



JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Report



View of Mt. Timpanogos from Silver Lake.

*ON THE COVER:
Welding the Central Pipeline casing at
future Porter Rockwell crossing.
T. Christensen*

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Acronyms used in this publication:

AF: Acre-feet

AMI: Advanced Metering Infrastructure

JVWCD: Jordan Valley Water Conservancy District

JVWTP: Jordan Valley Water Treatment Plant

MGD: million gallons per day

SCADA: Supervisory Control and Data Acquisition

SERWTP: Southeast Regional Water Treatment Plant

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Exceptional
Employees

A New Generation

As I reflect on the challenges our communities experienced in 2020, I considered how Jordan Valley Water managed to provide its essential services even in the midst of significant change. Despite uncertainties that arose, our water professionals worked around the clock to ensure that safe, reliable water service continued uninterrupted.

Over the last 70 years, Jordan Valley Water has dependably secured, developed, treated, and delivered water despite astonishing population growth in its service area and times of drought. As we look to the future, it is critical that we continue to adapt to ensure that these services remain uninterrupted. A recent series of studies commissioned by Jordan Valley Water confirmed that taking certain proactive steps now can better sustain water deliveries for the next 70 years. These studies illustrate the importance of adopting water efficiency standards for new construction, preparing for drought conditions, repairing and replacing aging infrastructure, and delaying costly water supply projects for as long as possible.

As we enter a new year, I thought it would be appropriate to announce Jordan Valley Water's new logo and brand identity (see below), which will be implemented July 2021. The process of designing this new brand has provided an opportunity to reflect on everything Jordan Valley Water has stood for in the past and aspires to be as we move forward into the future. Despite challenges that our community and organization are sure to face in the future, Jordan Valley Water's commitment to delivering quality water and services will remain.

Bart Forsyth, *General Manager*



JORDAN VALLEY WATER
CONSERVANCY DISTRICT



Matt Olsen
Assistant General Manager
*Communications, Water
Conservation & Information Systems*

Bart Forsyth
General Manager, CEO

Alan Packard
Assistant General Manager
*Engineering, Strategic & long-term
Planning, and New Initiatives*

Shazelle Terry
Assistant General Manager
Operations & Maintenance



1951



1980



JORDAN VALLEY WATER
CONSERVANCY DISTRICT

1997



JORDAN VALLEY WATER
CONSERVANCY DISTRICT

2021

Jordan Valley Water used an industry-common logo in its beginning. Its own logo was developed circa 1980, which was used for more than 20 years with slight modifications from the 90s till now. Moving into a new era of water considerations, we will start using a new logo in July that better represents our community support and water deliveries, water conservation, and environmental stewardship.

