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.[1] RPPUD was formed to provide water services to the River Pines community. The sewer system was completed in 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.[2] 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.[3] 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.[4] 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.[5]

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 Lane 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 three 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.

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

[2] Public Utilities Code §15501-17501.

[3] Public Utilities Code §16461.

[4] Public Utilities Code §16463.

[5] 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,[6] 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 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. An update and amendment of the sphere of influence is proposed by River Pines (LAFCO Project #296 and the parcels currently receiving service in El Dorado County are proposed for annexation by the district (LAFCO Project #292).

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 2017.

Figure 1: RPPUD Governing Body

River Pines PUD			
Governing Body			
Members	**Name**	**Position**	**Term Ends**
	Richard Miller	Chair	December 2019
	Rocky Raymond	Vice Chair	December 2021
	Anita Ebbinghausen	Director	December 2019
	Mark Etter	Director	December 2021
	Patrick Henry	Director	December 2021
Manner of Selection	Members are elected at large via biennial elections in odd numbered years.		
Length of Term	4 years.		
Meetings	Center at 22900 Canyon Way		
Agenda Distribution	Posted at the Town Hall and Store bulletin board in town; District Website		
Minutes Distribution	Available upon request; posted on District Website		
Contact			
Contact	General Manager		
Mailing Address	P.O. Box 70, River Pines, CA 95675		
Phone	209-245-6723		
Email/Website	rppud@riverpinespud.org		

[6] LAFCO Resolution 2012-03.

The District informs constituents by mail or through the District's website. District website is maintained with all of the District's documents, financials, etc. Board position vacancies are posted in the same locations as the Agendas.

Candidates for a board position typically conduct outreach by visiting constituents in person.

With regard to customer service, the District reported that complaints are most often related to water quality and fire flow. Complaints may be submitted to the General Manager via mail, phone, fax, email, or in person. The District reported that the number of complaints received in 2012 was unknown. As of this update (2018) the District notes that complaints are still somewhat related to water quality. Lack of fire hydrants have made it nearly impossible for owners to obtain insurance and/or financing to build vacant lots. Complaints may be made to the General Manager via mail, phone, fax, email or through the website.

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. There was also a successful recall in 2011.

The District demonstrated accountability in its disclosure of information and cooperation with LAFCO. The District was cooperative with the MSR process but was unable to provide some of the requested information. The General Manager hopes to improve the District's accountability and disclosure and has made great strides in this effort.

Management

As of 2018, District staff includes a General Manager who is sub-contracted and works approximately a 40 hour week with office hours Monday - Thursday. All plant operations are sub-contracted with Amador Water Agency (AWA).

To improve operational efficiency, the District has reduced the number of its personnel. Remaining independent of AWA as a separate independent district is the District's goal to increase accountability and 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 in 2014. As of 2018, the General Manager notes productivity is monitored and evaluated.

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

As of 2014, the District did not have a master plan for its water or wastewater system, and did not routinely prepare a capital improvement plan. RPPUD has successfully proceeded in the process of applying for a grant to repair the water storage and delivery system. Grant funding was received for the new well (Well 03R) which was awarded by U.S.D.A. The District also received a Planning Grant for a new distribution system which includes lines, pipes, meters, fire flow, pressures, etc., which were awarded through California Development Block Grant (C.D.B.G) and Proposition 1 – Drinking Water State Revolving Fund (D.W.S.R.F). Those plans are substantially complete and the District is now

in the process of submitting for a construction grant (D.W.S.R.F and U.S.D.A)for this work, which includes work in the El Dorado County service area.

District financial planning efforts include annual preparation of budgets. Audits were performed annually for 2012 through 2017. All audit reports are now located on the District's website for review.

As of 2016, the General Manager notes that Policy and Procedures are currently being developed. An Employee Handbook has been adopted. IIPP has been updated and adopted (2016). Policy and Procedures continue to be adopted; new Bylaws are planned to be adopted within the next couple of months as well.

Management practices include risk management. The District's insurance includes liability coverage of the buildings and property and also Errors and Omissions coverage for the Board and employees.

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. The Post Office was removed.

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.[7] 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 are planned construction projects and District is currently in process of submitting its grant application for the new distribution system. This project will give 275,000 gallons of water storage, all new distribution lines, new meters, fire hydrants, pressure reducer valves, isolation valves for repair work.

There were 52 standby accounts within District bounds in 2013 and no standby accounts outside bounds. The $6,000,000 improvements will enable the district to serve all the parcels within its boundaries.

