, and financial reserves are minimal.

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

Disadvantaged Unincorporated Communities

LAFCO is required to evaluate disadvantaged unincorporated communities as part of this service review, including the location and characteristics of any such communities. A disadvantaged unincorporated community is defined as any area with 12 or more registered voters, or as determined by commission policy, where the median household income is less than 80 percent of the statewide annual median.[501]

The California Department of Water Resources (DWR) has developed a mapping tool to assist in determining which communities meet the disadvantaged communities median household income definition.[502]DWR identified nine disadvantaged communities within Amador County—three of which are cities and are therefore not considered unincorporated.[503] The community of River Pines, which is also a River Pines Census Designated Place with the population of 574, is considered a disadvantaged unincorporated community.

However, DWR is not bound by the same law as LAFCO to define communities with a minimum threshold of 12 or more registered voters. Because income information is not available for this level of analysis, disadvantaged unincorporated communities that meet LAFCO's definition cannot be identified at this time.

Financing

RPPUD reports that its current financing level is sufficient to deliver services, and that all capital costs are incorporated into the rate structure. However, the District has

[500] The population estimate for the District is the product of the number of water connections within the boundary area and average household size (2.3) in Amador County in 2009-2011, according to the United States Census Bureau.

[501] Government Code §56033.5.

[502] Based on census data, the median household income in the State of California in 2010 was $57,708, 80 percent of which is $46,166.

[503] DWR maps and GIS files are derived from the US Census Bureau's American Community Survey (ACS) and are compiled for the five-year period 2006-2010.

significant unmet capital needs, some of which have not been evaluated, indicating likely underfunding of capital replacement. RPPUD is currently searching for grants to repair water storage and delivery system.

The District tracks its finances through two enterprise funds, one for water and the other for wastewater.

Total revenue in FY 11-12 was $289,555. Main revenue sources are property taxes (two percent), water and sewer fee income (86 percent), and variable income, which consists of broken locks, door hanger fee, late fees, paypal fees, reconnection fees, returned check fees, service connection fees, and water usage (11 percent). Additional sources include interest income, repair labor, and town hall rental, which together constitute about one percent.

The District charges water fees for initiation of new service, monthly usage, late fees, door hanger fees, bank fees, returned checks, reconnection following lock-off, monthly standby assessment, monthly voluntary lock off, service calls, and connection impact. The monthly base service rate is $45.36 for both commercial and residential properties. Fees for usage depend on the amount of water used. Sewer rates include a monthly residential charge of $57.75, a monthly commercial charge of $66.70, and a connection impact fee of $7,748.

Total expenditures for the year were $262,235. Costs are primarily composed of employee related expenses (49 percent), insurance expenses (six percent), plant monitoring (four percent), professional fees (eight percent), sewer expenses (12 percent), utilities (three percent), and water expenses (14 percent). Other expenditures include automobile expenses, bank charges, board member related expenses, contracted expenses, equipment rental charges, office expenses, property taxes, and repairs and maintenance.

The District was unable to provide information about its long-term debt at the end of FY 11-12. Similarly, the unrestricted fund balance at the end of the same fiscal year was also not provided.

RPPUD participates in a joint financing arrangement with the County. RPPUD and the County formed a JPA for purposes of water capital financing.

WATER SERVICES

Nature and Extent

RPPUD supplies treated water to domestic users. Water services include groundwater pumping, treatment of surface and groundwater, distribution and billing. The District does not produce or use recycled water, and does not practice conjunctive use.

The District relies on AWA staff (via contract) for emergency maintenance services and technical services; for example, AWA conducted repairs in 2007 of leaking distribution lines. RPPUD contracted with AWA for certain backup managerial and technical services to qualify for a State Revolving Fund loan to finance capital improvements in 1999.

Location

RPPUD provides services within its bounds to 219 connections. The District's service area extends beyond its boundary area and in El Dorado County where RPPUD serves 15 connections.

There are parcels not presently receiving service; there were 52 standby accounts within District bounds as of 2013.

Infrastructure

Key infrastructure includes the District's water supplies, a surface water treatment facility, two wells with treatment facilities, and distribution lines.