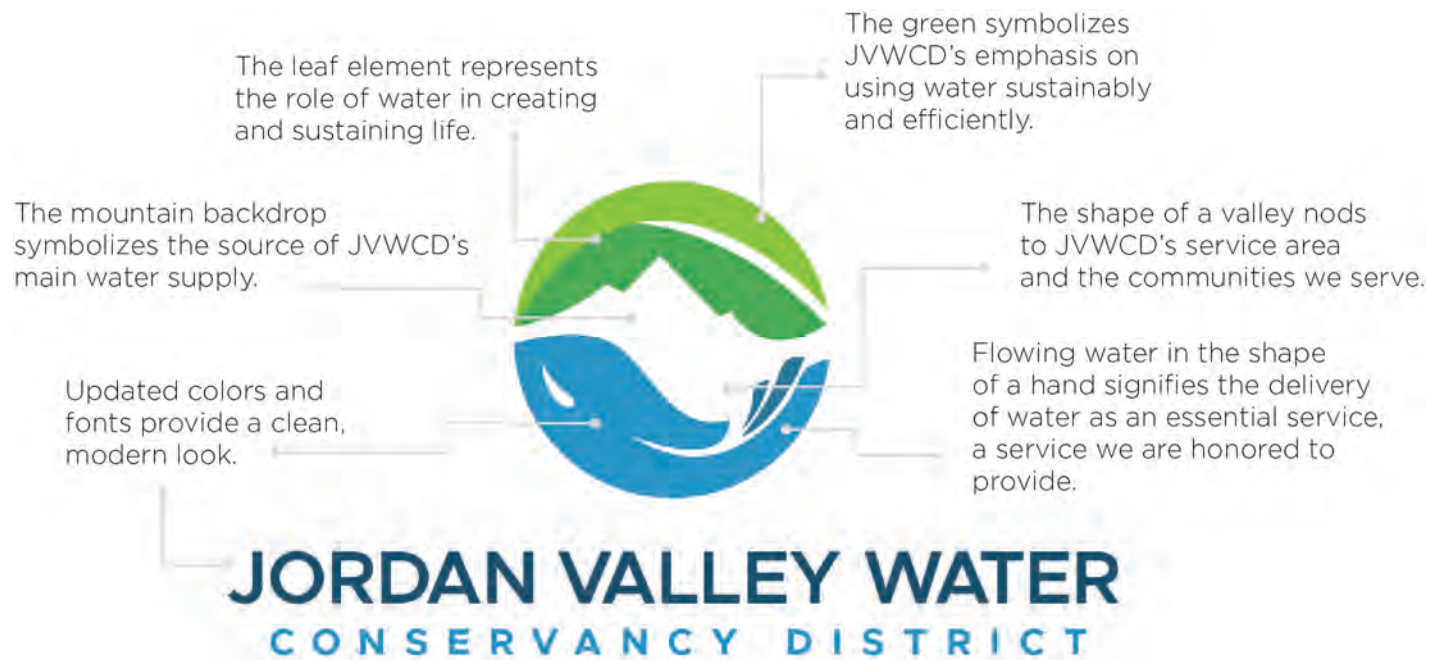
Our responsibilities require us to be able to adapt to many changing conditions, such as population growth, climate variability, water demand, environmental issues, and land use development. As a water provider to one of the largest population bases in Utah, it is imperative that we are resilient during changing conditions.

We look forward to embracing a new logo that better represents our mission, vision, and values well into the future.



looking ahead

new direction, new look



Wholes

City of Bluffdale

Mark Reid, City Manager
Trustee Representative: Sherrie L. Ohrn

Draper City

David Dobbins, City Manager
Trustee Representative: A. Reed Gibby

Granger-Hunter

Improvement District

Jason Helm, General Manager
Trustee Representatives: Corey L. Rushton & Karen D. Lang

Herriman City

Wendy Thomas, Interim City Manager
Trustee Representative: Sherrie L. Ohrn

Hexcel Corporation

Jared Carling, Environmental Engineer
Trustee Representative:
Gregory R. Christensen

Kearns Improvement District

Pam Gill, General Manager
Trustee Representative:
Gregory R. Christensen

Magna Water District

Clint Dilley, General Manager
Trustee Representative:
Gregory R. Christensen

Midvale City

Kane Loader, City Manager
Trustee Representative: A. Reed Gibby

Riverton City

David Brickey, City Manager
Trustee Representative: Sherrie L. Ohrn

City of South Jordan

Gary Whatcott, City Manager
Trustee Representative: Dawn Ramsey

City of South Salt Lake

Dennis Pay, Public Works Director
Trustee Representative: Barbara L. Townsend

Taylorsville-Bennion

Improvement District

Mark Chalk, General Manager
Trustee Representative: John H. Taylor

Utah Department of Corrections

Shawn Anderson, Director of Facilities
Trustee Representative: A. Reed Gibby

WaterPro, Inc.