The District is not interested in expanding its service area, indicating that, absent grant funding for the new system, current facilities are probably not adequate for serving the maximum customer base, the cost to connect may be prohibitively expensive, and financial reserves are minimal. The District intends to annex those properties outside the boundaries that are currently receiving service.

[7] 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.

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.[8]

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.[9] DWR identified nine disadvantaged communities within Amador County—three of which are cities and are therefore not considered unincorporated.[10] The community of River Pines, which is also a River Pines Census Designated Place with the population of 574, is considered a severely disadvantaged unincorporated community.

In conjunction with its grant funding application, the district conducted an income survey that closed and completed the week of January 29, 2018. The median income is $28,500 and River Pines is considered a Severely Disadvantaged Community.

Any MSR conducted by LAFCO for a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, shall identify any DUCs within and contiguous to the sphere of influence of that city or special district and describe the present and probable needs and deficiencies for the provision of those public facilities and services within such DUC. [11]

A legacy community is a geographically isolated community that meets DUC criteria, is at least 50 years old, and is beyond the adopted sphere of influence of any city.[12]

Financing

RPPUD reports that its current financing level is sufficient to deliver services, and that all capital costs are incorporated into the rate structure. The MSR earlier MSR research suggested the District has significant unmet capital needs, some of which had not been evaluated, indicating likely underfunding of capital replacement. RPPUD has secured grant funding for water storage and distribution planning. The District is currently (2018) trying to obtain a grant for construction of a new distribution system.

[8] Government Code §56033.5.

[9] 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.

[10] 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.

[11] LAFCO Policy 7.3 Adopted 2-16-17

[12] LAFCO Policy 7.7 Adopted 2-16-17

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. $308,352 was the total revenue for 16-17.

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, reconnection fees, returned check fees, transfer fees, and water usage (11 percent). Additional sources include interest income, repair labor, and town hall rental, which together constitute about one percent.. Customers may now pay their bills through the District website. In 2016 the Board voted to accept credit cards and debit card payments. Payments may be made through the District's website or to office staff. The General Manager was able to find a company that does not charge the District merchant fees. Instead the consumer is charged $2.95 per transaction.

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 $60.38 for both commercial and residential properties and as last increased by 10% October 1, 2017. The District uses a tier rate fee schedule for water usage. There is no water usage included in the base rate.

Sewer rates include a monthly residential charge of $57.75, a monthly commercial charge of $66.70, and a connection water impact fee of $7,500.

Standby assessment fees are "restricted" funds and may not be used in the general fund for expenses. Standby fees are used toward a customer's impact fee should they decide to develop the property.

Voluntary Lock-Off fees are for parcels with water/sewer service where the structure is no longer on the property. The voluntary lock off fees are "reserved" funds and may not be used in the general fund for expenses. Voluntary Lock-Off fees are used toward repairs or improvements to the system.

Total expenditures for FY 16-17 were $327,458. ($196,167 –suppliers; $131,291 – employees) The year-end financial report is posted on the website and shows the percentages of each expense. Other expenditures include automobile expenses, bank charges, board member related expenses, contracted expenses, office expenses, property taxes, and repairs and maintenance as noted in the final financial report.

Additional information can be obtained from the 2017 year end audit which can also be found on the District's website.

RPPUD participated in a joint financing arrangement with the County. RPPUD and the County formed a JPA for purposes of water capital financing, however records of this agreement have not yet been found.

WATER SERVICES

Nature and Extent

RPPUD supplies treated water to domestic users. Water services include groundwater pumping, treatment of groundwater, distribution and billing. The District does not produce or use recycled water, and does not practice conjunctive use. As of 2016, the District also has a complete SCADA system for water and wastewater.

The District operations rely on AWA staff (via contract) for 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.

As of 2017, the District contracted with AWA for all water, sewer, distribution and technical operations. AWA also provides emergency on-call services. AWA may be used if the District needs access to their heavy equipment also.

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 additional connections.

There are parcels not presently receiving service within the district; including 52 standby accounts within District bounds as of 2018. There have been no new developments of vacant lots. The California drought. lack of fire hydrants and limited water storage make insurance and financing almost impossible to obtain.

Infrastructure

The District's water sources are from groundwater. The well water is chlorinated prior to distribution.

There are a total of three wells. Well No. 2, Well No. 3-R and Well No. 6-R). Key infrastructure includes water supplies. Well 6-R runs only once a week to keep it running for emergency backup only. Well 2 and Well 3-R are groundwater - these are the District's two main Wells. Well 2 yields 30gpm and Well 3-R yields 35 gpm. These two main Wells are operated congruently.

The groundwater source is shallow, fractured rock fissures underlying the River Pines community.