The District's water sources are groundwater and surface water. Both the well water and the treated surface water are chlorinated prior to distribution.

The groundwater source is a shallow, fractured rock aquifer underlying the River Pines community. Groundwater is extracted at two wells (Well No. 2 and Well No. 6-R). Well No. 2 was drilled in 1976 and replaced in 2008; its yield of 35 gpm does not satisfy district demand alone when Cosumnes River water is unavailable. Well No. 6-R was dug in 1998, and yields 60 gpm. Both wells need down hole transducers to monitor the water level. The groundwater at Well No. 6-R is classified as groundwater under the direct influence of surface water. Well No. 6R was permitted in April 2006 for domestic use after installing treatment due to problems with microbiological contamination. In April 2006, River Pines completed the process of installing treatment for this well through the State Revolving Fund. After the treatment went online in April 2006, this well was permitted as an active source. Before 2006, Well No. 6R was being used in conjunction with a Boil Water Order for meeting the water demand. Groundwater at Well No. 6-R is filtered with Rosedale filtration equipment. The drinking water in Well No. 6R is most vulnerable to contamination from gas stations and high-density septic systems.[504]

E. coli was detected in a raw Well No. 6 sample taken in March 2012. The California Department of Health Services in Stockton was notified, and its instructions were to

[504] California Department of Public Health, *Water Assessment*, March 2001. The reported vulnerabilities are those with a vulnerability score of 15 or more.

increase the amount of chlorine used in the treatment process. All treated water samples taken from the distribution system during the same time periods were free of E. coli. No other contaminants were detected in the water from either well.

The District diverts surface water from the South Fork Cosumnes River, which flows through the east part of the community. The District holds water rights to divert up to 126.4 af from the South Fork Cosumnes River for municipal purposes, and may divert at a maximum rate of .204 cfs.[505] The District's water right requires it to maintain a minimum instream flow of 15 gpm, and to install a device to measure instream flow. In addition, RPPUD has rights to divert an additional three af in water from the same source for recreational use during the summer months.[506] The District does not presently have rights to store diverted Cosumnes River water, but could apply for such rights in the future to enhance water reliability. RPPUD has another 15 af in water rights from Slate Creek, a tributary to the south fork of the Cosumnes River, which may be used year-round for domestic purposes.[507] The Slate Creek source is not presently used. The Cosumnes River surface water source is generally good quality; however, it is affected by livestock in upstream fields.

The daily average flow of the South Fork Cosumnes River varies over the course of the year. The greatest flows occur between January and April; during rainy weather, the District often relies on its groundwater source due to turbidity in the surface water and associated treatment issues. The daily average flow exceeded the instream flow requirement of 15 gpm even in the driest months (0.6 cfs in September), based on river gage monitoring by U.S. Geological Survey between 1958 and 1980.[508] Since then, flows have declined, and there are times when there is no surface flow in the river. From July to November, the river is typically dry at the surface. In 2001, the river became unusable due to extremely low flow, and RPPUD increased its reliance on groundwater sources.

The RPPUD surface water treatment system consists of chemical pre-treatment, a slow sand filtration system, and disinfection.[509] RPPUD diverts the South Fork Cosumnes River through an infiltration gallery, which directs water into a pipe located beneath the streambed and to the treatment plant. When turbidity of the raw surface water is high, a pre-treatment system may be used to reduce turbidity prior to regular treatment. The pre-treatment system consists of an in-line mixer, coagulation, and pressure sand filtration (at 40 gpm capacity). However, RPPUD typically relies on groundwater during high-turbidity periods. The slow sand filter plant removes particulates, which are deposited in the top of the filter sand bed, and operates at a capacity of 100 gpm. The slow sand filter has been out of service since July 2007, due to low flow conditions in the Cosumnes River. The slow sand filter's infiltration gallery needs to be covered and operations data needs to be incorporated into the SCADA system. A flow meter needs to be installed downstream of the diversion point to comply with the water rights permit. The existing single-cell filter needs

[505] State Water Resources Control Board, permit 20878, last updated Nov. 6, 1996.

[506] State Water Resources Control Board, license 1338, last updated Aug. 24, 1966.

[507] State Water Resources Control Board, license 1748, last updated Aug. 24, 1966.