Darrin Jensen-Peterson, General Manager
Trustee Representative: A. Reed Gibby

City of West Jordan

Korban Lee, Chief Administrative Officer
Trustee Representative: Lyle C. Summers

White City Water

Improvement District

Paul Ashton, General Manager
Trustee Representative: Barbara L. Townsend

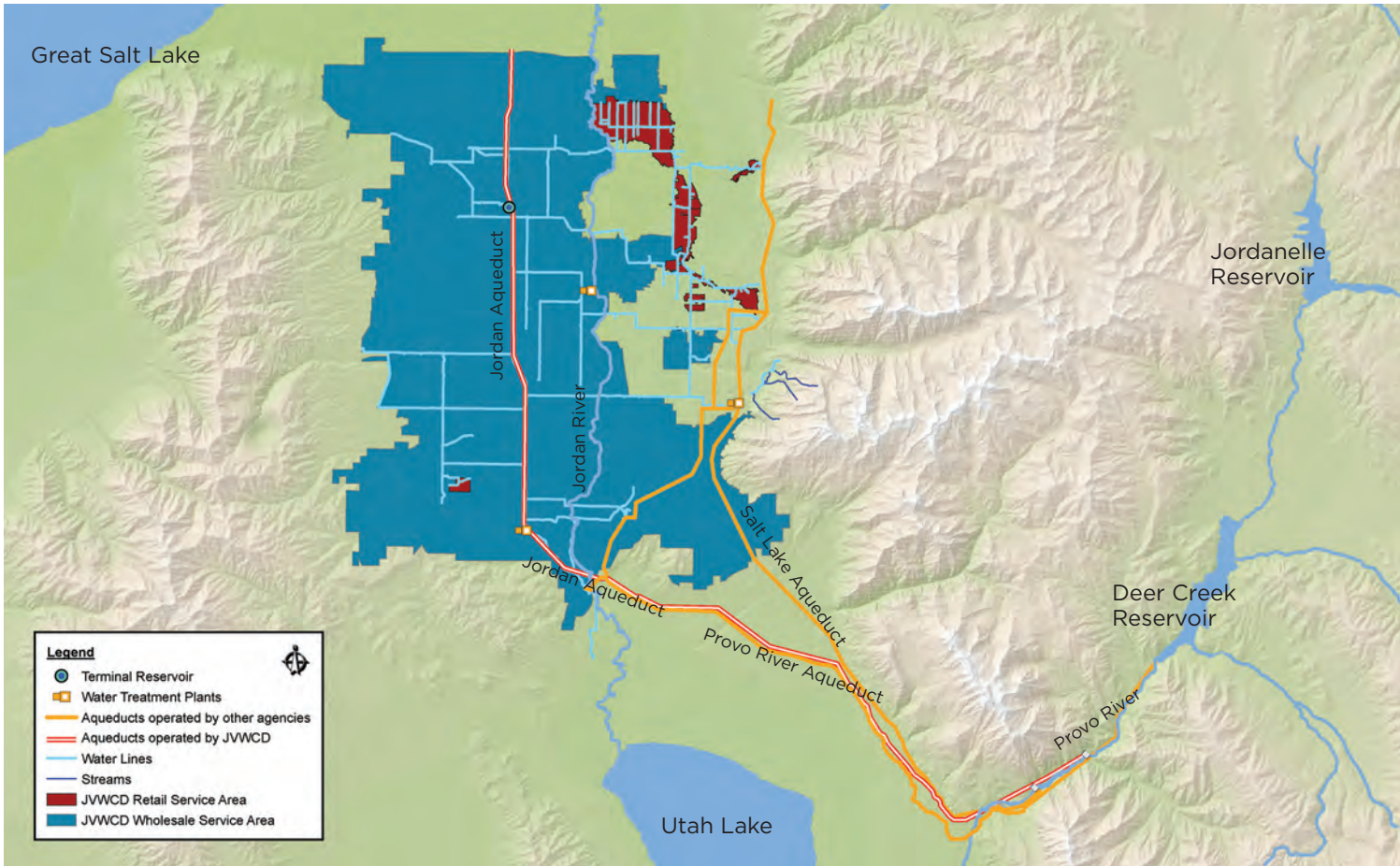
Willow Creek Country Club

Alex Nicolaidis, General Manager
Trustee Representative: Barbara L. Townsend

ale Member Agencies



*Storm rolling in at future Porter Rockwell crossing
T. Christensen*



Jordan Valley Water's Service Area

Jordan Valley Water's service area encompasses much of the Salt Lake Valley, including the most rapidly-growing areas in the state. Sources of water include the Provo, Weber and Duchesne rivers, groundwater, and local mountain streams.

