

**TWIN CREEKS SPECIAL SERVICE DISTRICT  
WATER RESERVATION RATE POLICY  
RESOLUTION NO. 2021-02**

**RECITALS**

WHEREAS, the Twin Creeks Special Service District (the “Twin Creeks”) is a special service district established by the County Legislative Body of Wasatch County, Utah, pursuant to the provisions of Utah law, for the purpose of providing culinary and irrigation water delivery services within the boundaries of Twin Creeks; and

WHEREAS, pursuant to those goals and policies, Twin Creeks entered into a Water Reservation Agreement with the Jordanelle Special Service District (“JSSD”) in order to reserve JSSD water for future growth within Twin Creeks,

WHEREAS, Twin Creeks allows others to reserve the water that Twin Creeks reserves from JSSD; and

WHEREAS, Twin Creeks passes its cost of reserving JSSD water on to those who reserve that water from Twin Creeks; and

WHEREAS, JSSD has raised the annual cost of reserving water to \$539.44 per acre foot.

NOW, THEREFORE, the Wasatch County Council, acting as the governing board of the District, hereby adopts this resolution:

1. As of the effective date of this resolution, the annual fee charged for any Water Reservation Agreement executed by Twin Creeks shall be \$539.44 per acre foot of water so reserved.
2. This annual rate shall remain effective until the District revises such annual fee.

Resolution 2021-02 Approved and adopted this 12<sup>th</sup> day of October, 2021.

By:   
District Board Chairman

Attest:

By:   
District Treasurer

# Jordanelle Special Service District



## 2022 Water Reservation Fee Update



Zions Public Finance, Inc.  
September 2021



## Contents

Contents .....	1
Water Reservation Fee Analysis Overview .....	2
Background .....	2
Changes from Previous Water Reservation Fee Analysis .....	2
Water Reservation Fee Cost Components .....	3
1. Unused Capacity Acre Feet .....	3
2. Unused Capacity Preservation (UCP) Operations & Maintenance .....	3
3. Supply O&M – Lease Expense .....	3
4. Supply O&M – Owned Water .....	4
Recommended Water Preservation Fee Structure .....	5
Appendix A – Water Reservation Fee Summary .....	6
Appendix B – Leased/Owned Supply O&M Detail .....	7
Appendix C – Summary of Expenses .....	8

## Water Reservation Fee Analysis Overview

---

### Background

Zions Public Finance, Inc. has been engaged by the Jordanelle Special Service District (District) to update the Water Reservation Fee Analysis to account for the historic expenses incurred by the District to maintain reserve water supply and source capacity for the District's future property owners. The annual water reservation fee is charged to property owners within Jordanelle Special Service District, Twin Creeks Special Service District, and North Village Special Service District who wish to reserve water supply and source capacity in anticipation of future development. The District has the authority to periodically review and modify the reservation fee and plans to account for annual changes in costs.

The District must incur time and cost to keep existing water facilities in good condition and maintain owned and leased water rights for capacity for future growth including wells and the Ontario mine tunnel, which is the District's primary source of supply. The District also incurs administrative costs related to the maintenance and reservation of the water supply and water sources.

The costs included in this Reservation Fee Analysis are only O&M and supply costs and do not include capital costs to accommodate growth. Capital costs that are impact fee eligible, not considering supply costs, are included in the District's impact fee calculation. Maintenance, vehicle, equipment, or other non-impact fee eligible capital costs are included in the District's user rates and reservation fees.

### Changes from Previous Water Reservation Fee Analysis

The primary change in the 2022 analysis is the shift from using the next year's budget to calculate the reservation fee to using the average of the past three year's expenses. Rather than planning around the 2022 budget, this analysis uses the average of the actual 2018-2020 O&M expenses.

## Water Reservation Fee Cost Components

The water reservation fee calculation to determine the cost of maintaining and reserving water supply and capacity to serve the reserved rights is comprised of the following four components, as summarized in Appendix A:

### 1. Unused Capacity Acre Feet

The District has rights to a total of 12,848.29 acre feet of combined leased and owned water, as detailed in Appendix B. District Staff calculated the used water capacity amount of 1,649.23 AF, leaving 11,199.06 AF of unused capacity.

TABLE 1: ACRE FEET SUMMARY

	AF	% of Total
Total District AF	12,848.29	100.00%
Used Water Capacity AF	1,649.23	12.84%
Unused Capacity AF	11,199.06	87.16%

### 2. Unused Capacity Preservation (UCP) Operations & Maintenance

UCP O&M includes the District costs incurred to maintain the capacity in the sources and system for property owners with reserved rights. UCP O&M does not include the cost of the water rights, water lease payments, sewer service, service to other districts, or other water contract costs. UCP O&M also does not include the costs related to general operations or delivery of water to active users such as power supply and treatment.