[508] Daily average flow was calculated by U.S. Geological Survey for a gage located just downstream of River Pines that was operational from 1958 through 1980 (State Water Resources Control Board, *Decision 1634*, 1996, p. 8).

[509] California Department Public Health, *2005 Annual Inspection Report: River Pines Public Utility District*, Oct. 4, 2005.

to be separated into two cells for redundancy so the system is operational during maintenance.

The District has a total of 170,000 gallons of storage capacity. By comparison, peak day demand is 40,000 gallons. In other words, the District's stored water capacity would accommodate about four days of peak demand. One of the storage tanks (on Circle Avenue) needs to be replaced. There are no interties between the RPPUD system and neighboring water systems.

The distribution network consists of 4.8 miles of water mains. The largest distribution main is undersized, and needs to be upgraded to the current six-inch diameter standard. The most recent (2011) state inspection notes that most of the mains are in good condition, but that approximately 10 percent of the mains were constructed of iron and reported to be corroded and undersized. The PVC mains and the AC mains are in good condition. The District had 30 distribution system service breaks and leaks in 2012, all of which were repaired. The 2011 Annual Inspection Report pointed out that District's emergency notification plan dated March 31, 2009 needed to be updated due to personnel changes. The plan was updated in 2013. It was also reported that RPPUD had unusual turnover of operational staff and this sometimes caused problems in consistently maintaining the system. There are two separate pressure zones—one in the River Pines community and another in the portion of the service area in El Dorado County. Fire flow is deficient, as indicated by the impact on water pressure when hydrants are opened, although the District needs to conduct modeling to determine precisely how deficient and to identify solutions and associated costs.

Generally, the District lacks certain equipment needed for water operations. The District does not own the proper equipment (e.g., backhoe, jackhammer) for performing most types of distribution system repairs. Additionally, the District reported that new vehicles with racks and utility boxes were needed.

The District's regulatory record includes deficiencies. In 1998, the District destroyed a well due to bacteriological contamination, and drilled a new well 30 feet from the destroyed well which was also subject to bacteriological contamination. DPH conducted a technical, managerial and financial (TMF) assessment of the District in 1999, and concluded that RPPUD had TMF deficiencies. At that time, DPH found the District lacked a source capacity evaluation, growth projections, technical engineering evaluation, capital improvement plan, capital replacement plan, and expenditure control procedures, among other deficiencies. RPPUD contracted with AWA for technical assistance; however, the various plans listed as TMF deficiencies in 1999 were not provided to LAFCO. DPH issued a notice of violation to the District in 2007 for having served old, stagnant water that had been left in a well contact tank for more than six months, and indicated that RPPUD "ran poor operations during this time and needs a good operations plan for preventing this and other situations in the future."[510] RPPUD reported that it had subsequently prepared a plan.

[510] California Department of Public Health, *Notice of Violation No. 03-10-07NOV-003*, 2007, p. 5.

For emergencies, such as water breaks and traffic accidents that knock out hydrants, RPPUD's policy is to respond as quickly as possible. RPPUD staff arrives on scene within one hour; for incidents outside normal working hours, arrival on scene may take longer if RPPUD needs to call in an outside service like AWA. Depending on the nature of the emergency, the resolution times vary from immediate (shut a valve) to as long as 4-8 hours.