Trustees



Corey L. Rushton
Chair

Karen D. Lang
Vice Chair

Gregory R. Christensen



A. Reed Gibby

Sherrie L. Ohrn

Dawn R. Ramsey



Lyle C. Summers
Conservation Committee Chair

John H. Taylor
Finance Committee Chair

Barbara L. Townsend

Capital



6000 West 4700 South Reservoir Vault Modifications

< Design and replacement of the vault piping and valves for a 1 million gallon reservoir at this location consisted of replacement of corroded piping and valves, replacement of the concrete vault lid, repairs to the vault walls, installation of a passive vault venting system, installation of a vault hatch and access ladder, and application of new paint.



SERWTP Filter Building Improvements

< Age-related upgrades and repairs to Southeast Regional Water Treatment Plant included repairs to drywall, windows, perimeter fencing, roof support beams, floors, and paint.

JVWTP Air Scour System Upgrades

∨ Jordan Valley Water Treatment Plant's air scour piping was installed in 1971 and expanded in 1986. The steel piping had developed severe corrosion and the blowers had reached the end of their useful life. This project replaced the two air scour blowers and the original air scour piping with new, stainless-steel piping.



Projects

6900 South 1300 East Valve Vault Upgrades

> Refurbishment of an existing valve vault including the replacement of corroded piping and valves, installation of venting and an access ladder, application of paint coatings, and surface restoration. The project included the installation of a pressure sustaining valve to maintain a constant upstream pressure in the 1300 East pipeline system while supplying a continuous flow to Jordan Valley Water's northeast system. A Wattsmart funding incentive offer for this project was received, and Rocky Mountain Power is now verifying the energy savings before providing the incentive funding.

Midvale Retail System Transfer

Midvale City administered a construction project to connect Jordan Valley Water's 1000 East retail system to Midvale's water system to accommodate transfer of more than 500 retail accounts to Midvale City. As part of the retail transfer project, Midvale's construction contractor made additional improvements to Jordan Valley Water's transmission system. Midvale City managed and paid for this project, with Jordan Valley Water reimbursing applicable expenses to them.



JVWTP Flocculation Basins Repairs

^ This project included demolition and replacement of approximately 1,000 linear feet of existing trench drains within four flocculation basins at Jordan Valley Water Treatment Plant. The existing trench drains had severe freeze-thaw damage. A six-foot wide section of concrete was removed and replaced. Weathered concrete and joint repairs were completed in the walkways above the basins.



Water Efficiency Standards



Water Efficiency Standards

In November 2019, Jordan Valley Water adopted new water efficiency standards and updated its policies to encourage adoption of these standards throughout its service area. During the past year, several Member Agencies have taken steps to improve the resiliency of their communities through adoption of these water efficiency standards. Jordan Valley Water anticipates that widespread adoption of these standards will provide greater flexibility and sustainability in providing for future growth within its service area.

A Key Solution

As a water supply solution, adoption of the Water Efficiency Standards offers several key advantages over alternative approaches.

Standards are less expensive than developing new supplies

With increasing development costs, aging infrastructure, and the price of operating, maintaining, and delivering larger quantities of water, every gallon of water developed in the future will cost more than an existing gallon. This makes conservation efforts such as water efficiency standards an attractive solution.

Installing landscapes efficiently is 5 times less expensive than replacing them later

Without water efficiency standards for new construction, water demand for landscapes will continue to outpace solutions like rebates for turf removal.

