

# Executive Summary

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- PSWID will need additional revenue through FY27 to cover operating costs, debt, reserves, and proposed capital improvements
- The analysis identifies that a 6.3% average adjustment in rates will be needed in FY23
- The analysis recommends consideration of a rate structure based on meter size (Option 3)



# PSWID Rate Study Discussion

January 13, 2022

# Karl Pennock

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Rural Community Assistance  
Corporation (RCAC)

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575-932-8222



# Rural Community Assistance Partnership, Inc.

## Western

**Rural Community  
Assistance Corporation**

916/447-2854

[www.rcac.org](http://www.rcac.org)

## Midwest

**Midwest Assistance Program**

952/758-4334

[www.map-inc.org](http://www.map-inc.org)

## Southern

**Communities Unlimited**

479/443-2700

[www.crg.org](http://www.crg.org)

## Northeast

**RCAP Solutions**

800/488-1969

[www.rcapsolutions.org](http://www.rcapsolutions.org)

## Great Lakes

**WSOS Community  
Action Commission**

800/775-9767

[www.glrcap.org](http://www.glrcap.org)

## Southeast

**Southeast Rural Community  
Assistance Project**

866/928-3731

[www.southeastrcap.org](http://www.southeastrcap.org)



800/321-7227

[www.rcap.org](http://www.rcap.org)



# System/Community Profile

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- Aging system with significant water loss
- Moratorium on new connections
- 3221 active connections (3153 residential, 67 commercial, 2974 with 5/8" meters)
- Numerous projects with approved funding

# Current Projects

<b>PSWID USDA CIP PROGRAM FY21 THRU FY26</b>	
<b>PROJECT NAME</b>	<b>Approved Project Budget</b>
<b>Portals 1, 2 &amp; 3 Waterline Replacement</b>	<b>\$5,518,758.00</b>
<b>Whispering Pines Waterline Replacement</b>	<b>\$421,083.00</b>
<b>Cool Pines Phase A Waterline Replacement</b>	<b>\$805,064.00</b>
<b>Woodland Heights Phase B &amp;C Waterline Replacement-Combined</b>	<b>\$2,948,415.00</b>
<b>Pine Mountain Acres/Pinon Waterline Replacement</b>	<b>\$234,456.00</b>
<b>White Oak/Cedar Meadows Waterline Replacement</b>	<b>\$450,156.00</b>
<b>System Wide Scada</b>	<b>\$549,000.00</b>
<b>System Wide Water Model</b>	<b>\$300,000.00</b>
<b>Strawberry Ranch PZ Deep Well</b>	<b>\$1,959,571.00</b>

# Purpose and Scope of This Rate Analysis

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- Adequate **revenue** to meet current and projected needs including operations, debt payments, and reserves
- Evaluation of rate structure based on **meter size**
- Present three rate options with a recommendation identified

