



PREPARED FOR:



PREPARED BY:



**WATER
CONSERVATION
PLAN**

NOVEMBER 2022

WATER CONSERVATION PLAN

November 2022

Prepared for:



Prepared by:



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ABBREVIATIONS

AMI	Advanced Metering Infrastructure
CUWCD	Central Utah Water Conservancy District
DWRi	Division of Water Rights
GPCD	Gallons per Capita per Day
JSSD	Jordanelle Special Service District
NVSSD	North Village Special Service District
TCSSD	Twin Creeks Special Service District

UNIT CONVERSIONS

GALLONS = ACRE FEET × 325,850
 ACRE-FEET = GALLONS ÷ 325,850
 MILLION GALLONS = ACRE-FEET ÷ 3.069
 ACRE-FEET = MILLION GALLONS × 3.069
 GPCD = GALLONS ÷ DAYS OF USAGE ÷ POPULATION

INTRODUCTION

Water is not a boundless resource, but as a valuable commodity that needs to be managed carefully. Therefore, conservation is becoming a larger part of water suppliers' plans to meet future water needs. Many water suppliers throughout the country have adopted conservation programs. Benefits of these programs include:

- Using existing water supplies more efficiently
- Maximization of existing water conveyance, treatment, and distribution facilities
- Deferring or eliminating the expense of construction or capital improvement projects
- Reducing the need for additional water supplies

Jordanelle Special Service District (JSSD or District) recognizes the benefits of conservation programs. The District sees that per capita use will be at higher levels without emphasis and a clear plan on conservation. It also recognizes that there are still many benefits of further conservation efforts. Since sustained water conservation efforts will be an important component in the District's plans for future water use, this report will evaluate the District's current conservation program and will discuss additional measures that will allow further conservation of water.

SYSTEM PROFILE

Jordanelle Special Service District Water System Service Area

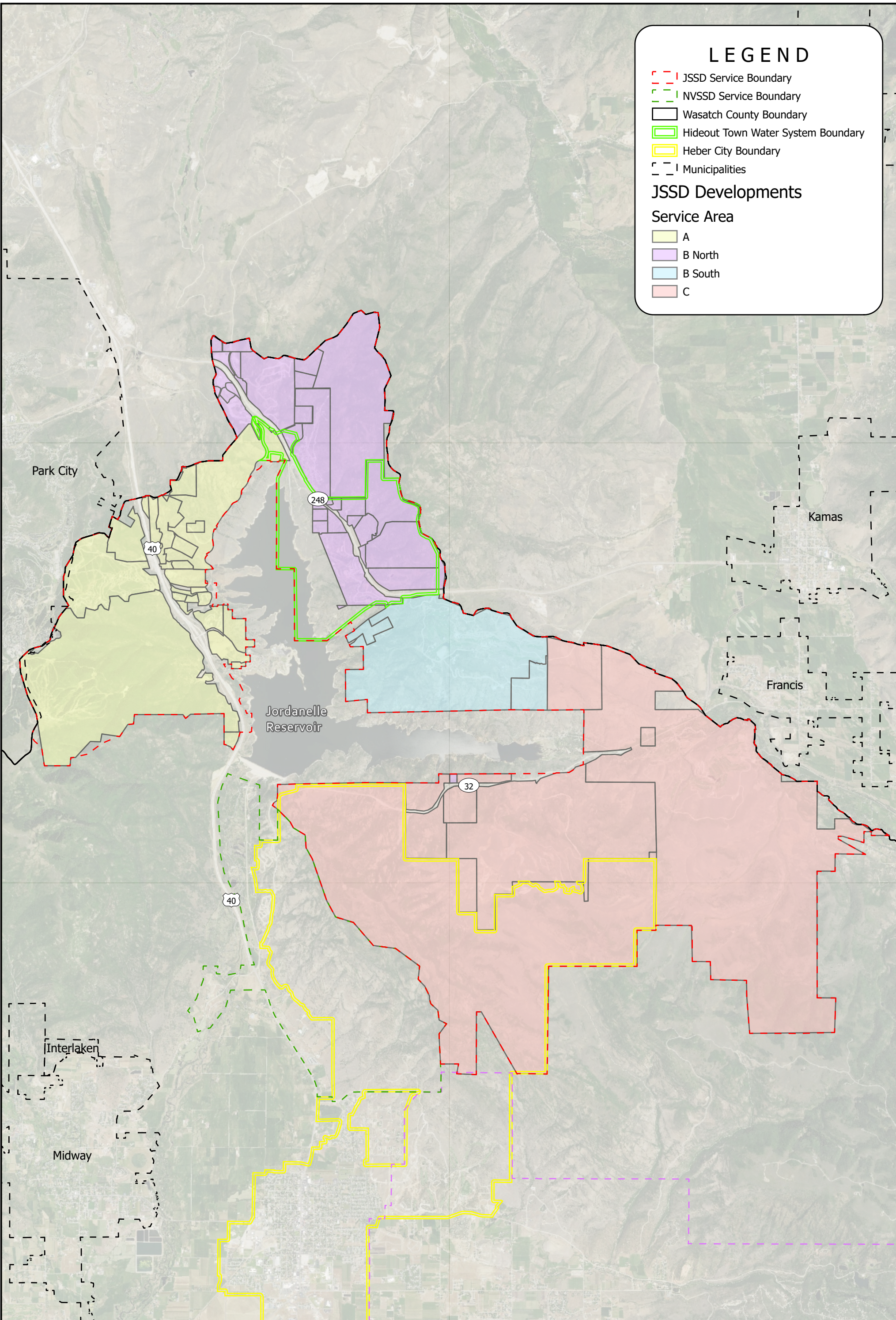
Jordanelle Special Service District is located in the north most part of Wasatch County and has a population of roughly 1,695¹ fulltime residents. JSSD has a culinary water system with no current plans to implement a secondary water system. The existing JSSD system service area is shown in Figure 1.

JSSD is divided into 4 sub-service areas, with areas A, B North and B South to the north of the Jordanelle Reservoir and Area C south of it. The system serves JSSD's legal boundaries, being boarded to the west by Park City, to the northeast by Francis and Kamas and to the south by the North Village Special Service District and Heber City. Heber City's boundary overlaps JSSD's Service Area C. Additionally, the municipality of Hideout as is within JSSD's legal boundaries and the Hideout Town water system is a wholesale customer.

¹ In the District, the difference between full time residential population and peak residential population is significant due to the types of vacation properties and resort style properties which prevail in the District.

LEGEND

- JSSD Service Boundary
 - NVSSD Service Boundary
 - Wasatch County Boundary
 - Hideout Town Water System Boundary
 - Heber City Boundary
 - Municipalities
- ### JSSD Developments
- ### Service Area
- A
 - B North
 - B South
 - C



JSSD
CONSERVATION PLAN

SERVICE AREA

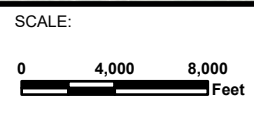
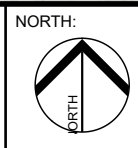


FIGURE NO.
1

System Connections

The Jordanelle water system includes residential, commercial, and institutional connections. To help evaluate and quantify the amount of water that can reasonably be conserved in JSSD, an analysis of current water use patterns has been performed. Usage among different classes of customers for the year 2021 is shown in Table 1 and Figure 2.

**Table 1
2021 Water Usage by Connection Type**

Customer Class	Accounts	Percent of Connections	Annual Water Sales (acre-ft)	Percent of Total Water Use
Residential	1,507	99.21%	1,253.08	92.65%
Commercial	11	0.72%	98.86	7.31%
Institutional	1	0.07%	0.50	0.04%
TOTAL	1,519	100.00%	1,352.44	100.00%



Figure 2 Culinary Usage by Type

In 2018, it appears that reported connections may have inadvertently included connections within the Hideout Town water system and thus inflated the connections in that year.