Figure 25-2: RPPUD Water Profile

Water Service Configuration & Infrastructure					
Water Service	**Provider(s)**		**Water Service**	**Provider(s)**	
Retail Water	Direct		Groundwater Recharge	None	
Wholesale Water	Direct		Groundwater Extraction	Direct	
Water Treatment	Direct		Recycled Water	None	
Service Area Description					
Retail Water	RPPUD boundary area and connections outside of the boundary area in Amador and El Dorado Counties.				
Wholesale Water	River Pines				
Recycled Water	NA				
Boundary Area	0.1 sq. miles		Population	504	
System Overview					
Average Daily Demand	0.032 mgd		Peak Day Demand	0.04 mgd	
Supply	0.032 mgd				
Major Facilities					
Facility Name	**Type**	**Capacity**		**Condition**	**Yr Built**
Slow sand filter	surface treatment	100 gpm		Fair	1994
Well No. 02	well	35 gpm		Good	1976
Well No. 06R	well	65 gpm		Excellent	1998
Jaybird	storage tank	75,000 gal		Fair	1982
Circle Ave. contact	contact tank	20,400 gal		Fair	1954
Circle Ave. storage	storage tank	63,000 gal		Fair	1964
Well No. 06R contact	contact tank	12,000 gal		Excellent	2005
Other Infrastructure					
Reservoirs	0		Storage Capacity (mg)	0.17	
Pump Stations	4		Pressure Zones	2	
Production Wells	2		Pipe Miles	4.8 miles	
Other:	18 fire hydrants				
Infrastructure Needs and Deficiencies					
Both wells need down hole transducers to monitor the water level. - The slow sand filter's infiltration gallery needs to be covered and operations data needs to be incorporated into the SCADA system. A flow meter needs to be installed downstream of the diversion point to comply with the water rights permit. The existing single-cell filter needs to be separated into two cells for redundancy so the system is operational during maintenance. Fire flow is deficient, as indicated by the impact on water pressure when hydrants are opened, although the District needs to conduct modeling to determine precisely how deficient and to identify solutions and associated costs. Generally, the District lacks certain equipment needed for water operations. The District does not own the proper equipment (e.g., backhoe, jackhammer) for performing most types of distribution system repairs. The District reported that new vehicles with racks and utility boxes were needed.					
Facility-Sharing and Regional Collaboration					
Current Practices: RPPUD contracts with AWA for as-needed services.					
Opportunities: There may be opportunities to share equipment with service providers in El Dorado County.					
Notes: (1) NA means Not Applicable, NP means Not Provided, mg means millions of gallons, af means acre-feet.					

Water Demand and Supply

Service Connections	Total	Inside Bounds	Outside Bounds
Total	234	219	15
Irrigation/Landscape	0	0	0
Domestic	229	214	15
Commercial/Industrial/Institutiona	5	5	0
Recycled	0	0	0
Other	0	0	0

Average Annual Demand Information (Acre-Feet per Year)[1]

	2000	2005	2010	2015	2020	2025	2030
Total	NP	35	35.8	NP	NP	NP	NP
Residential	NP	34	34.8	NP	NP	NP	NP
Commercial/Industrial	NP	1	1	NP	NP	NP	NP
Irrigation/Landscape	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0

Water Sources		Supply (Acre-Feet/Year)		
Source	Type	Average	Maximum	Safe/Firm
South Fork Cosumnes River	Surface	NP	0	NP
Slate Creek	Surface	NP	0	NP
Groundwater wells	Groundwater	NP	35.8	NP

Supply Information (Acre-feet per Year)

	2000	2005	2010	2015	2020	2025	2030
Total	NP	NP	NP	NP	NP	NP	NP
Imported	0.0	0.0	0	0	0	0	0
Groundwater	NP	NP	NP	NP	NP	NP	NP
Surface	NP	NP	NP	NP	NP	NP	NP
Recycled	0	0	0	0	0	0	0

Drought Supply and Plans			
Drought Supply (af)[1]	Year 1: NP	Year 2: NP	Year 3: NP
Significant Droughts	1976, 1977, 1988-94, 2007-2009		
Storage Practices	District water storage capacity amounts to 60 percent of peak day demand.		
Drought Plan	None		

Water Conservation Practices	
CUWCC Signatory	No
Metering	Yes, 100 percent of connections are metered
Conservation Pricing	Rate schedule includes water use charges, with gradually higher rates for greater use.
Other Practices	None.

Notes:
(1) Firm or safe water supply from the surface water source and aquifer is unknown. Limits of water during drought are unknown.

continued

Water Rates and Financing

Domestic Water Rates-Ongoing Charges FY 13[1]			
	Rate Description	Charges	Consumption[2]
Residential	$45.36/month base + use charge	$ 68.36	7,600 gal/month

Special Rates
Customers outside the boundaries pay 50 percent higher water rates.