# Rate Study Considerations

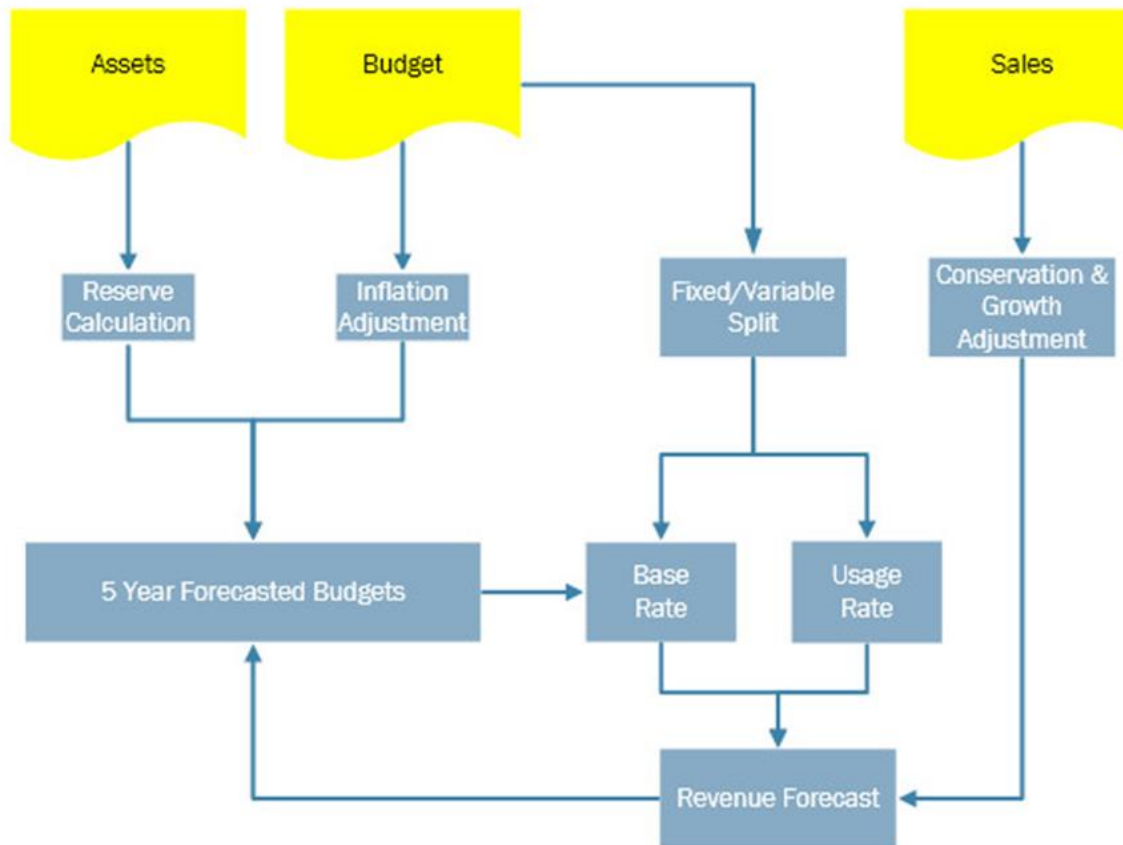
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- Fair, justifiable, easy to implement
- 5- to 6-year horizon with annual review
- Provides adequate revenue including funding for key reserves



# Methodology

## Rate Setting with Water Meters



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# Meter Size Analysis

# Rate Structure Based on Meter Size

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- Fixed costs comprise ~90% of system's overall expenses
- Analysis indicates imbalance in current fixed rate based on meter size (capacity demand)

# Meter Size Analysis

Meter Size (inches)	Number of Meters	AWWA Safe Maximum Operating Cap. (GPM)	Max Demand (GPM)	% of Max Demand by Meter Size	Total Fixed Costs Allocated by Meter Size	Theoretical Monthly Base Rate by Meter Size	Recommended Monthly Base Rate at this % of Theor. Value:	Current Base Rate
A	C	D	E=D*C	F = % of Total	G = % * Total	H = G/C/12	59.55%	Res/Comm
5/8"	2,974	20	59,478	86.50%	3,107,855.76	\$ 87.09	\$ 51.86	\$51/\$68.5
3/4"	219	30	6,563	9.54%	342,903.08	\$ 130.63	\$ 77.79	\$51/\$68.5
1"	10	50	504	0.73%	26,343.66	\$ 217.72	\$ 129.64	\$66.66/\$118.5
1 1/2"	12	100	1,242	1.81%	64,879.44	\$ 435.43	\$ 259.28	\$118.5/\$158.5
2"	6	160	973	1.42%	50,858.51	\$ 696.69	\$ 414.85	\$158.5/\$218.5
Total	3221		68,760	100%	3,592,840.45			

# Advantages/Disadvantages

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- Advantage: Uniform base rate tied to capacity demand (fair and justifiable)
- Advantage: Streamlines rate codes
- Advantage: Generally benefits residential customers with smaller meter sizes
- Disadvantage: May result in large adjustments in charge for customers with larger meter sizes

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# Rate Options

# Rate Options

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**Option 1:** No change in water system rates through FY27

**Option 2:** Uniform 6.3% adjustment in water system base rate and usage charges in FY23 followed by 3% annual adjustments to both base and usage charges thereafter through FY27

**Option 3 (Recommended):** 6.3% average overall increase based on meter equivalency followed by 3% annual adjustments to both base and usage charges thereafter through FY27

# Current Rates



## **PINE-STRAWBERRY WATER IMPROVEMENT DISTRICT**

P.O. Box 134 Pine, AZ 85544 • (928) 476-4222

Board Approved Proposed Water Rate Schedule For  
7/1/2021 through 6/30/2022

### Residential Base Fees

Meter Size	5/8"	3/4"	1"	1 1/2"	2"	3"	4"
Monthly Base Fee	\$51.00	\$51.00	\$66.66	\$118.50	\$143.50	-	-