Notwithstanding that data anomaly, it is clear from Table 1 and Figure 2 that roughly 99 percent of the meters in JSSD are residential connections, accounting for 93 percent of the total water use. Hence, residential water use represents the largest single area for potential conservation. However, JSSD develops, its number of commercial and institutional accounts is expected to grow. Thus, non-residential accounts should not be overlooked as potential contributors to future conservation efforts.

Current Rates

Table 2 shows the District's current culinary water rate structure. JSSD charges different rates based on meter size. Rates increase once users reach 10,000 gallons. The District will be preparing a new rate study later this year to identify areas where conservation could be encouraged. Preliminary ideas for water conservation include the creation of a more graduated tier structure.

Table 2
2021 JSSD Water Rates

Meter Size (inches)	2016	2017	2018	2019	2020	2021
1 and Smaller	\$65.81	\$68.74	\$71.78	\$74.86	\$78.12	\$81.44
1.5	\$87.31	\$90.99	\$94.84	\$98.79	\$102.97	\$107.27
2	\$113.10	\$117.69	\$122.51	\$127.50	\$132.97	\$138.27
3	\$173.28	\$180.00	\$187.09	\$194.50	\$202.38	\$210.61
4	\$259.26	\$269.00	\$279.34	\$290.22	\$301.79	\$313.95
6	\$474.21	\$491.51	\$509.96	\$529.51	\$550.32	\$572.29
8	\$732.15	\$758.52	\$786.70	\$816.66	\$848.55	\$882.30
10	\$1,033.07	\$1,070.04	\$1,109.57	\$1,151.66	\$1,196.84	\$1,243.98
12	\$1,692.25	\$1,752.41	\$1,816.81	\$1,885.48	\$1,958.63	\$2,036.24
Volume Rates (\$/kgal) (All use over 10K gal/month)						
All Customers	\$5.91	\$6.13	\$6.36	\$6.60	\$6.86	\$7.11

SUPPLY INFORMATION

A summary of JSSD's current and historical water supply is contained here. For additional information on water supply the reader should refer to Jordanelle Special Service District's Water Master Plan. JSSD currently meets system demand with two main sources: the Keetley Water Treatment Plant and two main wells, Victory Ranch Well #1 and #2. There are also a few smaller wells which can provide some minimal supply. It should be noted that Service Area C is currently disconnected from the rest of the system and only has access to the two main wells. JSSD plans to interconnect the system in the future. See Figure 3 for the source availability throughout the District.

LEGEND

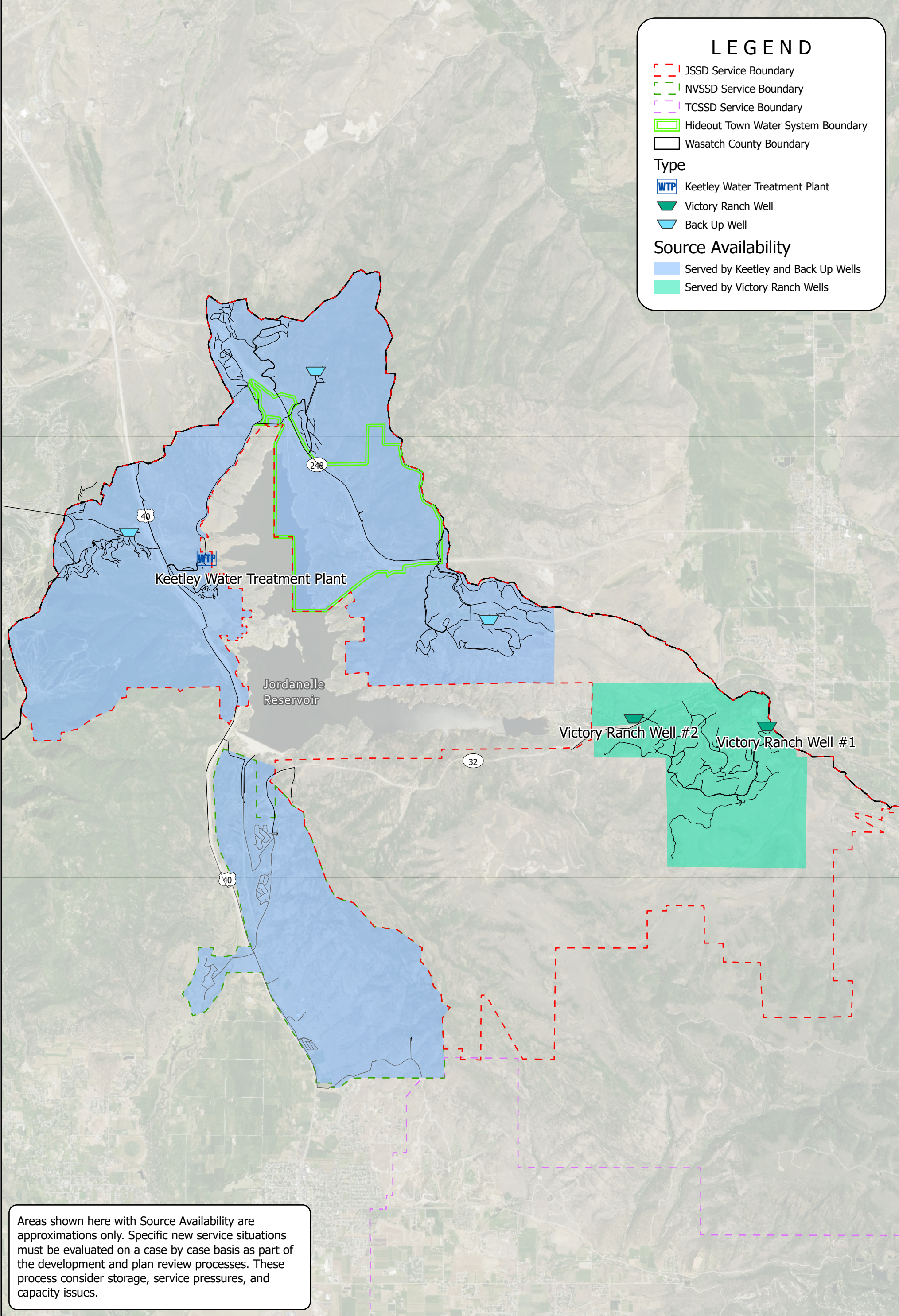
- JSSD Service Boundary
- NVSSD Service Boundary
- TCSSD Service Boundary
- Hideout Town Water System Boundary
- Wasatch County Boundary

Type

- WTP Keetley Water Treatment Plant
- ▼ Victory Ranch Well
- ▲ Back Up Well

Source Availability

- Served by Keetley and Back Up Wells
- Served by Victory Ranch Wells



Areas shown here with Source Availability are approximations only. Specific new service situations must be evaluated on a case by case basis as part of the development and plan review processes. These process consider storage, service pressures, and capacity issues.

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Approximately 92% of JSSD’s culinary water is produced at the Keetley Water Treatment Plant (Ontario Drain Tunnel). The majority of the remainder (5.5%) is supplied by Victory Ranch Well #1 (Main well). The back up wells in the system produced less than 3% of total source when all production is combined.

Figure 4 JSSD Culinary Water Sources shows the volume the District has used from each source as reported to the Division of Water Rights (DWRi) website from 2018 to 2021. It should be noted that this this shows what is produced for JSSD as well as their wholesale customers.

