



2021 BUDGET

Platte County Regional Sewer District

Approved
December 9, 2020

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Mission Statement

It is the Mission of PCRSD to protect the soil, water and the general environment of Platte County through continued efforts to eliminate improper disposal of wastewater, thus protecting and reclaiming property values.

District Board of Trustees

Aaron Jung, Chairman

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Tony Paolillo, Treasurer

Chris Barmann, Trustee

Commissioner Ron Schieber, Trustee

Staff

Dan Koch, Executive Director

Shawn Burns, Assistant Director

Karen Shanks, Billing Clerk

Kevin Schank, Treatment Facility Superintendent

Scott Jones, Treatment Facility Laborer

Lucas Wagner, Collection System Technician

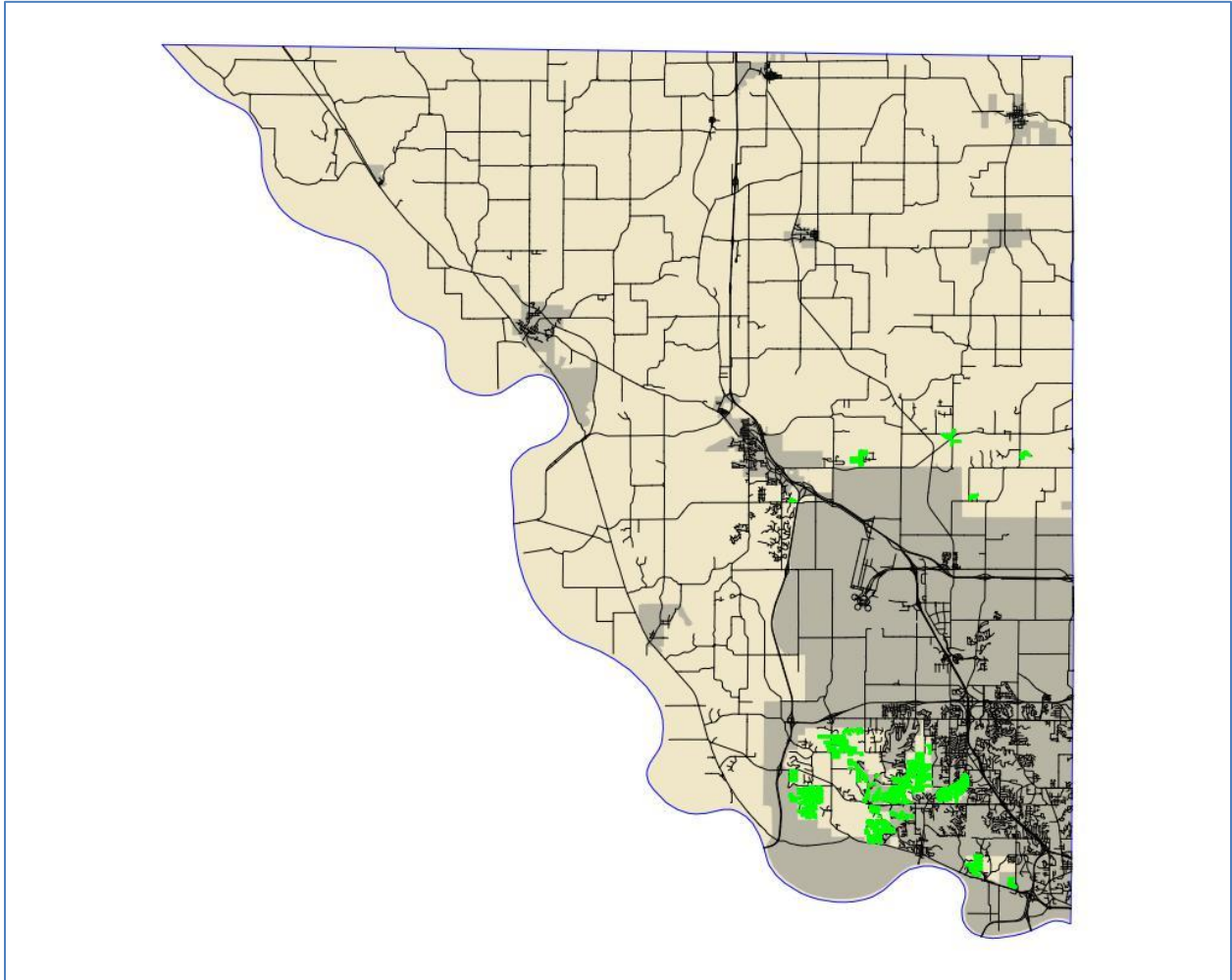
Dennis Hudson, Collection System Laborer