Well 2 was drilled 200 ft. deeper in 2015 and is still very much an active water source. Before it was drilled deeper it would dry up in late spring and would not be available through the summer when the District had to rely solely on Well 6-R. Well No. 6-R was drilled in 1998, and yields 60 gpm. Well 6-R needs a down hole transducer to monitor the water level. The groundwater at Well No. 6-R is classified as groundwater under the direct influence of surface water. While Wells 2 and 3-R have transducers, Well 6-R is too narrow to install.

Well No. 6-R was permitted in April 2006 after the district installed treatment for microbiological contamination through the State Revolving Fund. Before 2006, Well No. 6-R was being used only 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. 6-R is not vulnerable to contamination from gas stations, but is affected by individual septic systems according the General Manager. There have been no "boil Water" orders since 2006.

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 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. Well 6-R has always been the only Well with contamination risks.

Diversion from the Cosumnes River under district water rights is currently inactive due to water availability and the need for the District to purchase and install a flow measuring device required by the permit, However, the District still holds the permits for the diversion. The permit provides the District to divert 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. [13] The State will not permit the District to use its slow sand filter for surface water, and that filter and its water line is going to be demolished in conjunction with system upgrades.

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.[14] 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. 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. All potential surface water diversions are currently inactive.

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 relies on its groundwater source due to permit requirements, 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.[15] Since then, flows have declined, and there are times when there is no surface flow in the river. From July to

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

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

[15] 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).

November, the river is typically dry at the surface. In 2001, as the river became unusable due to extremely low flow, and RPPUD increased its reliance on groundwater sources.

The RPPUD surface water treatment system is being deactivated and dismantled. DWR no longer permits the use of district's treatment system.

The District has a total of 135,000 gallons of storage capacity. By comparison, peak day demand is 45,000 gallons. In other words, the District's stored water capacity would accommodate about one day 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. Per March 2016 Rehabilitation Study - the majority of the distribution system, which was placed in early 1927, consist of 3/4 inch to 4 inch diameter water lines with various materials (Galvanized Pipe, Polyvinyl Chloride Pipe, Polyethylene Pipe, Asbestos Cement Pipe, Copper).

The 2014 MSR noted that the largest distribution main is undersized, and needs to be upgraded to the current six-inch diameter standard. The most recent (2017) state inspection notes that most of the mains are in fair condition. Approximately 20 percent contain asbestos-cement pipelines. The PVC mains and the AC mains are in good condition. The District had approximately 22 distribution system service breaks and leaks in 2017, all of which were repaired. The 2017 Annual Inspection Report pointed out that District's emergency notification plan, which was last updated in 2016, needed to be updated due to personnel changes. As 2018, the District's emergency notification plan was up to date. Updating and replacing the system is the District's current challenge (financial) 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 the El Dorado County area served by the District.

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. Currently there are 18 fire hydrants. To provide adequate protection hydrants should be placed at intervals no more than about 300 feet. In 2017, the District conducted the modeling and planning to rectify these issues and these changes will be included with the new Distribution project.

The 2014 MSR noted the District does not own the equipment (e.g., backhoe, jackhammer) for performing most types of distribution system repairs. The District now contracts with AWA for operations.

The District's regulatory record includes deficiencies dating to 1997-8 DPH conducted a technical, managerial and financial (TMF) assessment of the District in 1999, and concluded that RPPUD had TMF deficiencies. 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."[16] RPPUD reported that it

had subsequently prepared a plan. As of 2018, AWA has implemented a schedule to comply with all State requirements.

The 2014 MSR noted the distribution system did not have the ability to shut off certain locations for repairs without affecting the majority of the customers. This has been addressed in the new distribution plans.

The 2014 Municipal Service Review noted the absence of drought planning by the district. A drought plan, including mandatory water reduction and fines, was adopted and implemented in 2015. Water use was reduced by approximately 37% under the drought management plan.

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

Figure 2: RPPUD Water Profile

River Pines PUD			
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	None	Poor / 1994
Well No. 02	well	35 gpm	Excellent / 1976
Well No. 06R	well	65 gpm	Excellent / 1998
Well No. 03R	well	35 gpm	Excellent / 2014
Jaybird	storage tank	75,000 gal	Fair / 1982
Circle Ave. contact	unused	0	/ 1954
Circle Ave. storage	storage tank	63,000 gal	Poor / 1964
Well No. 06R contact	contact tank	12,000 gal	Good / 2005
Other Infrastructure			
Reservoirs	0	Storage Capacity (mg)	0.17
Pump Stations	4	Pressure Zones	2
Production Wells	3	Pipe Miles	4.8 miles
Other:	18 fire hydrants		
Infrastructure Needs and Deficiencies			
Well 06R needs down hole transducer to monitor the water level. - The slow sand filter's permit has been revoked due to high operation cost and a need for a flow meter to be installed downstream of the diversion point to comply with the water rights permit. Fire flow is deficient, as indicated by the impact on water pressure when hydrants are opened. The District has completed a study and planning 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.			
Facility-Sharing and Regional Collaboration			
Current Practices: RPPUD contracts with AWA for all operation services.			
Opportunities: Currently has contract with AWA for all operation needs.			
Notes: (1) NA means Not Applicable, NP means Not Provided, mg means millions of gallons, af means acre-feet.			