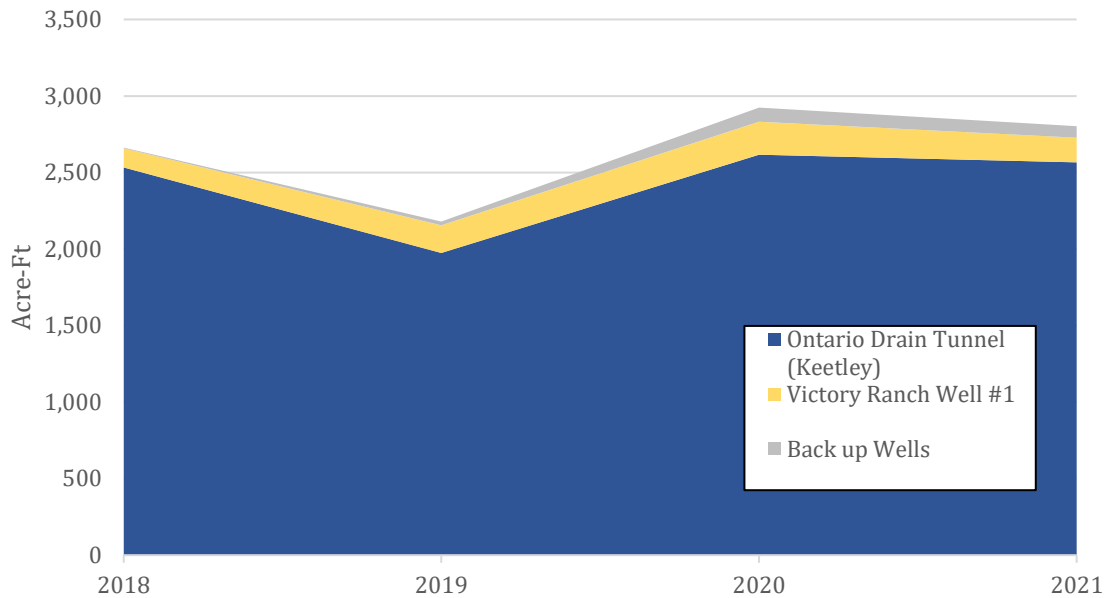


Figure 4 JSSD Culinary Water Sources

In addition to looking at what current sources have been producing, it is critical to consider how much current sources can produce. Table 3 summarizes the maximum available supply from the District’s current sources for both average historic production and estimated reliable annual yield.

**Table 3
Existing Source Annual Capacity Summary**

Sources	Average Year Production (acre-ft)	Estimated Reliable Annual Yield (acre-ft) ¹
Keetley Water Treatment Plant	6,500	5,900
Victory Ranch Well #1 (Main Well)	1,840	1,840
Victory Ranch Well #2 (Back up Well)	540	540
JSSD Back Up Wells	910	910
TOTAL	9,790	9,190

¹Estimated reliable annual yield is based off a “dry year.” A dry year is meant to represent the lowest water year in which typical level of service is to be maintained (i.e. no extra-ordinary mitigation measures implemented).

One additional note regarding District water sources is water rights. The District has sufficient water rights to utilize its sources to meet current needs. Current District development requires water dedication with all new development. Therefore, as the District grows into its sources, the rights to be able to fully utilize its sources will be in place.

WATER MEASUREMENT

Currently, all water connections within JSSD are metered and read on a monthly-basis. Over the last few years, the District has transitioned to an automated metering infrastructure (AMI) system. AMI systems automate collection of meter data around the District and can actively measure use, identify leaks, and educate customers on use. JSSD’s AMI system provides for each customer an online portal through which water use on a monthly (or even hourly) basis can be viewed and interacted with. Installation requires construction of central towers to collect the data. Generally, AMI technology can help encourage water conservation more for each customer by helping customers proactively monitor water use. The JSSD system is universally metered with AMI, with exception of remote wholesale meters, which are planned for integration into the AMI system this year.

WATER PRODUCTION, SALES, AND SYSTEM LOSS

Historic Water Use

Historic water use from 2018 to 2021 is summarized in Table A below. Table A includes both water production (water produced by each source and delivered to the system) and water sales (metered use out of the system) for the culinary system. For both categories, per capita water use has also been calculated.

Data for this table comes from the production records and water sales records which were provided by the District to the Division of Water Rights. For full-time/primary residential population, JSSD reviewed the methodology utilized by the DWR’s staff and determined that JSSD has no methodology available for improving on the DWR’s estimates.

**Table 4A
Historic Per Capita Water Culinary Production, Sales and System Loss Based on Full Time Residency**

Year	JSSD Full Time Population	Historic Water Production* (acre-ft)	Per Capita Production (gpcd)	Historic Water Sales* (acre-ft)	Per Capita Water Use (gpcd)	System Loss (acre-ft)	System Loss %
2018	1,220	1,355.95	993	1,241.44	908	114.51	4.41%
2019	1,630	1,109.90	608	935.27	512	174.63	8.54%
2020	1,640	1,402.14	763	1,064.51	579	337.63	13.69%
2021	1,695	1,365.95	719	1,352.44	712	13.51	0.50%

* This does not include what was produced and delivered to JSSD’s wholesale customers.

Table 4A shows per capita usage based on production ranging from 600 to nearly 1,000 gpcd. Per capita usage based on sales ranges from 500 to 900 gpcd. These values are particularly high for the

what’s observed in Wasatch County overall. For the purposes of this plan, an adjusted population reflecting the actual average occupancy population in the District was developed calculated. This adjusted population’s purpose is to reflect the average number of people actually served by the JSSD system including vacationers, those seasonally inhabiting second homes, short term rentals, and others. As mentioned earlier, due to the nature of this area being mostly vacation and resort type homes, the difference between the full-time/primary population and the adjusted average occupancy population is significant. After reviewing each of the existing development served by the District, it is estimated that approximately 65% of all connections within the District are “transient” (i.e. not full-time/primary connections). An average occupancy per connection is expected to be 3.1 persons per connection and it is assumed based on observation that the transient connections are about occupied about 60% of the year on average. Per capita results based off this

**Table 4B
Historic Per Capita Water Culinary Production, Sales and System Loss Based on Average Occupancy**

Year	JSSD Adjusted Population (average occupancy)	Historic Water Production* (acre-ft)	Per Capita Production (gpcd)	Historic Water Sales* (acre-ft)	Per Capita Water Use (gpcd)	System Loss (acre-ft)	System Loss %
2018	3,020	1,355.95	401	1,241.44	367	114.51	4.41%
2019	3,330	1,109.90	298	935.27	251	174.63	8.54%
2020	3,470	1,402.14	361	1,064.51	274	337.63	13.69%
2021	3,550	1,365.95	343	1,352.44	340	13.51	0.50%

* This does not include what was produced and delivered to JSSD’s wholesale customers.

Table 4B shows per capita usage based on production ranging from 300 to 400 gpcd. Per capita usage based on sales ranges from 250 to 370 gpcd. These values have significantly less variability and overall match the observed data in Wasatch County much more consistently. Thus, the remainder of this report will be based on the average occupancy.

Current Per Capita Water Use

Per capita indoor and outdoor water use for the year 2021 by water use type is summarized in Table 5. Culinary data for 2021 was obtained from the DWRi. It was assumed that the indoor to outdoor ratio was consistent for all customer types.

**Table 5
Current Per Capita Water Use By Type**

User Type	Indoor Use (gpcd)	Outdoor Use (gpcd)	Total Use (gpcd)
Residential	172.8	142.3	315.1
Commercial	13.6	11.3	24.9
Institutional	0.07	0.03	0.1
Total	186.47	153.63	340.1

System Losses

Over the last four years, average system losses in the JSSD water system have been approximately 7 percent of annual water production, as shown in Table . The District currently has a team of staff which meet regularly to audit water use, continually tighten up their data, and identify causes of water loss. See “Conservation Practices” for further discussion of District efforts to minimize system losses including prevention activities and activities to locate and eliminate losses.

Historic Per Capita Water Use

As summarized in Table , the historic per capita water sales ranges from a high of 367 gallons per capita per day (gpcd) in 2018 to a low of 251 gpcd in 2019. The change in per capital water sales is shown in Figure 5.