Jake Percy, Collection System Laborer

About the District

The Platte County Regional Sewer District was formed in 1992 to collect and treat sewage in the county. The District serves over 4,600 customers in neighborhoods highlighted in green in Figure 1 below. Service is provided through the operation and maintenance of four wastewater treatment facilities, 22 pump stations, and 63 miles of sewer lines. The District also provides wastewater treatment for the Blair Heights neighborhood and parts of Kansas City, Missouri.

Figure 1: PCRSD Service Areas



Treatment Facilities

The District operates and maintains four wastewater treatment facilities (WWTF): Brush Creek WWTF, Red Rock WWTF, South Gale WWTF, and Alan Acres WWTF. The Brush Creek WWTF is the largest facility and treats all customers south of Highway 152. Originally built in 1996, it was expanded in 2006 to increase capacity and comply with the latest Missouri Department of Natural Resources regulations. The facility can treat up to 2,000,000 gallons of wastewater a day. It is an activated sludge facility that uses organisms to break down the sewage.

The remaining plants are smaller and serve individual neighborhoods. Alan Acres is an activated sludge plant, just like Brush Creek, and serves 17 residences. The Red Rock and South Gale facilities use a combination of septic tanks and a re-circulating sand filter to treat the wastewater. The residential septic tanks initially treat the sewage and then send it to the plant for additional treatment. Each facility currently serves between 25 and 50 customers. In the past two years, improvements were constructed at the Red Rock, Alan Acres, and South Gale WWTFs to comply with the operating permits.



Figure 2: Red Rock WWTF

Collection System

The District operates and maintains over 63 miles of sewer lines and 22 pump stations. For most of the District's service areas, the sewer lines use gravity to move the sewage to the nearest pump station or treatment facility. The remaining lines are force mains that use pressurized air to push the sewage. Property owners connected to pressure lines have grinder pumps installed to facilitate this process. From the lines, the sewage travels to the pump station, where it is pumped into another line and taken to the nearest treatment facility.

All of the District's pump stations and treatment facilities have remote telemetry units (RTUs) equipped. These units provide real-time monitoring of pump station activity and warning alarms. Staff can check the status of any station from a computer or smart phone and are notified immediately of any alarm, such as a power outage or pump failure, via an email or telephone call. These units also record and maintain data that is useful in examining long-term trends.

The District began a comprehensive Sanitary Sewer Evaluation Study (SSES) in 2011. Each year, specific neighborhoods and sewer lines were inspected and given a condition rating for repairs. This information was used to identify deficiencies and most effectively utilize District resources. In 2018, the District studied part of the Walnut Creek neighborhood. The annual findings were incorporated into the Capital Improvement Plan (CIP) Fund Budget and Appendix A.

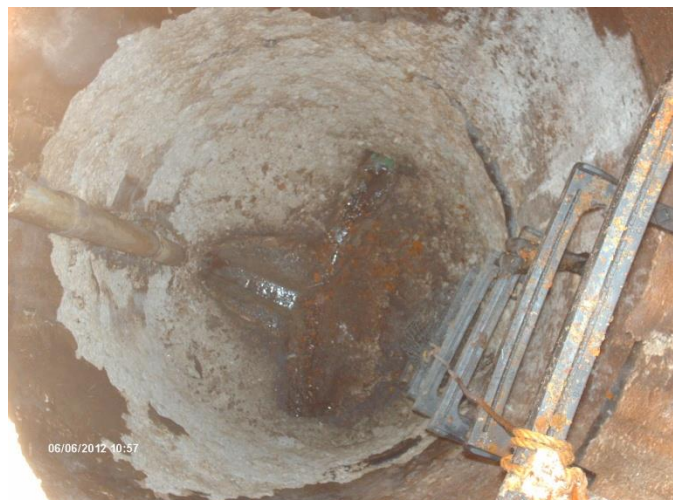


Figure 3: A manhole with severe corrosion discovered during the SSES. It was rehabilitated in 2014.