### Commercial Base Fees

Meter Size	5/8"	3/4"	1"	1 1/2"	2"	3"	4"
Monthly Base Fee	\$68.50	\$68.50	\$118.50	\$158.50	\$218.50	\$248.50	\$468.50

### Water Usage Rate Tiers

Usage Tier	Tier 1	Tier 2	Tier 3	Tier 4
Water Usage per billing period	1 to 3,000 gallons	3,001 to 5,000 gallons	5,001 to 10,000 gallons	10,001 to unlimited gallons
Rate per 1,000 gallons	\$1.75	\$7.00	\$10.00	\$15.00



# Option 1: No Change in Rates

Pine-Strawberry Water Improvement District (Option 1: No Change in Rates)								
	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
<b>Operating Revenue</b>								
Customer Sales	\$ 2,096,649.81	\$ 2,312,382.69	\$ 2,530,541.72	\$ 2,530,541.72	\$ 2,530,541.72	\$ 2,555,847.14	\$ 2,581,405.61	\$ 2,607,219.66
Property Tax Levies	\$ 801,369.54	\$ 833,485.54	\$ 883,048.88	\$ 918,370.84	\$ 964,656.73	\$ 1,013,275.42	\$ 1,064,344.51	\$ 1,117,987.47
Miscellaneous Revenues	\$ 84,955.16	\$ 90,604.03	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00
<b>Total Operating Revenue</b>	<b>\$ 2,982,974.51</b>	<b>\$ 3,236,472.26</b>	<b>\$ 3,518,590.60</b>	<b>\$ 3,553,912.56</b>	<b>\$ 3,600,198.45</b>	<b>\$ 3,674,122.56</b>	<b>\$ 3,750,750.11</b>	<b>\$ 3,830,207.13</b>
Additional Revenue from Rate Adjustments			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Adjusted Total Revenue</b>	<b>\$ 2,982,974.51</b>	<b>\$ 3,236,472.26</b>	<b>\$ 3,518,590.60</b>	<b>\$ 3,553,912.56</b>	<b>\$ 3,600,198.45</b>	<b>\$ 3,674,122.56</b>	<b>\$ 3,750,750.11</b>	<b>\$ 3,830,207.13</b>
<b>Operating &amp; Administrative Expenses</b>								
Operations	\$ 505,931.24	\$ 576,193.50	\$ 550,000.00	\$ 566,500.00	\$ 583,495.00	\$ 600,999.85	\$ 619,029.85	\$ 637,600.74
Field Labor & Burden	\$ 358,352.58	\$ 362,219.88	\$ 500,000.00	\$ 515,000.00	\$ 530,450.00	\$ 546,363.50	\$ 562,754.41	\$ 579,637.04
Administrative	\$ 454,740.63	\$ 511,719.77	\$ 510,000.00	\$ 525,300.00	\$ 541,059.00	\$ 557,290.77	\$ 574,009.49	\$ 591,229.78
Board of Directors	\$ 86,152.84	\$ 69,302.96	\$ 72,000.00	\$ 74,160.00	\$ 76,384.80	\$ 78,676.34	\$ 81,036.63	\$ 83,467.73
Infrastructure Repairs	\$ -	\$ -	\$ 140,000.00	\$ 144,200.00	\$ 148,526.00	\$ 152,981.78	\$ 157,571.23	\$ 162,298.37