Rate-Setting Procedures			
Policy Description	The District has an increasing block rate schedule; greater water use pays higher rates. $10/month standby charge for parcels within bounds that are not actively served.		
Most Recent Rate Change	2013	Frequency of Rate Changes	Every 3-5 years

Water Development Fees and Requirements	
Connection Fee Approach	Properties paying standby charges pay $4,500 for a new connection.
Connection Fee Timing	Due prior to connection.
Connection Fee Amount	$7,500/Single Family Unit
Land Dedication Requirements	Any new developer would be required to build water lines to RPPUD specifications and dedicate those lines to the District.
Development Impact Fee	None

Water Enterprise Revenues, FY 12			Expenditures, FY 12	
Source	Amount	%		Amount
Total	$165,824	100%	Total	NP
Rates & charges	$125,849	76%	Administration	NP
Property tax	$7,027	4%	O & M	NP
Grants	$0	0%	Capital Depreciation	NP
Interest	$22	0%	Debt	NP
Connection Fees	$0	0%	Purchased Water	NP
Variable Income	$32,926	20%	Other	NP

Notes:

(1) Rates include water-related service charges and usage charges.

(2) Water use assumptions were used to calculate average monthly bills. Assumed use levels are consistent countywide for comparison purposes.

continued

Water Service Adequacy, Efficiency & Planning Indicators

Water Planning	Description	Planning Horizon
Water Master Plan	None	N/A
UWMP	None	N/A
Capital Improvement Plan	None	N/A
Emergency Response Plan	Emergency contacts	Last Updated 2013

Other Plans

Operations plan for the slow and filtration plant

Service Challenges

The most significant challenge at the treatment plant is continuity of operating knowledge due to employee turnover; to address this, the District should attempt to prevent turnover. Distribution system piping is not standardized, creating challenges for distribution system maintenance. Standardized piping would simplify distribution system maintenance.

Service Adequacy Indicators

Connections/FTE	293	O&M Cost Ratio[1]	NP
MGD Delivered/FTE	0.04	Distribution Loss Rate	NP
Distribution Breaks & Leaks	30	Distribution Break Rate[2]	625
Response Time Policy	ASAP	Response Time Actual	4-8 hours
Water Pressure	20 psi	Total Employees (FTEs)	0.8

Water Operator Certification

NP

Drinking Water Quality Regulatory Information[3]

	#	Description
Health Violations	0	NA
Monitoring Violations	3	Haloacetic Acid and total trihalomethanes monitoring, 2005. Coliform, 2005.
DW Compliance Rate[4]	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 for the last 10 years 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 2012.

WASTEWATER SERVICES

Nature and Extent

RPPUD provides wastewater collection, treatment and disposal services. The District primarily provides services directly with its own staff. The District personnel lack certification in maintenance of collection systems, and rely on AWA for contract services related to collection maintenance.

The community relied on septic systems until FY 87-88 when the sewer system was completed by Amador County and subsequently transferred to the district. The County received grant funding to develop the system because septic systems were failing, soils and small lots made septic systems infeasible and due to public health hazards associated with septic systems.[511] State and federal grants funded the costs of developing the sewer system. Amador County planned, acquired easements, developed and owned the wastewater collection system until 2008 when it was transferred to RPPUD. RPPUD now owns the collection system and bears responsibility for all aspects of the wastewater system.

Location

RPPUD offers wastewater services throughout its boundary area. As of 2013, the District had 215 residential and four commercial connections, all of which were within its bounds. It was not reported whether the District had any standby sewer connections.

Infrastructure

Key infrastructure includes the wastewater treatment plant (WWTP), sewer pipes and lift stations.

The District's WWTP has a facility design flow capacity of 0.035 mgd (ADWF), and can accommodate peak flows of 0.088 mgd. The average treatment plant daily flow in 2012 was 0.022 mgd and peak wet weather flow 0.03 mgd. The treatment system consists of a bar screen, two 1.25-af aerated ponds, a secondary clarification pond and a storage reservoir, and a 17-acre spray field.[512] Treated effluence is disinfected prior to disposal. The disposal system consists of eight sprinkler circuits. Solids accumulate in the ponds are removed occasionally; sludge is hauled off-site to a landfill for disposal.