2020 in Review

Here is an overview of the PCRSD actions and changes in 2020:

- **COVID-19 Response**

In an effort to provide some relief for PCRSD customers, no penalties were levied for the March, April, and May billing periods and water service terminations were halted until the summer.

- **Pro-rated sewer billing**

Beginning in June, the sewer bills were pro-rated based on the filings with the Recorder of Deeds' Office. Previously, the owner of record on the first day of the month was responsible for the entire month's billing. Pro-rating ensures customers are not having to pay for service they did not utilize.

- **Hired Jake Percy**

The PCRSD field staff grew when Jake Percy was hired in May. He handles the inspection of public sewer lines and private connections, as well as assisting other field workers as needed.

- **Upgrades to the Brush Creek WWTF**

Upgrades were constructed at the Brush Creek WWTF to the headworks building. The bar screen, which filters out unwanted debris in the wastewater, was replaced, the electrical system upgraded and HVAC system was replaced.

- **Sewer line repairs and rehabilitation**

Staff completed spot repairs of a sewer line in the Parks Hills neighborhood and one in the Walnut Creek neighborhood. The spot repairs were necessary to allow for future a cured-in-place pipe replacement project.

- **New development phases**

Sewer lines were constructed by the developer of the following subdivision:

- Bella Ridge 2nd Plat
- Creekside Commons Phase 1
- Creekside Meadows Phase 1 Part 2
- Creekside Village Townhomes Phase 1

These subdivisions were designed, constructed, and inspected in accordance with PCRSD standards.

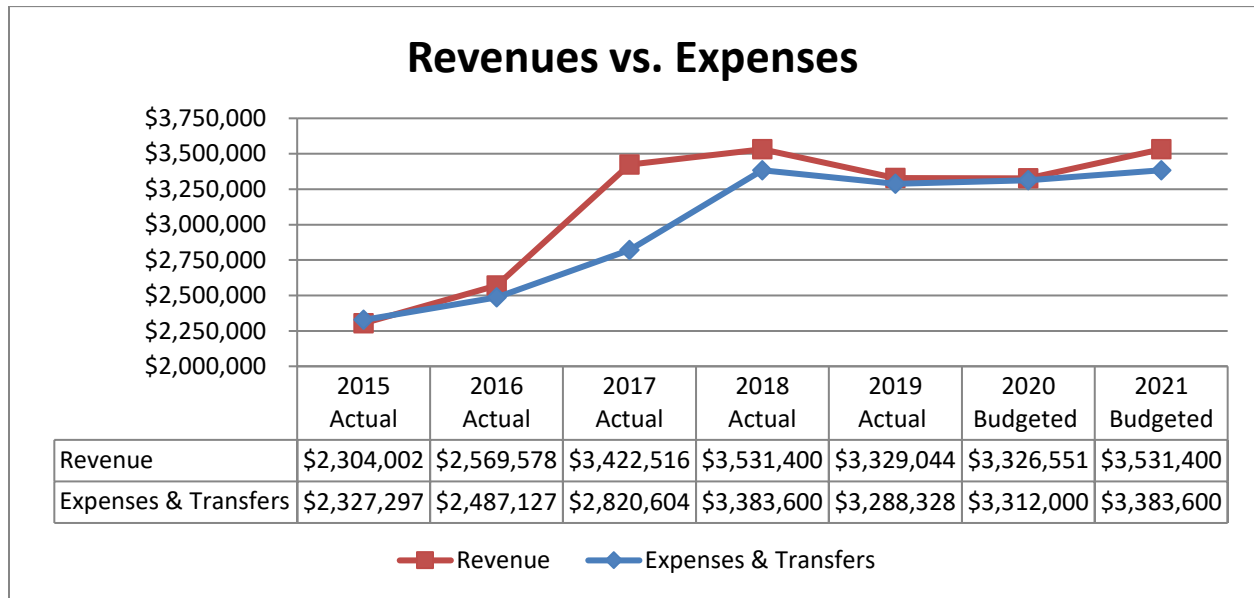
- **New Sewer Connections**

There were 176 new residential sewer connection permits and four commercial connection permits issued.