Equipment Replacement	\$ -	\$ -	\$ 100,000.00	\$ 103,000.00	\$ 106,090.00	\$ 109,272.70	\$ 112,550.88	\$ 115,927.41
Depreciation Expense	\$ 413,865.51	\$ 567,960.80						
<b>Total Operating &amp; Admin Expense</b>	<b>\$ 1,819,042.80</b>	<b>\$ 2,087,396.91</b>	<b>\$ 1,872,000.00</b>	<b>\$ 1,928,160.00</b>	<b>\$ 1,986,004.80</b>	<b>\$ 2,045,584.94</b>	<b>\$ 2,106,952.49</b>	<b>\$ 2,170,161.07</b>
Additional Operating Expenses (Proposed Improvements)								
Debt Payments (Principal & Interest)	\$ 275,820.70	\$ 275,820.70	\$ 827,615.52	\$ 673,598.00	\$ 974,955.10	\$ 1,120,717.76	\$ 1,144,217.76	\$ 1,462,546.00
Non Operating Revenue	\$ (40,800.53)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Adjustments</b>	<b>\$ 235,020.17</b>	<b>\$ 275,820.70</b>	<b>\$ 827,615.52</b>	<b>\$ 673,598.00</b>	<b>\$ 974,955.10</b>	<b>\$ 1,120,717.76</b>	<b>\$ 1,144,217.76</b>	<b>\$ 1,462,546.00</b>
<b>Net System Revenue</b>	<b>\$ 1,398,951.88</b>	<b>\$ 1,424,896.05</b>	<b>\$ 818,975.08</b>	<b>\$ 952,154.56</b>	<b>\$ 639,238.55</b>	<b>\$ 507,819.86</b>	<b>\$ 499,579.86</b>	<b>\$ 197,500.07</b>
<b>Plus: Beginning Cash Position</b>		\$ -	\$ -	\$ 85,185.28	\$ 280,355.45	\$ 121,543.37	\$ (168,421.55)	\$ (466,475.10)
<b>Net Position Before Reserves</b>			<b>\$ 818,975.08</b>	<b>\$ 1,037,339.84</b>	<b>\$ 919,594.00</b>	<b>\$ 629,363.23</b>	<b>\$ 331,158.31</b>	<b>\$ (268,975.03)</b>
<b>Reserves</b>								
Debt Reserve			\$ 100,970.36	\$ 106,377.56	\$ 98,230.75	\$ 47,745.57	\$ 47,594.20	\$ 78,253.03
Operating Reserve			\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66
Emergency Reserve								
Capital Reserve			\$ 590,396.77	\$ 608,184.17	\$ 657,397.21	\$ 707,616.55	\$ 707,616.55	\$ 707,616.55
<b>Total Reserves</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 733,789.80</b>	<b>\$ 756,984.39</b>	<b>\$ 798,050.63</b>	<b>\$ 797,784.78</b>	<b>\$ 797,633.41</b>	<b>\$ 828,292.24</b>
<b>Net Position After Reserves</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 85,185.28</b>	<b>\$ 280,355.45</b>	<b>\$ 121,543.37</b>	<b>\$ (168,421.55)</b>	<b>\$ (466,475.10)</b>	<b>\$ (1,097,267.27)</b>
<b>Debt Coverage Ratio</b>			177.3%	208.4%	150.4%	139.4%	137.9%	107.7%