Sustainable water use is good for the environment

More efficient yards and home appliances allow water to stay in rivers, streams, lakes, and wetlands—helping to avoid the severe

*Results of
Locascapes Reward Program
participation in Kerns.
C. Bee*



environmental impacts created by drying lake beds. In California, the LA Department of Water and Power reports that dust mitigation from the dry Owens Lake bed accounts for 15% of their rate payers' annual water bills. According to a 2019 BYU study, 90% of northern Utah's dust is the result of drying lakes (<https://news.byu.edu/intellect/how-are-local-dry-lakes-impacting-air-quality-and-human-health>).

Implementing standards now will help avoid extreme actions in the future

While other communities across the western United States have grappled with implementing

efficiency standards as a response to emergency water needs, early implementation of water efficiency standards makes room for a more moderate regional solution that avoids extreme requirements or actions, such as large-scale turf removal programs.

Good landscaping standards can contribute to great looking communities

It is possible to have landscapes that look nice, are easy to maintain, and provide space for relaxation and recreation while still being more Utah friendly and water efficient.

strategic **WATER MANAGEMENT**

What Is Strategic Water Management?

Strategic Water Management is a joint effort between Jordan Valley Water and eligible commercial, industrial, institutional, and multi-family water users to both save water and meet the unique needs of program participants. The program seeks to identify mutually beneficial opportunities that can improve the water efficiency of operations, equipment, and fixtures used by the participant. Solutions can range from no-cost and low-cost water saving processes to the installation of new water-saving equipment.

Examples of qualifying projects include, but are not limited to:

- Irrigation system upgrades (ex. smart central irrigation controllers, drip conversions, zone adjustments)
- Indoor fixture replacement (ex. toilets, urinals, faucets, showerheads)
- Replacement of water-cooled equipment with new air-cooled equipment (ex. ice machines)
- Enhanced or added water reclamation systems
- Elimination of water intensive industrial processes
- Boiler and steam system upgrades
- Air conditioning condensate capture and reuse
- Cooling tower modifications
- Industrial laundry equipment upgrades
- More efficient reverse osmosis units
- Car wash system and equipment upgrades
- Laboratory and medical equipment upgrades



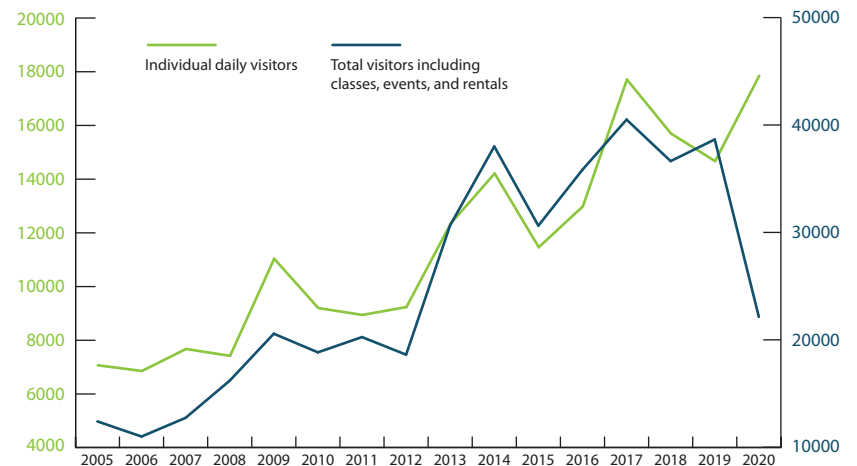


Garden Visitation

Conservation Garden Park
S. Halterman

The number of people visiting Conservation Garden Park has steadily increased since we began tracking in 2005 (see chart). Although our total number of visitors were down because we weren't able to have in-person classes, events, or rentals in 2020, we had our greatest number of individual daily visitors ever. In fact, more may have visited in an effort to kill the Coronavirus blues!

In 2020 we moved most of our classes online. Even as in-person classes resume, we will increase the number of online options so more people than ever can learn how to effectively landscape for Utah's dry climate.