Operating Fund

Overview

The Operating Fund is comprised of the District’s activities necessary to operate and maintain the collection system. Those activities include wastewater treatment, system maintenance, inspections & line locations, billing & collections, and customer service. Below is a line graph detailing the operating revenue and expenses since 2015:



Revenue

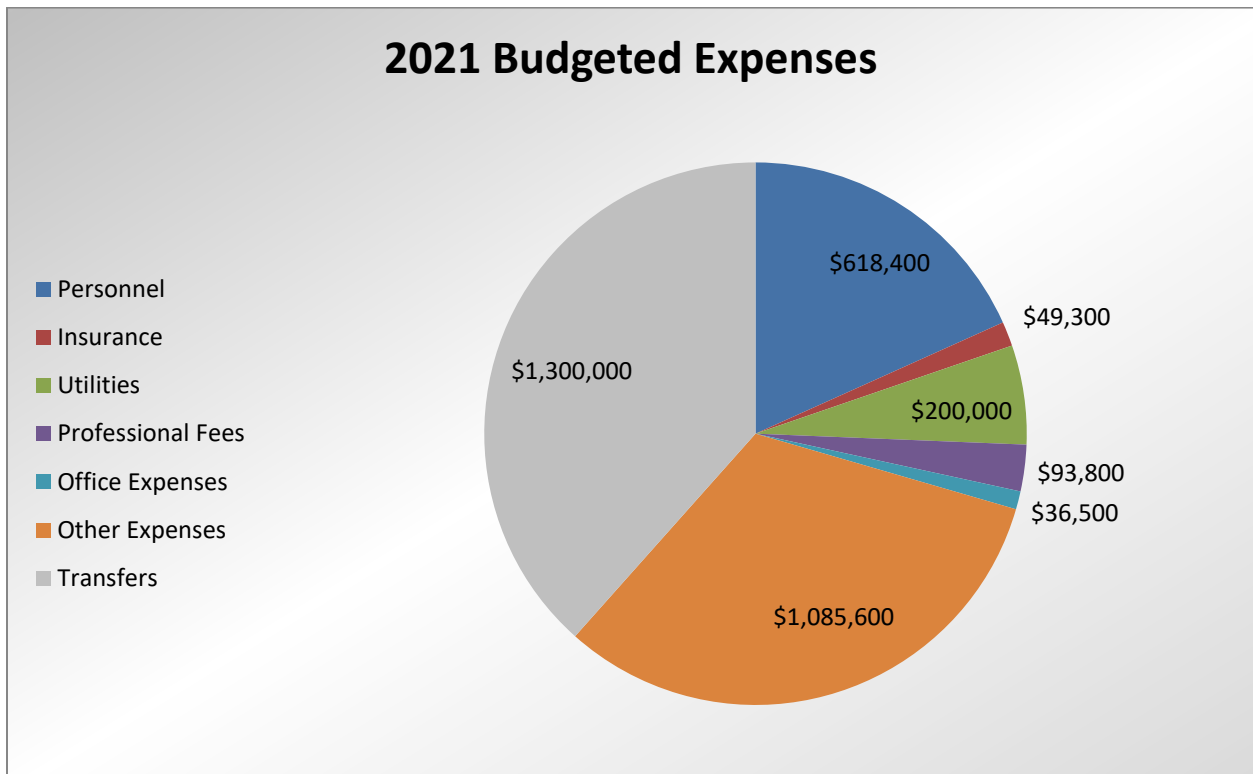
The District anticipates \$3,531,400 in revenue for 2021. Sewer user charges continue to be the single largest source representing over 94 percent of operating revenue. The remaining revenue sources are late fees/penalties, reimbursements, sale of equipment, and interest income. The total revenue reflects a 6.2 percent increase over the 2020 Budget, driven primarily by a growing customer base. The sewer rate, approved by the Board of Trustees, remained unchanged from 2020 and is shown in the table below.

	2021 Rate
Base	\$ 31.66
Rate per 1,000 gal	4.75
Total	\$ 50.66

A customer’s bill is calculated using the “winter average.” The water used during the months of January, February, and March are collected and an average monthly use is obtained. These months are used to avoid charging customers for water used for outdoor purposes that do not generate wastewater. The average is then applied to the rate formula above and establishes the monthly amount billed throughout the year.