# Option 2: Uniform Adjustment in Rates

## Pine-Strawberry Water Improvement District (Option 2: 6.3% Uniform Adjustments to Base and Usage in FY23 with 3% Annual Adjustments Thereafter)

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
<b>Operating Revenue</b>								
Customer Sales	\$ 2,124,017.00	\$ 2,312,382.69	\$ 2,530,541.72	\$ 2,530,541.72	\$ 2,689,965.85	\$ 2,798,371.47	\$ 2,911,145.84	\$ 3,028,465.02
Property Tax Levies	\$ 801,369.54	\$ 833,485.54	\$ 883,048.88	\$ 918,370.84	\$ 964,656.73	\$ 1,013,275.42	\$ 1,064,344.51	\$ 1,117,987.47
Miscellaneous Revenues	\$ 84,955.16	\$ 90,604.03	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00
<b>Total Operating Revenue</b>	<b>\$ 3,010,341.70</b>	<b>\$ 3,236,472.26</b>	<b>\$ 3,518,590.60</b>	<b>\$ 3,553,912.56</b>	<b>\$ 3,759,622.57</b>	<b>\$ 3,916,646.90</b>	<b>\$ 4,080,490.35</b>	<b>\$ 4,251,452.49</b>
Additional Revenue from Rate Adjustments			\$ -	\$ 159,424.13	\$ 80,698.98	\$ 83,951.14	\$ 87,334.38	\$ 90,853.95
<b>Adjusted Total Revenue</b>	<b>\$ 3,010,341.70</b>	<b>\$ 3,236,472.26</b>	<b>\$ 3,518,590.60</b>	<b>\$ 3,713,336.68</b>	<b>\$ 3,840,321.55</b>	<b>\$ 4,000,598.04</b>	<b>\$ 4,167,824.72</b>	<b>\$ 4,342,306.44</b>
<b>Operating &amp; Administrative Expenses</b>								
Operations	\$ 505,931.24	\$ 576,193.50	\$ 550,000.00	\$ 566,500.00	\$ 583,495.00	\$ 600,999.85	\$ 619,029.85	\$ 637,600.74
Field Labor & Burden	\$ 358,352.58	\$ 362,219.88	\$ 500,000.00	\$ 515,000.00	\$ 530,450.00	\$ 546,363.50	\$ 562,754.41	\$ 579,637.04
Administrative	\$ 454,740.63	\$ 511,719.77	\$ 510,000.00	\$ 525,300.00	\$ 541,059.00	\$ 557,290.77	\$ 574,009.49	\$ 591,229.78
Board of Directors	\$ 86,152.84	\$ 69,302.96	\$ 72,000.00	\$ 74,160.00	\$ 76,384.80	\$ 78,676.34	\$ 81,036.63	\$ 83,467.73
Infrastructure Repairs	\$ -	\$ -	\$ 140,000.00	\$ 144,200.00	\$ 148,526.00	\$ 152,981.78	\$ 157,571.23	\$ 162,298.37
Equipment Replacement	\$ -	\$ -	\$ 100,000.00	\$ 103,000.00	\$ 106,090.00	\$ 109,272.70	\$ 112,550.88	\$ 115,927.41
Depreciation Expense	\$ 413,865.51	\$ 567,960.80						
<b>Total Operating &amp; Admin Expense</b>	<b>\$ 1,819,042.80</b>	<b>\$ 2,087,396.91</b>	<b>\$ 1,872,000.00</b>	<b>\$ 1,928,160.00</b>	<b>\$ 1,986,004.80</b>	<b>\$ 2,045,584.94</b>	<b>\$ 2,106,952.49</b>	<b>\$ 2,170,161.07</b>
Additional Operating Expenses (Proposed Improvements)								
Debt Payments (Principal & Interest)	\$ 275,820.70	\$ 275,820.70	\$ 827,615.52	\$ 673,598.00	\$ 974,955.10	\$ 1,120,717.76	\$ 1,144,217.76	\$ 1,462,546.00
Non Operating Revenue	\$ (40,800.53)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Adjustments</b>	<b>\$ 235,020.17</b>	<b>\$ 275,820.70</b>	<b>\$ 827,615.52</b>	<b>\$ 673,598.00</b>	<b>\$ 974,955.10</b>	<b>\$ 1,120,717.76</b>	<b>\$ 1,144,217.76</b>	<b>\$ 1,462,546.00</b>
<b>Net System Revenue</b>	<b>\$ 1,426,319.07</b>	<b>\$ 1,424,896.05</b>	<b>\$ 818,975.08</b>	<b>\$ 1,111,578.68</b>	<b>\$ 879,361.65</b>	<b>\$ 834,295.34</b>	<b>\$ 916,654.47</b>	<b>\$ 709,599.37</b>
<b>Plus: Beginning Cash Position</b>		\$ -	\$ -	\$ 85,185.28	\$ 439,779.58	\$ 521,090.60	\$ 557,601.16	\$ 676,622.22
<b>Net Position Before Reserves</b>			<b>\$ 818,975.08</b>	<b>\$ 1,196,763.97</b>	<b>\$ 1,319,141.23</b>	<b>\$ 1,355,385.94</b>	<b>\$ 1,474,255.63</b>	<b>\$ 1,386,221.59</b>
<b>Reserves</b>								
Debt Reserve			\$ 100,970.36	\$ 106,377.56	\$ 98,230.75	\$ 47,745.57	\$ 47,594.20	\$ 78,253.03
Operating Reserve			\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66
Emergency Reserve			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Reserve			\$ 590,396.77	\$ 608,184.17	\$ 657,397.21	\$ 707,616.55	\$ 707,616.55	\$ 707,616.55
<b>Total Reserves</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 733,789.80</b>	<b>\$ 756,984.39</b>	<b>\$ 798,050.63</b>	<b>\$ 797,784.78</b>	<b>\$ 797,633.41</b>	<b>\$ 828,292.24</b>
<b>Net Position After Reserves</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 85,185.28</b>	<b>\$ 439,779.58</b>	<b>\$ 521,090.60</b>	<b>\$ 557,601.16</b>	<b>\$ 676,622.22</b>	<b>\$ 557,929.35</b>
<b>Debt Coverage Ratio</b>			177.3%	228.9%	172.8%	167.3%	172.9%	141.0%