The wastewater collection system consists of an unknown number of miles of gravity sewer and approximately 1.5 miles of force main. The system is subject to infiltration and inflow, although the peaking factor of 1.8 is lower than the industry standard of 3.0. There are three major pumping stations: East Side, Horseshoe Lane and Slate Creek. In addition, there are seven small "grinder" pump stations, which are located along the Cosumnes River; these pump wastewater through a force main up to the gravity collection system.

[511] An estimated 60 of 215 septic systems had failed when the wastewater collection system was developed (Baracco and Associates, *Environmental Impact Report: River Pines Wastewater Facilities Project*, June 1984, p. 3)

[512] Central Valley RWQCB, *Waste Discharge Requirements for River Pines Wastewater Treatment Plant: Order No. 85-291*, 1985.

Figure 25-3: RPPUD Wastewater Profile

Wastewater Service Configuration and Demand				
Service Configuration				
Service Type	**Service Provider(s)**			
Wastewater Collection	River Pines PUD			
Wastewater Treatment	River Pines PUD			
Wastewater Disposal	River Pines PUD			
Recycled Water	None			
City of Ione Wastewater Service Area				
Collection:	River Pines PUD			
Treatment:	River Pines PUD			
Recycled Water	None			
Sewer Connection Regulatory/Policies				
Properties with structures are required to connect to the sewer system.				
Onsite Septic Systems in Service Area				
The District is not aware of any septic systems within the service area.				
Service Demand 2013				
	Connections			**Flow Average (mgd)**
Type	**Total**	**Inside Bounds**	**Outside Bounds**	
Total	219	219	0	NP
Residential	215	215	0	NP
Commercial	4	4	0	NP
Institutional	0	0	0	0
Projected Demand (in millions of gallons per day)				
	2007	**2015**	**2025**	**Build-Out**
Avg. dry weather flow	NP	NP	NP	NP
Peak wet weather flow	NP	NP	NP	NP
Notes:				
(1) NA: Not Applicable; NP: Not Provided.				

continued

Wastewater Infrastructure

Wastewater Treatment & Disposal Infrastructure

System Overview

Treatment level: Secondary

Disposal method: Secondary-treated effluent is discharged to sprayfields.

Facility Name	Capacity	Condition	Yr Built
Wastewater Treatment Facility	0.035	Good	1985
Equalization basin (storage reservoir)	4 mg	Fair	1985
Spray field	17 af	Good	1985

Treatment Plant Daily Flow (mgd)	Average Dry	Peak Wet
RPPUD WWTP	0.022	0.03

Infrastructure Needs and Deficiencies

NP

Wastewater Collection & Distribution Infrastructure

Collection & Distribution Infrastructure

Sewer Pipe Miles	NP	Sewage Lift Stations	10
Other:	1-2 miles of force main		

Infrastructure Needs and Deficiencies

NP

Infiltration and Inflow

The District reported significant I/I during wet weather, but its WWTP has enough wet weather capacity to handle peak flows that result.

Wastewater Regional Collaboration and Facility Sharing

Regional Collaboration

The District contracts with AWA for wastewater collection system maintenance services.

Facility Sharing Opportunities

No facility sharing opportunities were identified.

continued

Wastewater Service Adequacy, Efficiency & Planning

Regulatory Compliance Record, 2008-2012			
Formal Enforcement Actions	0	Informal Enforcement Actions	1

Enforcement Action Type	Date	Description of Violations
Notice of Violation	8/1/2010	Failure to complete, approve, and certify any of the required Sewer System Management

Service Adequacy Indicators			
Sewer Overflows 2012[1]	0	Sewer Overflows 2006[2]	1
Treatment Effectiveness Rate[3]	100%	Sewer Overflow Rate[4]	0
Total Employees (FTEs)	0.8	Response Time Policy[5]	as quick as possible
Employees Certified?	Yes	Response Time Actual	0.75-1.5 hours

Source Control and Pollution Prevention Practices

NP

Collection System Inspection Practices

The only portion of the collection system that is regularly inspected are the grinder stations and lift stations. Collection system piping is not inspected.