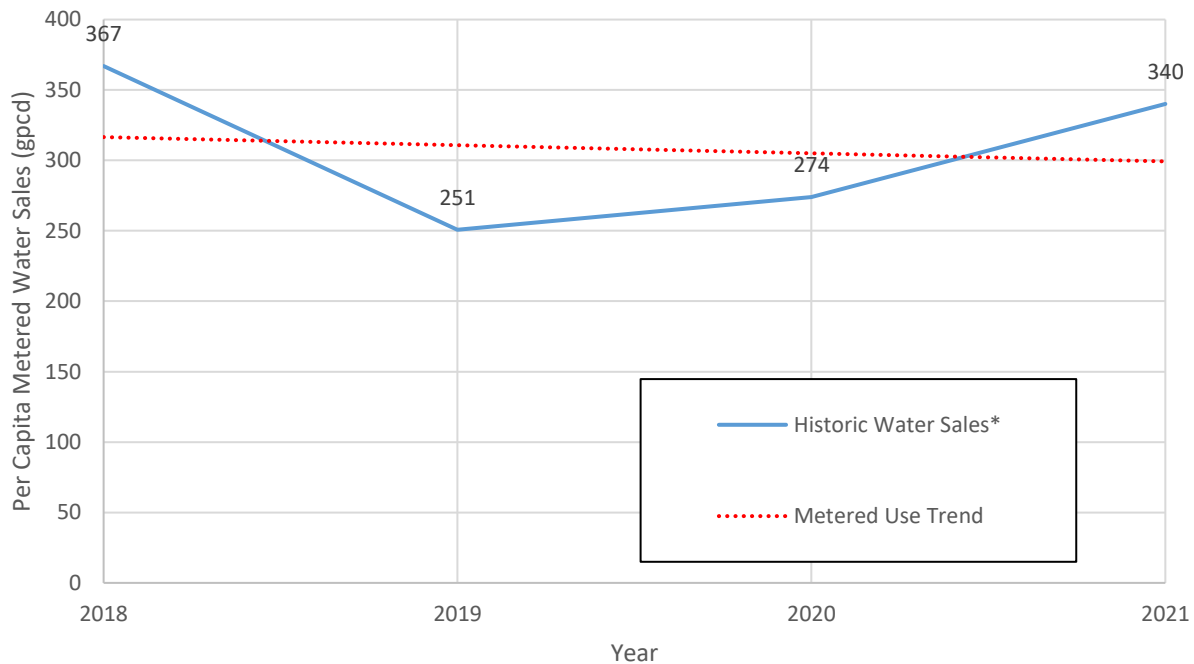


Figure 5 Historic Per Capita Water Sales Use

CONSERVATION GOAL WITH MILESTONES

The State of Utah recently adopted regional conservation goals for the State of Utah that focus on regions of water use driven primarily by dominant river drainages. The District and Wasatch County aim to meet the State of Utah’s conservation targets (Utah’s Regional M&I Conservation Goals, November 2019). The adopted goals establish 2015 as the baseline year for setting conservation targets. Due to some uncertainty in the water use data and population data for 2015, the estimated actual per capita use was back calculated based on recent years’ data. The regional conservation goals for JSSD are summarized in Table 6 and Figure 6.

**Table 6
Conservation Goal With Milestones Through 2065**

Year	State Conservation Goal	JSSD Per Capita Water Use Goal (gpcd)
2015	0%	380
2030	20%	294
2040	27%	268
2065	32%	250

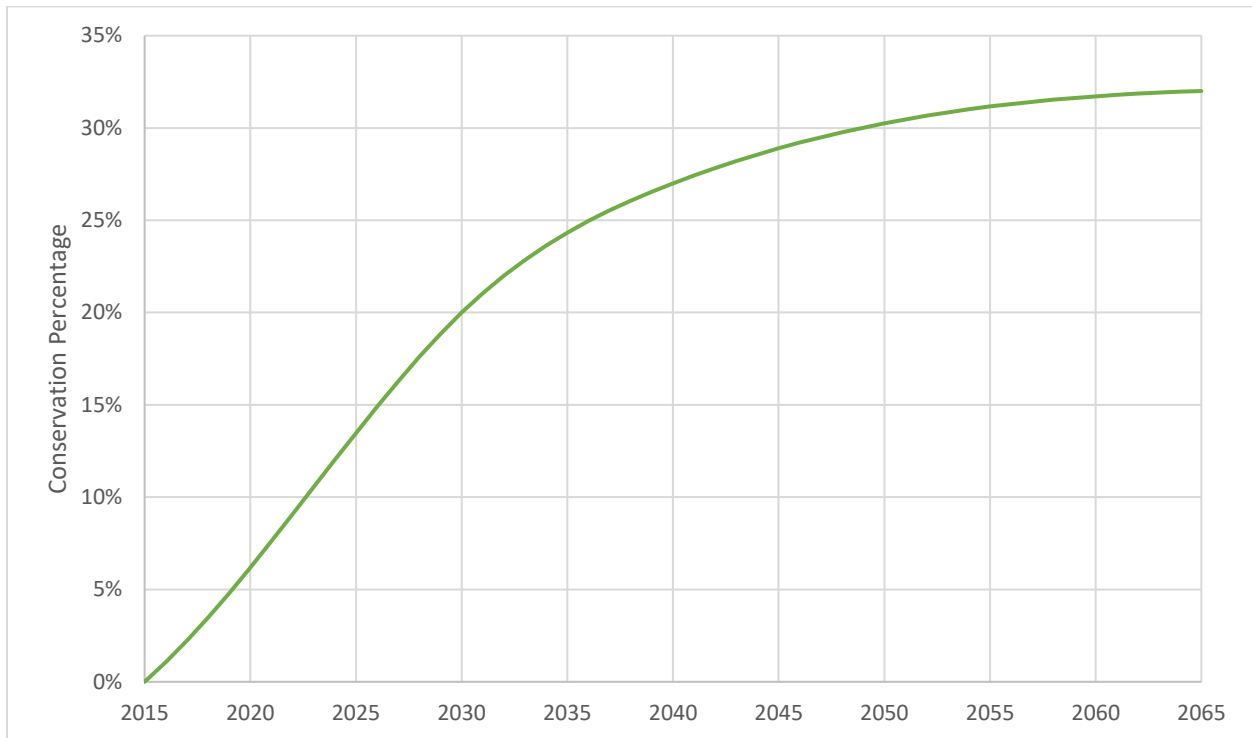


Figure 6 Conservation Curve

It will be imperative that the District make an effort to conserve throughout their system. Because JSSD has a relatively high percentage of undeveloped land, significant savings on a per capita basis are expected through the development of new properties with smaller lot sizes and reduced turf grass coverage. Due to the area being relatively undeveloped, planning for future sources and infrastructure has assumed conservation goals are met.

Figure 7 shows the Districts’ demand projections with and without conservation along with historical annual production. (Note that this figure is from the master plan and includes production for wholesale customers. It also assumes that wholesale customers achieve similar conservation targets.)