# Option 3 (Recommended): Meter Equivalency Adjustment

Pine-Strawberry Water Improvement District (Option 3: 6.3% Average Adjustment in FY23 Based on Meter Equivalency Analysis with 3% Uniform Adjustments Thereafter)								
	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
<b>Operating Revenue</b>								
Customer Sales	\$ 2,124,017.00	\$ 2,312,382.69	\$ 2,530,541.72	\$ 2,530,541.72	\$ 2,689,965.85	\$ 2,798,371.47	\$ 2,911,145.84	\$ 3,028,465.02
Property Tax Levies	\$ 801,369.54	\$ 833,485.54	\$ 883,048.88	\$ 918,370.84	\$ 964,656.73	\$ 1,013,275.42	\$ 1,064,344.51	\$ 1,117,987.47
Miscellaneous Revenues	\$ 84,955.16	\$ 90,604.03	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00
<b>Total Operating Revenue</b>	<b>\$ 3,010,341.70</b>	<b>\$ 3,236,472.26</b>	<b>\$ 3,518,590.60</b>	<b>\$ 3,553,912.56</b>	<b>\$ 3,759,622.57</b>	<b>\$ 3,916,646.90</b>	<b>\$ 4,080,490.35</b>	<b>\$ 4,251,452.49</b>
Additional Revenue from Rate Adjustments			\$ -	\$ 159,424.13	\$ 80,698.98	\$ 83,951.14	\$ 87,334.38	\$ 90,853.95
<b>Adjusted Total Revenue</b>	<b>\$ 3,010,341.70</b>	<b>\$ 3,236,472.26</b>	<b>\$ 3,518,590.60</b>	<b>\$ 3,713,336.68</b>	<b>\$ 3,840,321.55</b>	<b>\$ 4,000,598.04</b>	<b>\$ 4,167,824.72</b>	<b>\$ 4,342,306.44</b>
<b>Operating &amp; Administrative Expenses</b>								
Operations	\$ 505,931.24	\$ 576,193.50	\$ 550,000.00	\$ 566,500.00	\$ 583,495.00	\$ 600,999.85	\$ 619,029.85	\$ 637,600.74
Field Labor & Burden	\$ 358,352.58	\$ 362,219.88	\$ 500,000.00	\$ 515,000.00	\$ 530,450.00	\$ 546,363.50	\$ 562,754.41	\$ 579,637.04
Administrative	\$ 454,740.63	\$ 511,719.77	\$ 510,000.00	\$ 525,300.00	\$ 541,059.00	\$ 557,290.77	\$ 574,009.49	\$ 591,229.78
Board of Directors	\$ 86,152.84	\$ 69,302.96	\$ 72,000.00	\$ 74,160.00	\$ 76,384.80	\$ 78,676.34	\$ 81,036.63	\$ 83,467.73
Capital Projects/Repair	\$ -	\$ -						
Infrastructure Repairs	\$ -	\$ -	\$ 140,000.00	\$ 144,200.00	\$ 148,526.00	\$ 152,981.78	\$ 157,571.23	\$ 162,298.37
Equipment Replacement	\$ -	\$ -	\$ 100,000.00	\$ 103,000.00	\$ 106,090.00	\$ 109,272.70	\$ 112,550.88	\$ 115,927.41
Depreciation Expense	\$ 413,865.51	\$ 567,960.80						
<b>Total Operating &amp; Admin Expense</b>	<b>\$ 1,819,042.80</b>	<b>\$ 2,087,396.91</b>	<b>\$ 1,872,000.00</b>	<b>\$ 1,928,160.00</b>	<b>\$ 1,986,004.80</b>	<b>\$ 2,045,584.94</b>	<b>\$ 2,106,952.49</b>	<b>\$ 2,170,161.07</b>
Additional Operating Expenses (Proposed Improvements)								
Debt Payments (Principal & Interest)	\$ 275,820.70	\$ 275,820.70	\$ 827,615.52	\$ 673,598.00	\$ 974,955.10	\$ 1,120,717.76	\$ 1,144,217.76	\$ 1,462,546.00
Non Operating Revenue	\$ (40,800.53)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Adjustments</b>	<b>\$ 235,020.17</b>	<b>\$ 275,820.70</b>	<b>\$ 827,615.52</b>	<b>\$ 673,598.00</b>	<b>\$ 974,955.10</b>	<b>\$ 1,120,717.76</b>	<b>\$ 1,144,217.76</b>	<b>\$ 1,462,546.00</b>
<b>Net System Revenue</b>	<b>\$ 1,426,319.07</b>	<b>\$ 1,424,896.05</b>	<b>\$ 818,975.08</b>	<b>\$ 1,111,578.68</b>	<b>\$ 879,361.65</b>	<b>\$ 834,295.34</b>	<b>\$ 916,654.47</b>	<b>\$ 709,599.37</b>
<b>Plus: Beginning Cash Posiiton</b>		\$ -	\$ -	\$ 85,185.28	\$ 439,779.58	\$ 521,090.60	\$ 557,601.16	\$ 676,622.22
<b>Net Position Before Reserves</b>			<b>\$ 818,975.08</b>	<b>\$ 1,196,763.97</b>	<b>\$ 1,319,141.23</b>	<b>\$ 1,355,385.94</b>	<b>\$ 1,474,255.63</b>	<b>\$ 1,386,221.59</b>
<b>Reserves</b>								
Debt Reserve			\$ 100,970.36	\$ 106,377.56	\$ 98,230.75	\$ 47,745.57	\$ 47,594.20	\$ 78,253.03
Operating Reserve			\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66	\$ 42,422.66
Emergency Reserve			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Reserve			\$ 590,396.77	\$ 608,184.17	\$ 657,397.21	\$ 707,616.55	\$ 707,616.55	\$ 707,616.55
<b>Total Reserves</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 733,789.80</b>	<b>\$ 756,984.39</b>	<b>\$ 798,050.63</b>	<b>\$ 797,784.78</b>	<b>\$ 797,633.41</b>	<b>\$ 828,292.24</b>
<b>Net Position After Reserves</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 85,185.28</b>	<b>\$ 439,779.58</b>	<b>\$ 521,090.60</b>	<b>\$ 557,601.16</b>	<b>\$ 676,622.22</b>	<b>\$ 557,929.35</b>
<b>Debt Coverage Ratio</b>			177.3%	228.9%	172.8%	167.3%	172.9%	141.0%