Continued

River Pines PUD

Water Demand and Supply

Service Connections	Total	Bounds	Outside Bounds
Total	234	219	15
Irrigation/Landscape	0	0	0
Domestic	229	214	15
Commercial/Industrial/Institutiona	4	4	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	35	NP	NP	NP
Residential	NP	34	34.8	34	NP	NP	NP
Commercial/Industrial	NP	1	1	1	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	0.0	0	Not in Use
Slate Creek	Surface	0.0	0	Not in Use
Groundwater wells	Groundwater	NP	35.8	2017 Actual 34.4"

Supply Information (Acre-feet per Year)

	2000	2005	2010	2017	2020	2025	2030
Total	NP	NP	NP	34	NP	NP	NP
Imported	0.0	0.0	0	0	0	0	0
Groundwater	NP	NP	NP	34	NP	NP	NP
Surface	0	0	0	0	0	0	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, 2013-2016		
Storage Practices	District water storage capacity amounts to 60 percent of peak day demand.		
Drought Plan	Adopted 2015		

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

River Pines PUD

Water Rates and Financing

Domestic Water Rates-Ongoing Charges FY 13[1]			
	Rate Description	Charges	Consumption[2]
Residential	$60.38/month base + use charge	$ 97.01	7,600 gal/month

Special Rates
None

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. $35/month voluntary lock off charge for parcels within bounds that have no structure.		
Most Recent Rate Change	2017	Frequency of Rate Changes	Every 3-5 years

Water Development Fees and Requirements	
Connection Fee Approach	Properties paying standby charges get to have those payments applied to new impact fee.
Impact Fee Timing	Due prior to connection.
Impact Fee Amount	$7,500/Single Family Unit
Land Dedication Requirements	
Development Impact Fee	

Water Enterprise Revenues, FY 17			Expenditures, FY 17	
Source	Amount	%		Amount
Total	$308,408	100%	Total	$318,431
Rates & charges	$131,488	43%	Administration	$47,664
Property tax	$6,883	2%	O & M	$88,172
Grants	$132,117	43%	Capital Depreciation	$40,972
Interest	$1,174	0%	Debt	$9,500
Connection Fees	$395	0%	Purchased Water	$0
Variable Income	$36,351	12%	Other	$132,123

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.

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River Pines PUD

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 2016

Other Plans

Specs and plans for a new distribution system

Service Challenges

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	28%
Distribution Breaks & Leaks	30	Distribution Break Rate[2]	625
Response Time Policy	ASAP	Response Time Actual	1-2 hours
Water Pressure	20 psi	Total Employees (FTEs)	0

Water Operator Certification

Grade 3

Drinking Water Quality Regulatory Information[3]

	#	Description
Health Violations	0	NA
Monitoring Violations	5	Coliform, 2005. Failed to conduct nitrate monitoring, 2016. Failed to test all of its backflow prevention devices, 2016.
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 2018.

WASTEWATER SERVICES

Nature and Extent

RPPUD provides wastewater collection, treatment and disposal services. The District contracts with AWA for all wastewater services.

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.[17] 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 2018, the District had 215 residential and four commercial connections, all of which were within its bounds. In 2014, standby sewer connections and stand by charges were not reported.

Infrastructure

Key infrastructure includes the wastewater treatment plant (WWTP), sewer pipes, grinders used to transfer effluent up hill to the lift stations 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.[18] Treated effluence is disinfected prior to disposal. The disposal system consists of seven 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.

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[17] 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)

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

Figure 3: RPPUD Wastewater Profile

River Pines PUD

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
River Pines 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 2018				
	Connections			**Flow**
Type	**Total**	**Inside Bounds**	**Outside Bounds**	**Average (mgd)**
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

River Pines PUD			
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			
Three monitoring wells.			
Wastewater Collection & Distribution Infrastructure			
Collection & Distribution Infrastructure			
Sewer Pipe Miles NP	Sewage Lift Stations 3		
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 all wastewater operation and maintenance services.			
Facility Sharing Opportunities			
No facility sharing opportunities were identified.			