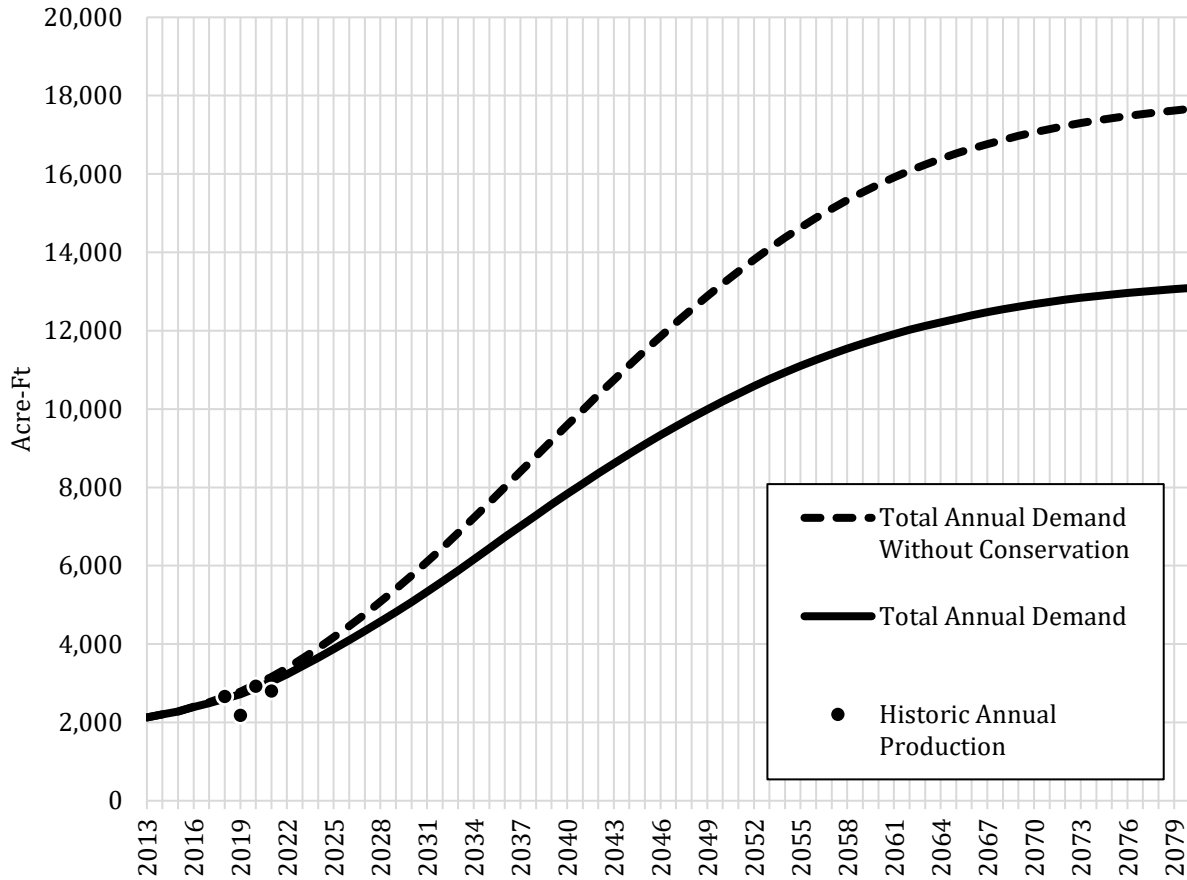


Figure 7 Annual Production with and without Conservation

Measuring Savings from Conservation

Figure 8 shows historic water sales per capita compared to the proposed District conservation goal. Historically, JSSD values register below their per capita goal. It is recommended that the District continue to monitor this as greater certainty will come with additional years of higher quality data.

Therefore, to track how well the District is doing in achieving its conservation goal in the future, JSSD will continue to annually estimate per capita water demands based on yearly metered sales data and an updated population estimate as a function of new system connections.

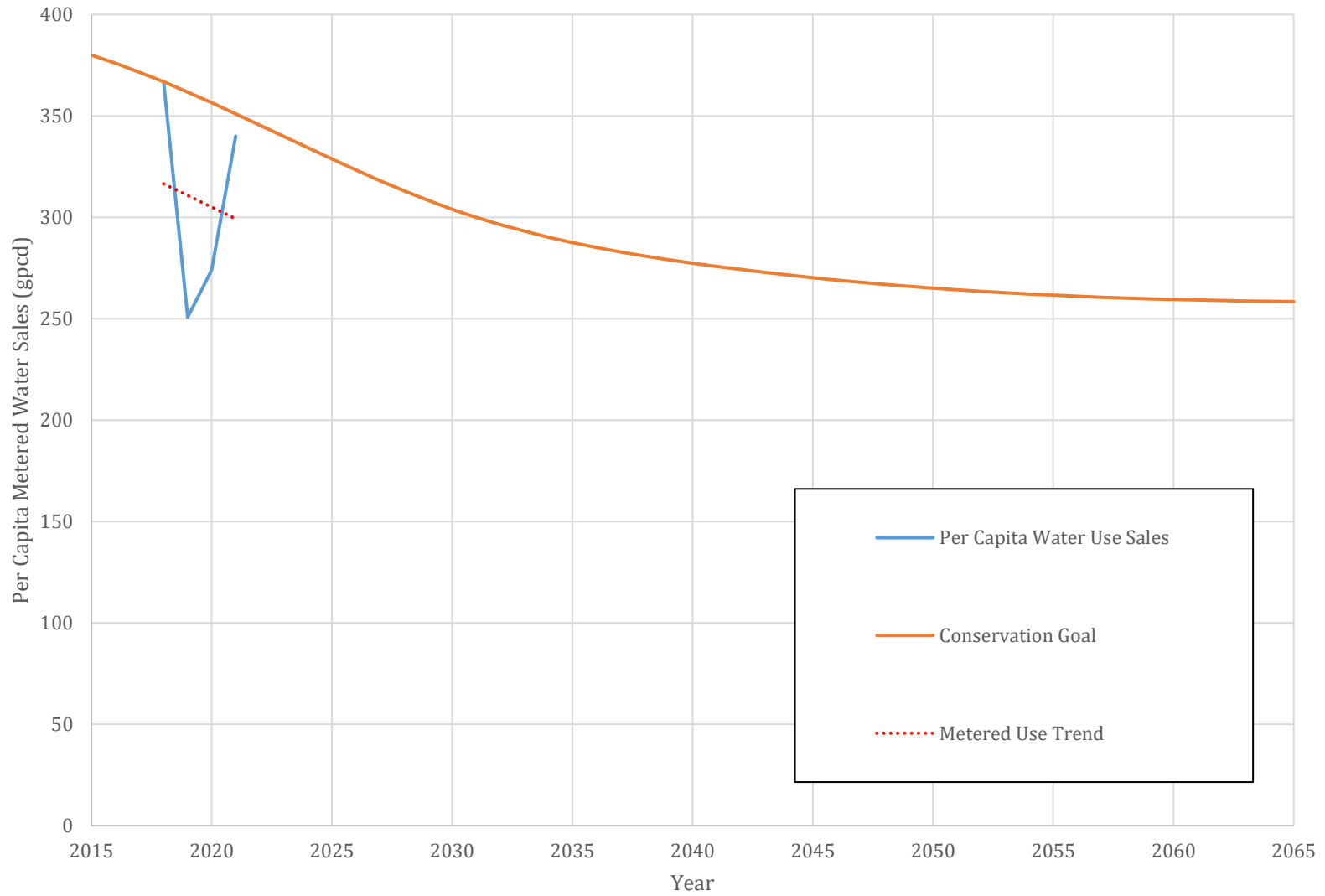


Figure 8 Historic & Future Per Capita Water Use

EFFECT OF CONSERVATION ON FUTURE WATER SUPPLY AND DEMAND

The District has experienced large amounts of growth in the past 5 years and is expected to have aggressive growth until buildout. Future growth is expected to fill the developments that surround the Jordanelle Reservoir. The historic and projected population for both full time and seasonal adjusted estimates for the JSSD water service area are shown in Table 7.

Table 7
JSSD Historic and Projected Population Estimates

Year	Full Time Population	Seasonal Adjusted Population
2018	1,220	3,020
2019	1,630	3,330
2020	1,640	3,470
2021	1,695	3,550
2025	2,500	5,250
2030	3,840	8,070
2040	7,560	15,910
2050	12,170	25,620
2060	15,780	33,240
2065	16,970	35,740
Buildout	19,550	41,180

Based on these growth estimates, Table 8 shows both the projected dry year culinary water production requirement (demand) for the District with conservation and the projected production requirement (demand) if no conservation occurs. This table also compares projected demands against the existing available water supply described previously in this plan. This same information is shown graphically in Figure 7.

Included in Figure 7 is a representation of the appropriate supply buffer needed should existing supply be suddenly or gradually reduced due to climate change, groundwater decline, equipment failure, or other factors. While discussion of supply reliability are beyond the scope of this document, the reader should reference the Districts' Water Master Plan for further explanation of how this level of potential reduction has been estimated.