Expenses & Transfers

The District budget includes \$2,071,900 for expenses and transfers out at \$1,300,000. The operating expenses reflect a 5.5 percent increase over the 2020 budget. The District’s largest expense continues to be the Kansas City Water Services treatment charges, accounting for 34 percent of the operating expenses. The expenses are divided into six categories and analyzed in the chart below:



A transfer of \$1,300,000 will be made from the Operating Fund to the Debt Service Fund in 2021. This amount covers the 2021 debt service obligations for system-wide projects and improvements. Normally, the PCRSD would transfer funds from the Operating Fund to the CIP Fund for future repairs and facility improvements/expansions required to comply with DNR permits and regulations. However, the transfer was deferred in 2021 to avoid a sewer rate increase. The CIP transfer would resume in 2022. By taking this proactive approach, the District may rely less on debt and save money on interest payments and borrowing costs.

2021 Operating Budget

	2018 Actual	2019 Actual	2020 Budgeted	2020 Estimated	2021 Budgeted	% Change
Estimated Beginning Fund Balance			3,541,116	3,541,116	3,832,028	
Revenue						
User Charges	2,823,449	3,089,759	3,133,351	3,304,815	3,400,000	8.5%
Penalties & Late Fees	36,644	41,447	40,000	30,200	40,000	0.0%
Collection Fees	17,382	12,093	26,000	8,800	26,000	0.0%
Reimbursements	15,947	49,675	5,000	32,311	30,000	500.0%
Sale of Equipment		25,440	22,200	22,200	23,400	5.4%
Interest Income	97,629	110,630	100,000	24,190	12,000	-88.0%
Total Revenue	2,991,051	3,329,044	3,326,551	3,422,516	3,531,400	6.2%
Expenses						
Personnel						
Salaries & OT	380,486	390,733	426,000	426,000	470,000	10.3%
Payroll Taxes	29,063	29,001	32,800	32,800	36,900	12.5%
Employee Benefits	59,862	63,200	75,600	75,600	86,800	14.8%
Board Expenses	5,300	5,400	6,000	5,800	6,000	0.0%
Uniforms	2,432	2,204	3,500	3,500	3,500	0.0%
Professional Development	11,085	4,972	12,000	6,000	12,000	0.0%
Mileage Reimbursement	2,779	2,860	3,200	3,000	3,200	0.0%
Total Personnel	491,007	498,370	559,100	552,700	618,400	10.6%
Insurance						
Hazard, Liability, & Vehicle	36,425	43,405	40,000	40,952	43,000	7.5%
Workers Compensation	5,812	6,563	6,000	5,952	6,300	5.0%
Total Insurance	42,237	49,968	46,000	46,904	49,300	7.2%
Utilities						
Electricity	151,464	138,519	165,000	166,000	170,000	3.0%
Water/Sewer	1,934	1,436	1,900	2,000	2,000	5.3%
Telephone	22,521	23,273	27,000	26,500	28,000	3.7%
Total Utilities	175,919	163,228	193,900	194,500	200,000	3.1%
Professional Fees						
Attorney	2,253	2,233	15,000	5,000	15,000	0.0%
Engineer	25,416	47,206	30,000	45,000	55,000	83.3%
Accounting/Payroll	751	715	800	800	800	0.0%
Auditor	20,400	21,100	22,000	21,800	23,000	4.5%
Total Professional Fees	48,820	71,254	67,800	72,600	93,800	38.3%