District staff reports that \$3,542,633, of the District's three-year average annual expenses are related to UCP O&M, as shown in Appendix C. This cost, divided by the total remaining 11,199.06 AF, results in a fee of \$316.33.

TABLE 2: UNUSED CAPACITY PRESERVATION NON-SUPPLY O&M EXPENSE

	Non-Supply O&M Expense <sup>1</sup>	Cost per Unused Capacity AF
Water	\$1,785,134	\$159.40
Water Treatment Plant	\$1,757,499	\$156.93
<b>Total Non-Supply O&amp;M Allocated to UCP</b>	<b>\$3,542,633</b>	<b>\$316.33</b>

### 3. Supply O&M – Lease Expense

The District leases 11,132.75 acre-feet of water from various sources. Lease payments are made each year. District staff calculated a three-year average leased cost of \$2,517,159, as shown in Appendix B.

TABLE 3: LEASED WATER O&M EXPENSE

	Leased Water O&M Expense	Total District AF	Leased O&M Expense Cost per AF
Annual Supply Expense	\$2,517,159	12,848.29	\$195.91



#### 4. Supply O&M – Owned Water

The District owns water rights equal to 1,715.54 acre-feet. While the District owns the rights, the District incurs annual operational expenses and debt service payments to maintain the owned and leased water rights. The annual expenses include payments on bonds which were taken to pay for the purchase of the water rights. Additionally, a portion of the District supply-related operational costs, including a portion of salaries and wages, are used to maintain the water rights and the points of diversion for those rights, primarily the Ontario Tunnel. Appendix B lists the District owned water rights and the three-year average costs associated with each right. The costs associated with the District owned water rights and their source of supply is \$349,348.

**TABLE 4: OWNED WATER O&M EXPENSE**

	<b>Owned Water O&amp;M Expense</b>	<b>Total District AF</b>	<b>Owned O&amp;M Expense Cost per AF</b>
Annual Supply Expense	\$349,348	12,848.29	\$27.19

The combined budgeted cost of water supply for leased and owned rights is \$2,866,507. The portion of the annual water reservation fee attributed to the combined cost of water supply is \$223.10. The cost of maintaining the water rights and their source of supply are not part of the District's impact fee.

**TABLE 5: SUMMARY OF LEASED AND OWNED WATER**

	<b>Owned Shares</b>	<b>Leased Shares</b>	<b>Totals</b>
Annual Supply Expense	\$349,348	\$2,517,159	\$2,866,507
JSSD Supplies (AF)	1,715.54	11,132.75	12,848.29
<b>Average Annual Cost per AF</b>			<b>\$223.10</b>

## Recommended Water Preservation Fee Structure

The District's costs to maintain and preserve the water supply and sources for the reserved rights is \$539.44 per acre-foot. The following table is a schedule of the cost breakdown by category and the current recommended annual water reservation fee per acre-foot of water.

**TABLE 6: WATER RESERVATION FEE CALCULATION PER AF**

	Water Reservation	AF Provided	Cost per AF
Unused Capacity Preservation O&M	\$3,542,633	11,199.06	\$316.33
Supply O&M – Lease Expense	\$2,517,159	12,848.29	\$195.91
Supply O&M – Owned Water	\$349,348	12,848.29	\$27.19
<b>2022 Water Reservation Fee per AF</b>			<b>\$539.44</b>



## Appendix A – Water Reservation Fee Summary

A B C D E F

### Acre Feet Summary

	AF	% of Total
Total AF	12,848.29	100.00%
District Usage	1,649.23	12.84%
Unused Capacity AF	11,199.06	87.16%

### Water Reservation Fee Calculation per Af

	Water Reservation (\$)	AF Provided	Cost per Af
Unused Capacity Preservation O&M <sup>1</sup>	\$ 3,542,633	11,199.06	\$ 316.33
Supply O&M - Lease Expense <sup>2</sup>	2,517,159	12,848.29	\$ 195.91
Supply O&M - Owned <sup>2</sup>	349,348	12,848.29	\$ 27.19
<b>2022 Water Reservation Fee per Af</b>			<b>\$ 539.43</b>

<sup>1</sup> Unused Capacity Preservation (UCP) O&M is divided by the total future reserved AF (11,199). This is estimated to be reasonable capacity that the current UCP budget will provide.

<sup>2</sup> Supply O&M is divided by 12,848 Af which is the total of leased and owned water.