Table 8
Projected Culinary Year Total Water Production Requirements

Year	Projected Production Requirements without Conservation (acre-ft)	Projected Production Requirements At Proposed Conservation Goal (acre-ft)	Existing Supply¹ (acre-ft)	Estimated Additional Supply Need without Conservation (acre-ft)	Estimated Additional Supply Need with Conservation (acre-ft)	Estimated New Supply Development Which Can Be Delayed Through Conservation (acre-ft)
2018	2,651	2,609	9,190	0	0	0
2019	2,786	2,721	9,190	0	0	0
2020	2,968	2,878	9,190	0	0	0
2021	3,160	3,039	9,190	0	0	0
2025	4,175	3,874	9,190	0	0	0
2030	5,747	5,071	9,190	0	0	0
2035	7,614	6,445	9,190	0	0	0
2045	9,585	7,830	9,190	395	0	395
2050	11,491	9,098	9,190	2,301	0	2,301
2055	13,202	10,195	9,190	4,012	1,005	3,008
2060	14,634	11,101	9,190	5,444	1,911	3,533
2065	15,733	11,797	9,190	6,543	2,607	3,936
Buildout	16,522	12,304	9,190	7,332	3,114	4,218

¹ Existing Supply as of the publication of this Conservation Planned, Based on a Dry Year.

As can be seen in Table 8 and Figure 9, existing District supplies are currently adequate to meet projected demands. However, without conservation, demands with the appropriate supply buffer would surpass available existing supplies by the year 2032. If conservation goals are achieved, developing new sources in the District can be delayed until 2040. Figure 9 illustrates why water conservation is essential JSSD's long-term water supply plan.

Note that the District's master plan shows the need for some new source capacity earlier than these dates due to the need for additional peak day supply/treatment with growth (unrelated to conservation).

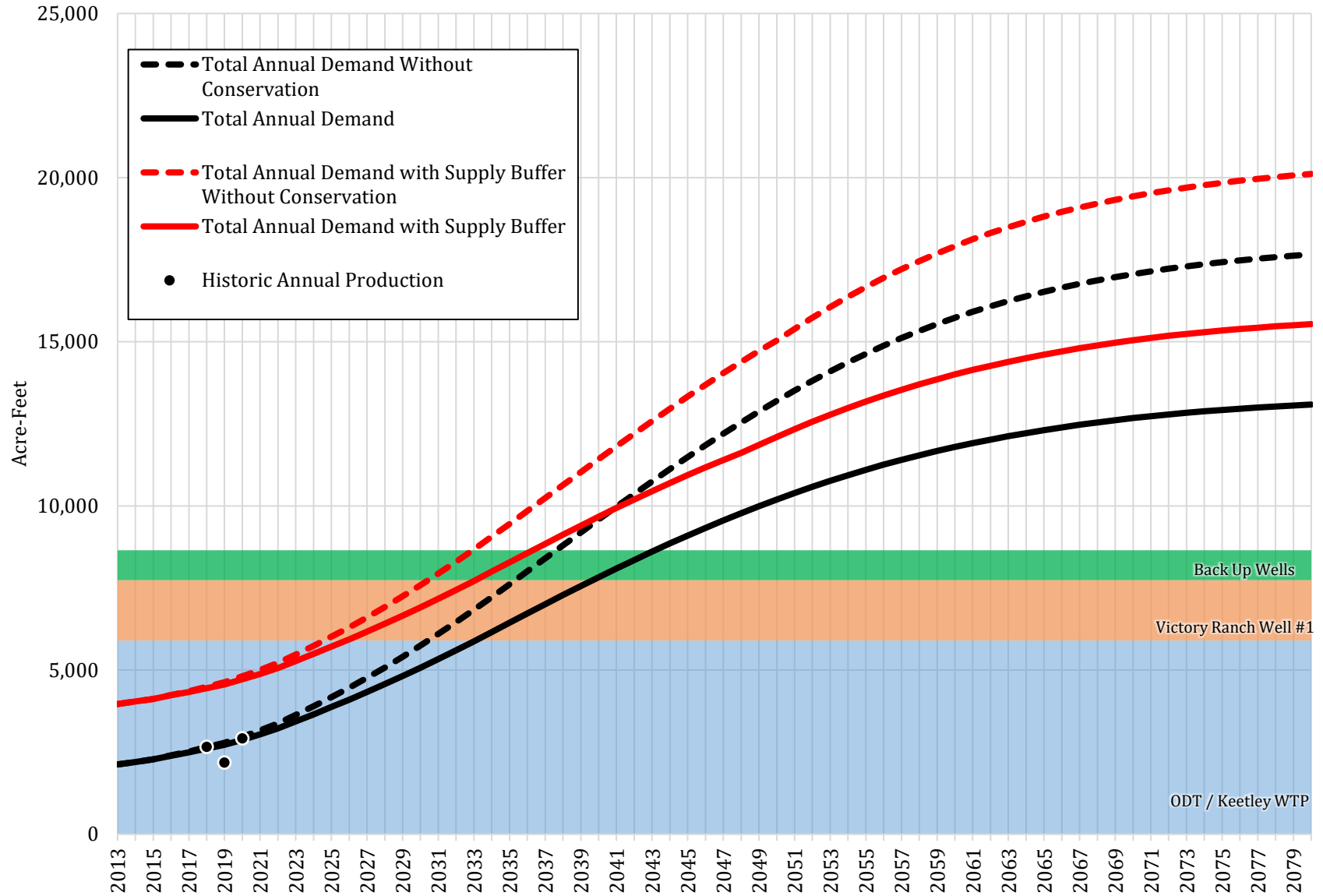


Figure 9 JSSD Culinary Annual Production Requirements vs. Supply

WATER CONSERVATION PRACTICES

The following sections document both existing and proposed water conservation practices in the District. To organize the information, each section groups conservation practices by the following major conservation categories:

- Conservation Public Awareness Practices
- Education and Training Practices
- Rebates, Incentives, and Rewards
- Ordinances and Standards
- Water Pricing
- Improvements to Physical System

Current Conservation Practices

JSSD has been working in recent years on its conservation practices and will continue to do so. JSSD's current conservation practices are listed below (organized by conservation category):

Conservation Public Awareness Practices:

- **Universal Water Meters** – All residential, commercial, and institutional connections to the District's water system are metered. The District also meters water that is used in public areas such as parks and streetscapes.
- **Water Conservation Report** – the District updated its previous conservation plan in 2018.
- **Consumer Confidence report** - As part of its annual Consumer Confidence Report sent to all customers, the District includes materials encouraging water conservation habits.
- **Drought Letters** – As a part of its typical operation, JSSD usually sends out letters in the spring discussing the outlook of the year's water supply and therein encourages conservation.
- **Mandatory AMI Portal Sign Up for Leak Forgiveness** – JSSD requires those who seek forgiveness on leaks to be signed up for the Customer Water Usage Portal to be eligible for reimbursement.

Education & Training Practices:

- **Conservation Links on the District Website**
 - **Important Water Conservation** – A link to “Water Conservation 2022 Reminders & Resources.” This document reminds the JSSD customers that as of April of this year, Gov. Cox declared a state of emergency due to drought conditions. It encourages users to conserve secondary irrigation and lists resources
 - **Watering Recommendations** – A link to “Slow the Flow” tools and resources tab. This outlines more ways for customers to save and allows them to research rebates they are eligible for.
 - **Weekly Lawn Watering Guide** – A link to the Utah Department of Natural Resources guidelines to how to water your lawn efficiently during the hottest days of the year.

- **Customer Water Usage Portal** – A link to the customer AMI portal that the District provides. The customer portal allows customers to view actual water usage with real-time data for both their culinary and/or irrigation meter.

As of 2022, 105 of 1,715 (6%) customers in JSSD are registered on the portal.

Ordinances & Standards:

JSSD as a service district does not control land use policy. However, the land use authority for the vast majority of JSSD's customers, Wasatch County, does have ordinances which promote conservation in new development as follows.