	2018 Actual	2019 Actual	2020 Budgeted	2020 Estimated	2021 Budgeted	% Change
Office Expenses						
Office Supplies	3,739	4,036	5,000	5,000	6,000	20.0%
Information Technology	6,841	9,297	13,000	20,000	13,000	0.0%
Postage	12,807	13,077	13,500	14,000	14,000	3.7%
Printing/Public Notices	2,312	4,927	3,500	3,200	3,500	0.0%
Total Office Expenses	25,699	31,337	35,000	42,200	36,500	4.3%
Other Expenses						
Missouri One Call	5,034	5,303	5,200	6,800	7,000	34.6%
DNR Fees	3,126	3,164	3,400	3,400	3,600	5.9%
Laboratory	6,899	13,967	20,000	20,500	21,000	5.0%
Outside Treatment	641,143	584,499	708,000	660,000	708,000	0.0%
Maintenance	210,559	325,317	220,000	225,000	230,000	4.5%
Solid Waste Hauling	29,524	150,790	36,000	35,000	36,000	0.0%
Service Vehicles	12,573	42,323	44,000	43,000	54,000	22.7%
Collections	23,610	29,308	26,000	29,000	26,000	0.0%
Total Other Expenses	932,468	1,154,671	1,062,600	1,022,700	1,085,600	2.2%
Total Expenses	1,716,150	1,968,828	1,964,400	1,931,604	2,083,600	6.1%
Other Financing Sources (Uses)						
Transfer to Debt	120,000	(1,200,000)	(1,200,000)	(1,200,000)	(1,300,000)	8.3%
Transfer to CIP	(191,500)	(191,500)	(147,600)	-	-	-100.0%
Total Financing Sources (Uses)	(71,500)	(1,391,500)	(1,347,600)	(1,200,000)	(1,300,000)	-3.5%
Surplus (Deficit)	1,203,401	(31,284)	14,551	290,912	147,800	
Estimated Ending Fund Balance			3,555,667	3,832,028	3,979,828	

Debt Service Fund

Overview

The District has three State Revolving Fund (SRF) loans that were used to finance various improvements to the system. Some of these projects benefitted only a specific neighborhood and are repaid through special debt assessments against the benefitting customers. The system-wide projects completed with these funds are repaid through the fund transfer from the Operating Fund. For budgeting purposes, the District budgets the principal and interest expenses for the following year. That ensures the resources are available in advance of the payment due dates. The District will set aside \$1,325,997 for the debt service obligations in 2022. A detailed breakdown of the total is in the table below:

	Principal	Interest	Total
Series 2002B	30,000	450	30,450
Series 2006A	1,190,000	105,547	1,295,547
Total 2015 Payments	\$ 1,220,000	\$ 105,997	\$ 1,325,997

The district’s total debt payments through 2027 are listed below. These numbers reflect the estimated interest due after the SRF interest subsidy:

Year	Principal	Estimated Interest	Total
FY 2022	1,220,000	105,997	1,325,997
FY 2023	1,215,000	88,590	1,303,590
FY 2024	1,245,000	71,276	1,316,276
FY 2025	1,270,000	53,535	1,323,535
FY 2026	1,300,000	35,438	1,335,438
FY 2027	1,325,000	17,889	1,342,889

2021 Debt Service Budget

	2018 Actual	2019 Actual	2020 Budgeted	2020 Estimated	2021 Budgeted	% Change
Estimated Beginning Fund Balance	1,348,603	1,632,214	2,137,395	2,137,395	1,952,022	
Revenue						
Debt Service Assessments	373,839	253,875	173,960	173,960	143,456	-17.5%
Penalties & Late Fees	6,604	4,649	2,500	3,439	2,500	0.0%
Interest Income	24,661	33,825	24,000	8,321	1,200	-95.0%
Total Revenue	405,104	292,349	200,460	185,720	147,156	-26.6%
Expenses						
SRF Principal	367,500	1,007,917	1,370,000	1,370,000	1,302,500	-4.9%
SRF Interest	183,160	168,923	148,500	145,574	127,225	-14.3%
SRF Fees	70,833	63,240	60,000	55,519	50,000	-16.7%
Total Expenses	621,493	1,240,080	1,578,500	1,571,093	1,479,725	-6.3%
Other Financing Sources (Uses)						
Transfer from Operating	500,000	1,200,000	1,200,000	1,200,000	1,300,000	8.3%
Total Financing Sources (Uses)	500,000	1,200,000	1,200,000	1,200,000	1,300,000	8.3%
Surplus (Deficit)	283,611	252,269	(178,040)	(185,373)	(32,569)	
Estimated Ending Fund Balance	1,632,214	1,884,483	1,959,355	1,952,022	1,919,453	

Capital Improvement Plan Fund

Overview

The CIP is a proactive program that will help PCRSD discover and correct defects in sewer lines and equipment before they fail and cause significant problems. It is funded through connection fees, transfers from the Operating Fund, and existing bond proceeds. It is the goal of the CIP to minimize repair costs and reduce the District's dependency on debt.