Service Challenges

NP

Wastewater Planning Plan	Description	Planning Horizon
Sanitary Sewer Management Plan	-	NP
Emergency Plan	Emergency contacts	NP
Other:	Operations and Maintenance Manual	

Notes:
(1) Total number of overflows experienced (excluding those caused by customers) in 2012 as reported by WRCB.
(2) Total number of overflows experienced (excluding those caused by customers) in 2011 as reported by WRCB.
(3) Total number of non-compliance days in 2012 per 365 days.
(4) Sewer overflows (excluding those caused by customers) per 100 miles of collection piping.
(5) Agency policy, guidelines or goals for response time between service call and clearing the blockage.

continued

Wastewater Rates and Financing

Wastewater Rates-Ongoing Charges FY 11-12[1]

	Rate Description	Avg. Monthly Charges	Demand[2]
Residential	Flat rate per unit	$57.75	250 gpd
Commercial	Flat rate per unit	$66.70	-

Rate Zones

There is one rate zone.

Rate-Setting Procedures

Policy Description: Each residential connection pays $57.75 monthly.

Last Rate Change	2013	Frequency of Rate Changes	Occasional

Wastewater Development Fees and Requirements

Connection Fee Approach	The connection fee was last updated in 2013.
Connection Fee Timing	Upon building permit issuance.
Connection Fee Amount[1]	Residential: $7,748
Land Dedication Req.	None
Development Impact Fee	None

Wastewater Enterprise Revenues, FY 11-12			Expenditures, FY 11-12	
Source	Amount	%		Amount
Total	$123,345		Total	NP
Rates & Charges	$123,345		Administration	NP
Property Tax	$0		O & M	NP
Grants	$0		Capital Depreciation	NP
Interest	$0		Debt	NP
Connection Fees	$0		Other	NP
Other	$0			

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.

SUMMARY OF DETERMINATIONS

Growth and population projections

- The District's demand has been fairly stable in recent years.
- Future growth is expected to be limited, because there are only a few undeveloped properties within the District's bounds with no current planned or proposed development projects.
- The District discourages expansion of its service area since its facilities are undersized for serving the existing customer base, the cost to connect is prohibitively expensive, and financial reserves are minimal.

Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs and deficiencies

- RPPUD has considerable infrastructure needs and deficiencies, most of which have not been addressed since 2007.
- The existing water supply is inadequate. The District is not able to meet its peak day demand.
- The District faces challenges in delivering adequate water services based on its distribution break rate. Past and present regulatory violations and evaluations reveal poorly operated water services, and failure to keep storage facilities filled with potable water reserves.
- District planning efforts are inadequate, and do not meet state standards for technical, managerial, and financial ability.
- The District has adequate wastewater treatment capacity to meet average dry weather demand, and although the facility's design capacity equals to current peak wet weather flow, reportedly the plant can accommodate peak flows of 0.088 mgd.
- The wastewater collection system is not regularly inspected due to lack of qualified personnel, lack of equipment and financing constraints.
- While reductions in district staffing may reduce cost to ratepayers, the deficiencies in adequate staffing compromise the district's ability to safely provide essential services to its citizens.

Financial ability of agencies to provide services

- RPPUD reports that current financing is sufficient to deliver services, and that all capital costs are incorporated into the rate structure. However, the District has significant unmet capital needs, some of which have not been evaluated, indicating underfunding of capital replacement.

Status of, and opportunities for, shared facilities

- The District contracts with AWA for emergency and technical services.
- No future opportunities to share facilities were identified by the District; however, there may be a possibility to share equipment with nearby service providers in El Dorado County.

Accountability for community service needs, including governmental structure and operational efficiencies

- The District demonstrated very limited transparency through its cooperation with LAFCO and the MSR process. Limited staff and absence of a general manger greatly constrain the accessibility and transparency of the District. Several requests for documents and updated information were unanswered. Needed information and specific data, could not be obtained to update this report.
- The District inappropriately serves connections outside its bounds in El Dorado County. While it is an option for the District to annex these properties, it is not anticipated to occur in the near future. Alternative service providers may be more appropriate for customers outside of the county. Eliminating this demand could enhance the district's ability to provide service within its boundaries.
- The District has been facing challenges in regulatory compliance and providing adequate services for many years. Absent significant changes in district policy and improvement in leadership, these problems are likely to continue into the indefinite future.