- **Ordinance 5.6.7: Native Plants/Native-Like Plants** - Native landscapes and vegetation areas that reflect the indigenous plant materials and landscape textures are envisioned. Native landscape species consist primarily of drought tolerant plants. Plants in wet areas shall be consistent with native species in these types of plant associations. The plant materials should thrive with very little or no irrigation, except during the period of initial establishment. All native landscape plants should be carefully planted due to the high mortality rate for these species. Plants that are "native-like" are species that may be indigenous but not endemic to the area. The use of the indigenous species or other more recent introduced species that mimic native plants is acceptable. Transplanting existing plants on the site is encouraged.
- **Ordinance 5.6.8: Turf Meadow and Wildflowers** - Where turf areas are necessary, a turf grass blend should be chosen that is durable to traffic and drought tolerant. It is required that irrigation accompanies turf areas, and it is mandatory for irrigation systems to be installed with turf that is laid over slab.
- **Ordinance 5.6.9.1 Minimize Lawn Areas** - Lawn areas should be kept to a minimum within the JSPA. An appropriate use of turf is to scale the lawn to the surrounding area and use. Some common public spaces are intended as park-like settings.

Water Pricing:

- **Increasing Water Block Schedule** – JSSD currently structures its Water Rate schedule that customers that have higher water usage pay more for water via its overage charges.

Improvements to Physical System:

- **AMR to AMI Project** – From 2019 to 2021, the District converted their metering system to an AMI system. This allows the district to better collect data, as well as have this data readily available to the consumers.

New Conservation Practices Planned for Implementation

There are several new conservation practices that the District has either recently started to implement or will implement in the next five years. The following sections describe each conservation practice and Table 9 summarizes the implementation schedule, estimated costs, and measurement of progress for each practice.

Conservation Public Awareness Practices:

- **Water Shortage and Drought Plan** – Complete a detailed water shortage and drought plan by 2024. This plan will include specific drought stages along with triggers and responses for each. This will target drought responses and allow for timely action when drought conditions exist.

- **Update Conservation Report** – Update existing JSSD conservation plan regularly to capture new data, reflect additional growth, and check in on conservation practices/goals.

Education & Training Practices:

- **Assign JSSD Staff Member Conservation Tasks** – Assign a JSSD staff member to act as a Water Conservation Education Coordinator that ensures that the public/stakeholder education and engagement for water conservation as identified in this plan are sent out (mailers) and kept up to date (website).
- **Backflow Preventor Lead Training** - Train back flow preventor lead operator to identify outdoor water waste and report it to the District so corrective action can be taken (e.g. sprinklers watering concrete).
- **Educate Users on the Water Usage Portal** – Include educational inserts in mailed bills to inform how to access to the portal and what information it has. JSSD will set a goal to increase the percentage of customers registered for the portal in the next 5 years.

Rebates, Incentives & Rewards:

- **Educate Consumers on CUWCD Rebates** – Central Utah Water Conservancy District (CUWCD) offers rebate programs that residents in Wasatch County can participate in.
 - **Smart Controller Rebates** – Receive a rebate for up to \$75 when you purchase an eligible WaterSense labeled smart controller. Smart controllers reduce water waste by automatically adjusting how often and how long a landscape is watered based on local weather and landscape conditions.
 - **Flip Your Strip** – Park strips are known to be one of the most challenging portions of any landscape to maintain. Central Utah Water now offers rebates of up to \$1.25/sq ft to homeowners who convert their current lawn filled park strip to a water efficient design. “Flipped” park strips can save an estimated at 5,000-8,000 gallons every year.
 - **Localscapes Rewards** – Localscapes is an approach to landscaping designed specifically for Utah. Plus, you could qualify for cash rewards and a free review of your Localscapes landscape plan.
 - **Toilet Replacement** – Receive up to \$100 when you replace your old toilet with a WaterSense labeled toilet! Toilets use more water than any other indoor fixture. Because toilets manufactured before 1994 use more gallons of water per flush, replacing them is an easy way to conserve water.

Water Pricing:

- **Evaluate Current Water Rate Structure to Further Incentivize Conservation** – Within the next 2 years, the District will complete a rate study to identify potential modifications to its current rates structure that encourage reductions in excessive water use and further incentivize conservation. This will likely be more graduated increasing block rate structure than what they have now. Results of the review will be presented to the JSSD board for consideration.

Improvements to Physical System:

- **Upgrade Remaining Wholesale Meters to AMI** – Update the Districts whole sale meters to automated metering systems.

- **Participate in AWWA Water Audit Program** – This program helps water suppliers quantify system water loss and associated revenue losses. This will be the natural progression of the District’s existing internal auditing after all the necessary metering is completed (remaining wholesale meters) and all data are consolidated. The District will participate in at least one water audit by 2025.

**Table 9
Implementation, Schedule, Estimated Cost, and Measurement of Progress**

New Conservation Practices	Implementation Timeline	Estimated Cost	Measurement of Progress
Water Shortage and Drought Plan	Complete by 2024	\$20,000	Completion of report with associated recommendations
Update Water Conservation Plan	Complete by 2022	\$6,200	Completion of report
Assign JSSD Staff Member Conservation Tasks	Complete by 2025	Varies	Complete the associated tasks (See New Conservation Practices)
Backflow Preventor Lead Training	Complete by 2023	Varies	Create training program for JSSD system operators
Educate Consumers on CUWCD Rebates	Begin in 2023	Varies	Educate JSSD consumers on the rebate programs available to them.
Educate Consumers on Water Usage Portal	Begin in 2023	Varies	Raise portal registration from 6% to 10%
Evaluate Current Water Rate Structure to Further Incentivize Conservation	Complete in 2022	\$15,000	Completion of report with associated recommendations
Upgrade Wholesale Meters to AMI	Complete by 2024	Varies	Project Completion
Participate in AWWA Water Audit Program	Complete by 2024	\$10,000	Completed audit score and record

WATER CONSERVATION COORDINATOR

The District currently does not have a water conservation coordinator. See new conservation practices.

WATER CONSERVATION PLAN AUTHOR(S)

This plan was prepared by Bowen Collins & Associates at the Draper office:

Bowen Collins & Associates
154 E. 14000 South
Draper, Utah 84020
801.495.2224 Office

Primary authors of the plan are:

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Marilyn Rice
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JORDANELLE SPECIAL SERVICE DISTRICT CONTACTS

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BOWEN COLLINS
& ASSOCIATES

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**MINUTES OF THE WASATCH COUNTY COUNCIL
ACTING AS
THE GOVERNING BOARD OF THE JORDANELLE
SPECIAL SERVICE DISTRICT
NOVEMBER 8, 2022**

PRESENT: Board Chair Mark Nelson
Board Member Spencer Park
Board Member Marilyn Crittenden
Board Member Kendall Crittenden
Board Member Steve Farrell

EXCUSED: Board Member Danny Goode
Board Member Jeff Wade

STAFF: Max Covey, General Manager
Theresa Baronek, District Treasurer
Dana Kohler, Administrative Assistant
Doug Scow, Water Rights Manager
Kierstan Smith, CPA
Chance Morris, Distribution/Collections Manager
Wade Webster, Keetley Water Treatment Plant Manager
David Fuller, Project Coordinator
Shari Coleman, Accounting Clerk
Teresa Robins, District Treasurer
Rick Tatton, Court Reporter via Zoom

Board Chair Mark Nelson called the meeting to order at 5:50 p.m. on Tuesday, November 8, 2022. The record should show that all the Governing Board Members of the Jordanelle Special Service District are present except Board Member Danny Goode and Board Member Jeff Wade. Board Chair Mark Nelson indicated that all the Governing Board of the Jordanelle Special Service District are meeting in the Wasatch County Senior Center Classroom in the Wasatch County Library Building located at 465 E 1200 S, Heber City, Utah 84032. Board Chair Mark Nelson then called the first agenda item.