Planned Projects for 2021

- **New tracked excavator and trailer** **\$65,000**
A larger excavator is necessary to perform sewer line and manhole repairs by PCRSD staff. The current mini-excavator can safely dig up to eight feet deep. A new excavator could dig 11 to 14 feet deep and can lift manhole barrel sections.
- **Manhole repairs** **\$10,000**
PCRSD staff will raise buried manholes. The budget covers the adjusting rings and barrel sections necessary to bring the manhole to grade level. Since staff will perform the work, it will save about \$50,000 compared to a contractor's price.
- **Thousand Oaks 11th Plat PS Upgrade** **\$70,000**
Upgrades include a new control panel, terminal box, and check valves to replace corroded and unsatisfactory components.
- **Sanitary Sewer Repairs Phase 4** **\$390,000**
This project includes rehabilitation of manholes deteriorated from sulfide corrosion, spot repairs that are too deep for PCRSD staff to perform, and cured-in-place pipe lining of deteriorating lines. Most of the lines are located in the Walnut Creek neighborhood.
- **Brush Creek WWTF Aeration Grids** **\$40,000**
The aeration grids, which diffuse fine air bubbles into the wastewater as part of the treatment process, are past their useful life. PCRSD staff will install the new piping and diffusers.
- **SSES Phase** **\$55,000**
The 2021 phase includes the inspection/evaluation of the lines in The National south of Highway 45; cleaning and televising lines along Blair Road, Graden Road, and Pleasant Drive; and monitoring the wastewater flow of the Rush Creek interceptor line.

Additional information regarding projects planned for 2021 and beyond can be found in Appendix A.

2021 Capital Improvements Plan Budget

	2018 Actual	2019 Actual	2020 Budgeted	2020 Estimated	2021 Budgeted
Estimated Beginning Fund Balance	1,212,256	1,145,408	855,353	855,353	1,843,654
Estimated SRF Balance		-	-		-
Revenue					
Connection Fees	448,000	421,253	750,000	1,500,000	330,000
Total Revenue	448,000	421,253	750,000	1,500,000	330,000
Expenses					
Capital Equipment	-	-	150,000	-	65,000
Collection System	26,048	40,396	50,000	19,943	390,000
Pump Stations	-	-	30,000	58,378	70,000
Treatment Facilities	600,000	574,781	435,000	367,926	40,000
Sanitary Sewer Evaluation Study	85,000	79,139	66,000	50,692	55,000
CIP Management	4,800	16,992	17,400	14,760	17,400
Total Expenses	715,848	711,308	748,400	511,699	637,400
Other Financing Sources (Uses)					
Transfer from Operations	201,000	-	176,000	-	-
Total Financing Sources (Uses)	201,000	-	176,000	-	-
Surplus/(Deficit)	(66,848)	(290,055)	177,600	988,301	(307,400)
Estimated Ending Fund Balance	1,145,408	855,353	1,032,953	1,843,654	1,536,254

	2022 Budgeted	2023 Budgeted	2024 Budgeted	2025 Budgeted	2026 Budgeted
Estimated Beginning Fund Balance	1,536,254	1,509,794	1,773,036	(3,298,535)	(2,814,409)
Estimated SRF Balance	-	-	-	-	-
Revenue					
Connection Fees	330,000	330,000	330,000	330,000	330,000
Total Revenue	330,000	330,000	330,000	330,000	330,000
Expenses					
Capital Equipment	-	-	-	-	-
Collection System	400,000	-	-	-	-
Pump Stations	40,000	-	45,000	-	30,000
Treatment Facilities	40,000	200,000	5,500,000	-	-
Sanitary Sewer Evaluation Study	53,100	53,100	53,100	53,100	53,100
CIP Management	17,400	17,400	17,400	17,400	17,400
Total Expenses	550,500	270,500	5,615,500	70,500	100,500
Other Financing Sources (Uses)					
Transfer from Operations	194,040	203,742	213,929	224,626	235,857
Total Financing Sources (Uses)	194,040	203,742	213,929	224,626	235,857
Surplus/(Deficit)	(26,460)	263,242	(5,071,571)	484,126	465,357
Estimated Ending Fund Balance	1,509,794	1,773,036	(3,298,535)	(2,814,409)	(2,349,053)

NOTE: The budget figures for 2022 and beyond are for planning purposes only. They will be evaluated on an annual basis and are subject to change based on SSES recommendations, regulatory changes, and/or emergencies.

Appendix

Appendix A Capital Improvement Plan