Continued

River Pines PUD

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
	4/13/2017	Discharge of effluent

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)	0.0	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 was inspected and jetted in 2016.

Service Challenges

Sewer pond access during high river flow.

Wastewater Planning Plan	**Description**	**Planning Horizon**
Sanitary Sewer Management Plan	-	NP
Emergency Plan	Emergency contacts	2016
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

River Pines PUD			
Wastewater Rates and Financing			
Wastewater Rates-Ongoing Charges FY 16-17			
	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 16-17			**Expenditures, FY 16-17**	
Source	**Amount**	**%**		**Amount**
Total	$125,532		Total	$163,278
Rates & Charges	$118,490		Administration	$46,652
Property Tax	$0		O & M	$101,974
Grants	$0		Capital Depreciation	$14,652
Interest	$0		Debt	$0
Connection Fees	$0		Other	$0
Other	$7,042			

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

- Future growth is expected to be limited, because there are only a few undeveloped properties within the District's boundaries with no current planned or proposed development projects.
- The District discourages expansion of its service area since growth potential for its facilities are limited and may not be adequate for serving outside the current service area. Costs to connect may be prohibitively expensive for some landowners, and district financial reserves are minimal.

Location & characteristics of any disadvantaged communities within or contiguous to the sphere of influence

- River Pines is a census designated place and a severely disadvantaged unincorporated community with a median annual household income of $28,500. The community has significant public facilities and service deficiencies. The District's grant application, if successful, will remediate deficiencies associated with water service. The district is encouraged to exercise its powers to add other needed community services such as solid waste collection.

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

- The District's demand has been fairly stable in recent years and future demand is expected to be limited.
- RPPUD has considerable infrastructure needs and deficiencies and has made substantial progress toward making needed improvements. Planning grants were obtained, with a planning study completed in 2016 for a new distribution system, an environmental analysis and engineering specifications and plans completed in 2018. The construction application is awaiting final district board approval for funding to replace the existing distribution system, add additional water storage, and provide required fire coverage.
- The existing water capacity is inadequate. While the District is able to meet peak day demand for domestic uses for parcels in its service area, it cannot meet fire flow demand. Additional planned storage and system improvements will enhance reliability and resolve this inadequacy within the area currently served by the District.
- The District faces challenges in delivering adequate water services. Past and present regulatory violations and evaluations are being addressed through a

contract for operations by Amador Water Agency and the application for grant funding for system improvements. Planned system improvements will enhance the District's ability to deliver adequate water services.

- District planning efforts have improved as required by the grant application process. The district should continue to seek improvements to 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 equal to current peak wet weather flow, reportedly the plant can accommodate peak flows of 0.088 mgd.
- As of 2016, the wastewater collection system is regularly inspected via the SCADA system.
- Staffing deficiencies have been improved through a contract with Amador Water Agency for operation of the system. The contract with AWA has reduced cost to ratepayers and increased the district's ability to safely provide essential water and wastewater services. The District's appointment and retention of a General Manager further improves and stabilizes the district services.

Financial ability of agencies to provide services

- RPPUD reports that current financing is sufficient to deliver services, and that capital costs are incorporated into the rate structure. The District has now established a Capital Improvement account. The District is relying on one-time state grant funding for renovating and upgrading the system. As of 2018, there is no long term capital improvement plan, and LAFCO urges the District to make long term plans for its system and operations.
- Fiscal accountability has improved since the 2014 MSR.

Status of, and opportunities for, shared facilities

- The District now contracts with AWA for all daily operations, maintenance, emergency and technical services and week-end on-call. This provides a higher level of service and reliability for the future.
- No future opportunities to share facilities were identified by the District.
- The District is geographically isolated from other providers of water and wastewater service, reducing the opportunities for intergovernmental sharing and cooperation.

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

- The District has significantly enhanced transparency and accountability since the 2014 MSR update. District staff and board members fully cooperated with LAFCO and the MSR process. The appointment of a General Manager and the enhanced web-site have greatly increased the transparency and accessibility of district information.
- The District inappropriately serves connections outside its boundaries in El Dorado County. As noted, the District has proposed annexation of all these properties with a goal of improving accountability to citizens within and outside the current boundaries.
- The District has been facing challenges in regulatory compliance and providing adequate services for many years. The District has taken steps to remediate many of its internal and operational problems, including its contract with Amador Water Agency, staffing changes and significant changes in district policy.
- The District is hopeful to be able to secure grant funding for a major system rehabilitation and renovation. If successful, this effort will result in important system efficiencies for the entire service area, including parcels now served outside the boundaries.