# Summary of Options

Option	Projected Outcome	Details (FY22/FY27)
#1: No change in rates	Deteriorating fiscal position	Net Position Before Reserves = 0.819M/ <b>-\$0.269M</b> Net Position After Reserves = 0.085M/ <b>-1.097M</b> Projected Debt Coverage Ratio = 177.3%/ <b>107.7%</b>
#2: Uniform adjustment in base and usage (6.3% in FY23) + 3% annual increase through FY27	Stable fiscal position meeting system revenue needs	Net Position Before Reserves = 0.819M/1.386M Net Position After Reserves = 0.085M/0.558M Projected Debt Coverage Ratio = 177.3%/141.0%
#3: Meter Equivalency Adjustment (6.3% <b>average</b> increase in FY23) + 3% annual increase through FY27	Stable fiscal position meeting system revenue needs	Net Position Before Reserves = 0.819M/1.386M Net Position After Reserves = 0.085M/0.558M Projected Debt Coverage Ratio = 177.3%/141.0%

# Key Assumptions

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- 3% annual adjustment in operating costs
- 1% annual growth in system connections beginning in FY24
- No change in per capita water consumption
- No additional operating costs with new projects
- 4% annual increase in property tax revenue
- Rate adjustments made at the beginning of each fiscal year

# Residential Rate Impact (5/8" Meters)

## Residential (5/8" meter): 2924 Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)	Town of Payson (7688 connections)
Base Charge (No Usage)	\$51.00	\$54.21	\$51.86	\$45.86
3,000	\$56.58	\$59.79	\$57.44	\$52.05
5,000	\$71.46	\$74.68	\$72.32	\$64.43
10,000	\$124.61	\$127.83	\$125.47	\$105.23
20,000	\$284.06	\$287.28	\$284.92	\$198.63
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Base Charge up to 2K (\$45.86) + up to 5K (\$6.19/1000) + up to 10K (\$8.16/1000) + up to 20K (\$9.34/1000) + \$11.67 per thousand gallons thereafter.
Affordability at 3K gals. Monthly Usage (MH = \$38,459)	1.77%	1.87%	1.79%	NA