REGULAR SESSION

APPROVAL OF THE MINUTES FOR OCTOBER 11, 2022

Board Member Spencer Park made a motion to approve the minutes for October 11, 2022, as written. Board Member Marilyn Crittenden seconded the motion, and the motion

carries with the following vote:

AYE: Board Chair Mark Nelson
AYE: Board Member Steve Farrell
AYE: Board Member Spencer Park
AYE: Board Member Marilyn Crittenden
AYE: Board Member Kendall Crittenden

NAY: None.

WARRANT LIST APPROVAL

Board Member Steve Farrell made a motion to approve the warrants in the amount of \$1,581,961,53. Board Member Kendall Crittenden seconded the motion, and the motion carries with the following vote:

AYE: Board Chair Mark Nelson
AYE: Board Member Marilyn Crittenden
AYE: Board Member Kendall Crittenden
AYE: Board Member Steve Farrell
AYE: Board Member Spencer Park

NAY: None.

PRELIMINARY BUDGETS/SET PUBLIC HEARING FOR BUDGETS.

Kierstan Smith, CPA, addressed the Governing Board of the Jordanelle Special Service District and presented a power point presentation and went through the Preliminary Budgets for the Governing Board. **Board Member Spencer Park made a motion to approve the Preliminary Budgets as has been presented. Board Member Marilyn Crittenden seconded the motion, and the motion carries with the following vote:**

AYE; Board Chair Mark Nelson
AYE: Board Member Marilyn Crittenden
AYE: Board Member Kendall Crittenden
AYE: Board Member Steve Farrell
AYE: Board Member Mark Nelson

NAY: None

QUARTERLY FINANCIAL REPORT

Kierstan Smith, CPA, addressed the Governing Board of the Jordanelle Special Service District and indicated the following:

Accounts 11294 and 111300 restricted funds were received during the first quarter from the ARPA grant and from the developer participating the construction of the Fisher Ranch Water Treatment Plant.

Account 31060 the district bills water reservation fees annually except those billed to North Village Special Service District which are billed monthly.

Account 33000 a significant portion of the penalty revenue has been realized in the first quarter of the year due to the late fees accumulated on delinquent water reservation fees.

Account 34000 inspection fees were received for three large developments during the 2nd quarter.

Account 35000 the district budgeted for 120 new 1-inch connections.

Account 36000 the district received 95 percent of the award funds from the ARPA grant up front. Account 39300 the district is leasing capacity in its tower metering system.

Account 32070 Contributed Capital received to date consists of the amount received from the developer participating in the FRWTP project.

Account 50000 legal fees are expected greatly exceed the projected budget amount due to continued efforts to protect the district's infrastructure.

Account 54000 liability insurance exceeds budgeted amounts due to inflation effecting the premiums.

Account 71000 proprietary fund types don't recognize capital outlay as an expense which is why there isn't a budget amount for this outflow of cash.

Account 72000 depreciation is expected to exceed the current budgeted amount due to additional contributed infrastructure recorded after the budget was adopted last December.

The district is experiencing positive cash flow overall. The positive cash flow from capital and related financing activities is due mostly to the receipt of grant money and developer contributions for the FRWTP project. Proceeds from the sales and maturities of investments occur when the investments managed by Zions mature. These maturities are then either reinvested or held in the PTIF. The purchases this year have taken funds from the PTIF account and invested them in corporate debt and governmental securities to gain a better return on investment.

**Board member Spencer Park made a motion to accept the Quarterly Financial report
Board Member Marilyn Crittenden seconded the motion and the motion carries with the following vote.**

**AYE: Board Chair Mark Nelson
AYE; Board Member Marilyn Crittenden
AYE: Board Member Kendall Crittenden
AYE: Board Member Steve Farrell
AYE: Board Member Spencer Park**

NAY: None.

WATER CONSERVATION PLAN

Justin Dietrich, from Bowen Collins, addressed the Governing Board of the Jordanelle Special Service District and indicated that his comments would be the same was done in the Twin Creeks Special Service District meeting and ask that the Governing Board of the Jordanelle Special Service District accept the Water Conservation Plan. **Board Member Steve Farrell made a motion to approve the Water Conservation Plan. Board Member Kendall Crittenden seconded the motion, and the motion carries with the following vote:**

AYE: Board Chair Mark Nelson
AYE: Board Member Steve Farrell
AYE: Board Member Marilyn Crittenden
AYE: Board Member Kendall Crittenden
AYE: Board Member Spencer Park

NAY: None.

GENERAL MANAGER'S REPORT

Max Covey, the General Manager, addressed the Governing Board of the Jordanelle Special Service District and indicated that he has nothing further to present and indicated that everything is running and progressing great in the Jordanelle Special Service District.

OTHER BUSINESS

Max Covey, the General Manager, and the Governing Board of the Jordanelle Special Service District both have no other business.

**PUBLIC HEARING
NOVEMBER 8, 2022**

WATER RESERVATION RATE INCREASE

Justin Dietrich, from Bowen Collins, presented a power point presentation and then indicted that as of the effective date of this resolution, the annual fee charged for any water reservation agreement executed by the district shall be \$555.03 per acre foot of water so reserved. This annual rate shall remain until the district pursuant to Section 5 of Resolution 2022-4, revised such annual fee.

Public Comment:

Board Chair Mark Nelson then opened the public hearing for public comment and there was none, so the public comment period was closed.

Motion:

Board Member Steve Farrell made a motion to adopt Resolution 2022-4 as presented. Board Member Marilyn Crittenden seconded the motion, and the motion carries with the following vote:

**AYE: Board Chair Mark Nelson
AYE: Board Member Steve Farrell
AYE: Board Member Spencer Park
AYE: Board Member Kendall Crittenden
AYE: Board Member Marilyn Crittenden**

NAY: None.

Board Chair Mark Nelson that a motion is needed to leave our regular session in the Jordanelle Special Service District and go into Closed Session for pending litigation. **Board Member Spencer Park made a motion to go into Closed Session for pending litigation. Board Member Steve Farrell seconded the motion, and the motion carries with the following vote:**

**AYE: Board Chair Mark Nelson
AYE: Board Member Spencer Park
AYE: Board Member Marilyn Crittenden
AYE: Board Member Kendall Crittenden
AYE: Board Member Steve Farrell**

NAY: None.

CLOSED SESSION WAS NOT HELD

Meeting adjourned at 6:30 p.m.

MARK NELSON BOARD CHAIRMAN

**JORDANELLE SPECIAL SERVICE DISTRICT
WATER CONSERVATION PLAN
RESOLUTION NO. 2022-03**

RECITALS

WHEREAS, the Jordanelle Special Service District (the “District”) 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 District’s boundaries; and

WHEREAS, Utah and surrounding states have been impacted by drought for several years, coupled with growth and development, all of which are expected to continue in years to come; and

WHEREAS, the State of Utah has enacted the Water Conservation Act, Utah Code Ann. § 75-10-32, which requires the District to create and implement a Water Conservation Plan; and

WHEREAS, the District engaged Bowen Collins & Associates (“BC&A”) to research the best practices and approaches to water conservation engaged in by other water suppliers and the District itself, and to recommend approaches to water conservation that would be appropriate in the District; and

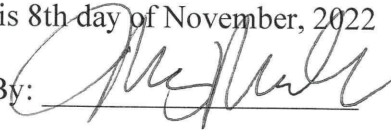
WHEREAS, BC&A prepared a draft Water Conservation Plan; and

WHEREAS, the Board has reviewed and considered BC&A’s recommendations, and has determined that it is in the best interests of the District and its customers to adopt those recommendations.

NOW, THEREFORE, the Wasatch County Council, acting as the governing board of the District (the “Board”), hereby adopts the Water Conservation Plan attached hereto as Exhibit A.

Resolution 2022-03 Approved and adopted this 8th day of November, 2022

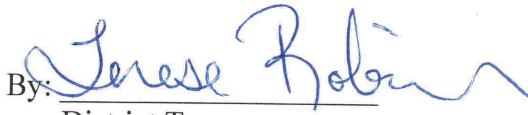
By:



District Board Chairman

Attest:

By:



District Treasurer