A B C D E F

## Appendix B – Leased/Owned Supply O&amp;M Detail

	A	B	C	D	E	F	G	H	I	
	Sources	Owned/ Leased	AF	Supply Cost <sup>1</sup>	Cost/AF	Owned Water (AF)	Owned Cost	Leased Water (AF)	Leased Cost	
1	<b>Ontario Drain Tunnel</b>									1
2	Beaver & Shingle Creek	Leased	700.00	\$ 250,294		-	\$ -	700.00	\$ 250,294	2
3	Salt Lake City Public Utilities	Leased	1,647.77	519,093		-	-	1,647.77	519,093	3
4	MWD of SL & Sandy	Leased	3,295.55	104,232		-	-	3,295.55	104,232	4
5	District's Ontario Tunnel Rights/Keet	Owned	883.97			883.97	-	-	-	5
6	<b>Mine Costs</b>									6
7	JSSD Labor	Leased	-	419,672		-	-	-	419,672	7
8	Expenses	Leased	-	263,484		-	-	-	263,484	8
9	Capital Outlay	Leased	-			-	-	-		9
10	Depreciation	Leased	-	94,871		-	-	-	94,871	10
11	<b>Ontario Drain Tunnel Totals</b>		<b>6,527.30</b>	<b>\$ 1,651,648</b>	<b>253.04</b>	<b>883.97</b>	<b>\$ -</b>	<b>5,643.32</b>	<b>\$ 1,651,648</b>	11
12										12
13	<b>Reservoir</b>									13
14	WCSSA#1 Contract 2018	Leased	-	\$ 375,458	-	-	\$ -	-	\$ 375,458	14
15	WCSSA#1 Contract 2 and M&I Deliver	Leased	-	188,880	-	-	-	-	188,880	15
16	<b>Reservoir Totals</b>		<b>1,816.00</b>	<b>\$ 564,338</b>	<b>310.76</b>	<b>-</b>	<b>\$ -</b>	<b>1,816.00</b>	<b>\$ 564,338</b>	16
17										17
18	<b>Agricultural</b>									18
19	supplemental irrigation	Leased	-		-	-	\$ -	-	\$ -	19
20	CUP supplemental	Leased	-		-	-	-	-	-	20
21	<b>Agricultural Totals</b>		<b>2,500.00</b>	<b>\$ -</b>	<b>-</b>	<b>-</b>	<b>\$ -</b>	<b>2,500.00</b>	<b>\$ -</b>	21
22										22
23	<b>North Field Irrigation</b>									23
24	William McNaughton	Leased	-	\$ 41,022	-	-	\$ -	-	\$ 41,022	24
25	North Field	Leased	-	1,080	-	-	-	-	1,080	25
26	Lost Hollow	Leased	-	76,684	-	-	-	-	76,684	26
27	Neil P Probst	Leased	-	60,372	-	-	-	-	60,372	27
28	<b>North Field Irrigation Totals</b>		<b>757.26</b>	<b>\$ 179,158</b>	<b>236.59</b>	<b>-</b>	<b>\$ -</b>	<b>757.26</b>	<b>\$ 179,158</b>	28
29										29
30	<b>Extension Irrigation</b>									30
31	John W. Lloyd Family Trust	Leased	60.00	\$ 15,480	-	-	\$ -	60.00	\$ 15,480	31
32	Extension/ Lost Acres	Leased	230.70	79,636	-	-	-	230.70	79,636	32
33	<b>Extension Irrigation Totals</b>		<b>290.70</b>	<b>\$ 95,116</b>	<b>327.20</b>	<b>-</b>	<b>\$ -</b>	<b>290.70</b>	<b>\$ 95,116</b>	33
34										34
35	<b>Timpanogos Irrigation</b>									35
36	Timpanogos (2009 Bonds)	Owned	81.00	\$ 741	9.15	81.00	\$ 741	-	\$ -	36
37										37
38	<b>South Kamas Irrigation</b>									38
39	Assessment Expense	Owned	-	\$ 31,572	-	-	\$ 31,572	-	-	39
40	South Kamas Irrigation (2003 Bonds)	Owned	660.56	317,035		660.56	317,035	-	-	40
41	<b>South Kamas Irrigation Totals</b>		<b>660.56</b>	<b>\$ 348,607</b>	<b>527.74</b>	<b>660.56</b>	<b>348,607</b>			41
42										42
43	<b>Services</b>									43
44	State Engineer/ Division of Water Ri	Leased	-	\$ 777		-	\$ -	-	\$ 777	44
45										45
46	<b>Well</b>									46
47	Francis Smith	Leased	50.45	\$ 13,016	258.00	-	\$ -	50.45	\$ 13,016	47
48	Wayne Foy	Leased	75.02	13,106	-	-	-	75.02	\$ 13,106	48
49	JSSD WRF Site	Owned	90.00		-	90.00		-		49
50	Deer Crest Well	Leased	-		-	-		-		50
51	<b>Well Totals</b>		<b>215</b>	<b>26,122</b>	<b>258.00</b>	<b>90</b>	<b>-</b>	<b>125</b>	<b>26,122</b>	51
52	<b>Total Average</b>		<b>12,848.29</b>	<b>\$ 2,866,507</b>	<b>\$ 223.10</b>	<b>1,715.54</b>	<b>\$ 349,348</b>	<b>11,132.75</b>	<b>\$ 2,517,159</b>	52
53										53