# Recommendations

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- Option #3 [Recommended Rate Option]
- Review rates at least annually
- Review and update related fees (e.g., impact fees, late fees, reconnection fees, etc.)
- Investigate water and energy usage

# Going Forward

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- Update and share updated analysis at next public meeting incorporating input
- Provide updated analysis at next public meeting (01/27/22)
- Vote to adopt rate study (2/25/22)



# Questions

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# Appendix 1: Rate Sheets

## Residential (5/8" meter): 2924 Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$51.00	\$54.21	\$51.86
3,000	\$56.58	\$59.79	\$57.44
5,000	\$71.46	\$74.68	\$72.32
10,000	\$124.61	\$127.83	\$125.47
20,000	\$284.06	\$287.28	\$284.92
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter

# Appendix 1: Rate Sheets

## Residential (3/4" meter): 218 Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$51.00	\$54.21	\$77.79
3,000	\$56.58	\$59.79	\$83.37
5,000	\$71.46	\$74.68	\$98.25
10,000	\$124.61	\$127.83	\$151.40
20,000	\$284.06	\$287.28	\$310.85
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter

# Appendix 1: Rate Sheets

## Residential (1" meter): No Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$66.66	\$70.86	\$129.64
3,000	\$72.24	\$76.44	\$135.22
5,000	\$87.12	\$91.32	\$150.10
10,000	\$140.27	\$144.47	\$203.25
20,000	\$299.72	\$303.92	\$362.70
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter

# Appendix 1: Rate Sheets

## Residential (1.5" meter): 12 Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$118.50	\$125.97	\$259.28
3,000	\$124.08	\$131.55	\$264.86
5,000	\$138.96	\$146.43	\$279.75
10,000	\$192.11	\$199.58	\$332.90
20,000	\$351.56	\$359.03	\$492.35
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter

# Appendix 1: Rate Sheets

## Commercial (5/8" meter): 50 Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$68.50	\$72.82	\$51.86
3,000	\$74.08	\$78.40	\$57.44
5,000	\$88.96	\$93.28	\$72.32
10,000	\$142.11	\$146.43	\$125.47
20,000	\$301.56	\$305.88	\$284.92
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter

# Appendix 1: Rate Sheets

## Commercial (3/4" meter): 1 Connection

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$68.50	\$72.82	\$77.79
3,000	\$74.08	\$78.40	\$83.37
5,000	\$88.96	\$93.28	\$98.25
10,000	\$142.11	\$146.43	\$151.40
20,000	\$301.56	\$305.88	\$310.85
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter

# Appendix 1: Rate Sheets

## Commercial (1.0" meter): 10 Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$118.50	\$125.97	\$129.64
3,000	\$124.08	\$131.55	\$135.22
5,000	\$138.96	\$146.43	\$150.10
10,000	\$192.11	\$199.58	\$203.25
20,000	\$351.56	\$359.03	\$362.70
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter



# Appendix 1: Rate Sheets

## Commercial (1.5" meter): No Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$158.50	\$168.49	\$259.28
3,000	\$164.08	\$174.07	\$264.86
5,000	\$178.96	\$188.95	\$279.75
10,000	\$232.11	\$242.10	\$332.90
20,000	\$391.56	\$401.55	\$492.35
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter

# Appendix 1: Rate Sheets

## Commercial (2.0" meter): 6 Connections

Monthly Usage Level (Gallons)	Option 1 (No Change)	Option 2 (Uniform Adjustment)	Option 3 (Meter Equivalent Adjustment)
Base Charge (No Usage)	\$220.50	\$234.39	\$414.85
3,000	\$226.08	\$239.97	\$420.43
5,000	\$240.96	\$254.85	\$435.32
10,000	\$294.11	\$308.00	\$488.47
20,000	\$453.56	\$467.45	\$647.92
Monthly Rates	Base Charge + up to 3K gals (\$1.75/1000) + up to 5K gals (\$7/1000) + up to 10K gals (\$10/1000) + \$15 per thousand gallons thereafter	Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter	Meter Equivalent Base Charge + up to 3K gals (\$1.86/1000) + up to 5K gals (\$7.44/1000) + up to 10K gals (\$10.63/1000) + \$15.95 per thousand gallons thereafter