<sup>1</sup> Costs include an inflation factor based on the average Consumer Price Index for Water and Sewerage Maintenance from 2018 to 2020

	Owned Shares	Leased Shares	Totals
JSSD Supplies (AF)	1,715.54	11,132.75	12,848.29
Annual Supply Expense	\$ 349,348	\$ 2,517,159	\$ 2,866,507
<b>Average Annual Cost per AF</b>			<b>\$ 223.10</b>



## Appendix C – Summary of Expenses

Unused Capacity Preservation Non-Supply O&M							
	O&M Expense	UCP AF %	UCP O&M				
Water	\$ 2,048,021	87.16%	\$ 1,785,134				
Water Treatment Plant	2,016,317	87.16%	1,757,499				
<b>Total Non-Supply O&amp;M Allocated to UCP</b>			<b>\$ 3,542,633</b>				

  

EXPENSE DETAIL (2018 - 2020 Average)							
	3 Year Average Historic Expenses	Cost to Other Districts/SAAs	Water <sup>1</sup>	Sewer and WRF	WTP <sup>1</sup>	Mine	Total
SALARIES & WAGES	\$ 2,166,973	\$ 505,054	\$ 690,260	\$ 308,757	\$ 406,126	\$ 283,518	\$ 2,193,715
PAYROLL TAXES	154,306	36,997	49,344	21,097	28,900	19,877	156,214
WORKERS COMPENSATION	26,263	-	6,713	7,150	2,574	10,052	26,489
EMPLOYEE BENEFITS	326,513	81,310	105,182	43,544	53,689	46,663	330,388
STATE RETIREMENT	466,136	111,753	149,135	63,356	88,117	59,563	471,922
TRAVEL	16,190	1,826	6,276	3,969	3,331	788	16,190
TRAINING/CONF	20,806	1,918	9,903	3,480	4,431	1,074	20,806
UTILITIES	823,001	584	349,928	139,649	271,959	69,314	831,434
BAD DEBT	735	-	444	290	-	-	735
PHONES	37,079	1,953	7,411	8,697	10,619	8,398	37,079
LEGAL FEES	122,427	-	63,048	24,466	26,420	8,493	122,427
JSSD WATER EXPENSE	1,540,566	-	1,540,566	-	-	-	1,540,566
BANK CHARGES	2,193	-	1,730	191	206	66	2,193
POSTAGE	1,712	493	495	225	287	213	1,712
EQUIPMENT	121,029	10,985	34,174	44,115	19,749	12,006	121,029
REPAIRS AND MAINT.	232,558	52	76,348	95,141	48,321	12,697	232,558
SUPPLIES	691,285	26,847	218,063	37,533	367,657	41,185	691,285
SERVICES	750,016	19,263	179,438	286,567	242,529	22,219	750,016
INSURANCE	256,293	-	124,122	76,678	46,656	11,353	258,809
VEHICLE EXPENSE	76,043	2,862	20,753	19,950	25,879	6,600	76,043
LEASE PRINCIPAL Debt Service	104,028.96	-	29,607	64,904	-	9,517	104,029
2003AB COP Debt Service	317,035	-	317,035	-	-	-	317,035
R&R FUND/DEPRECIATION EXPENSE	2,141,752	-	1,037,244	640,771	368,866	94,871	2,141,752
2009/2019 WATER REVENUE BOND INTEREST	10,145	-	10,145	-	-	-	10,145
	<b>\$ 10,405,085</b>	<b>\$ 801,897</b>	<b>\$ 5,027,362</b>	<b>\$ 1,890,530</b>	<b>\$ 2,016,317</b>	<b>\$ 718,466</b>	<b>\$ 10,454,572</b>

<sup>1</sup> The water and WTP costs associated with salaries and wages include the District's annual cost-of-living adjustment and the WTP utilities and insurance expenses include an inflation factor

Expense Category	Expense	% of Total Budget
Cost to Other Districts/SAAs	\$ 801,897	7.71%
Water	5,027,362	48.32%
Sewer and WRF	1,890,530	18.17%
Water Treatment Plant	2,016,317	19.38%
Mine	718,466	6.90%
<b>Project Totals</b>	<b>\$ 10,454,572</b>	<b>100.48%</b>