Murdock Diversion, Provo River
C. Smith



Delivering Quality Every Day[®]

Deliveries

| Municipal & Industrial Water Sources | 2020 (AF) | 2019 (AF) |
|--|----------------|----------------|
| Jordanelle Reservoir (Central Utah Project) ^a | 58,632 | 30,087 |
| Deer Creek Reservoir (Provo River Project) ^b | 9,368 | 13,425 |
| Upper Provo River reservoirs ^c | 2,114 | 1,969 |
| Echo Reservoir | 2,260 | 2,992 |
| Provo River (unstored flows) | 15,076 | 21,580 |
| Weber River (unstored flows) | 212 | 0 |
| Central Water Project | 14,902 | 8,562 |
| Salt Lake County mountain streams | 1,537 | 3,009 |
| Culinary water purchased from MWDSLS | 1,119 | 852 |
| Salt Lake County groundwater (wells) | 7,133 | 8,057 |
| Southwest Groundwater Treatment Plant | 4,282 | 5,274 |
| Bingham Canyon Water Treatment Plant ^d | 3,617 | 3,774 |
| <i>Subtotal for Municipal & Industrial sources</i> | 120,252 | 99,580 |
| Irrigation Water Sources | | |
| Jordanelle Reservoir (Central Utah Project) ^a | 0 | 0 |
| Deer Creek Reservoir (Provo River Project) ^b | 0 | 624 |
| Upper Provo River reservoirs ^c | 0 | 0 |
| Echo Reservoir | 0 | 0 |
| Provo River (unstored flows) | 8,600 | 11,270 |
| Weber River (unstored flows) | 0 | 0 |
| Utah Lake | 22,823 | 13,677 |
| <i>Subtotal for irrigation sources</i> | 31,423 | 25,571 |
| TOTAL ALL SOURCES | 151,675 | 125,151 |
| Total water treated or transported for other agencies | 12,932 | 10,608 |
| Total all water sources & transport | 164,607 | 135,759 |

Sources

| Municipal & Industrial (M&I) Water Deliveries | 2020 (AF) | 2019 (AF) |
|---|----------------|----------------|
| City of Bluffdale | 3,733 | 2,917 |
| Copperton Improvement District | 1 | 21 |
| Draper City | 5,063 | 4,016 |
| Granger-Hunter Improvement District | 20,297 | 18,929 |
| Herriman City | 6,142 | 4,527 |
| Hexcel Corporation | 714 | 874 |
| Kearns Improvement District | 8,980 | 7,473 |
| Magna Water District | 802 | 800 |
| Midvale City | 3,542 | 2,626 |
| Riverton City | 4,773 | 4,329 |
| City of South Jordan | 19,077 | 15,175 |
| City of South Salt Lake | 1,038 | 1,058 |
| Taylorsville-Bennion Improvement District | 4,594 | 4,044 |
| Utah Department of Corrections | 504 | 534 |
| WaterPro, Inc. (treated) | 1,351 | 950 |
| WaterPro, Inc. (raw) | 0 | 0 |
| City of West Jordan | 22,837 | 18,513 |
| White City Water Improvement District | 0 | 0 |
| Willow Creek Country Club | 386 | 285 |
| <i>Subtotal for wholesale deliveries</i> | 103,834 | 87,071 |
| JVWCD retail service areas (Holladay, Murray, Sandy, South Salt Lake and unincorporated county) | 8,794 | 7,897 |
| JVWCD system non-revenue water (use & loss) | 7,625 | 4,612 |
| <i>Subtotal for deliveries, use and loss</i> | 120,253 | 99,580 |
| Irrigation and raw water | | |
| Welby Jacob Water Users Co. ^a | 31,422 | 25,571 |
| <i>Subtotal for irrigation & raw water</i> | 31,422 | 25,571 |
| Total delivered water | 151,675 | 125,151 |
| M&I Water treated or transported for other agencies | | |
| Metropolitan Water District of SL & Sandy | 12,932 | 10,608 |
| Total water delivered, treated or transported | 164,607 | 135,759 |

*New 78-inch aqueduct at
6200 South Bangerter Highway.
S. Beck*



Financial Stewardship

Balance Sheet Summary as of June 30th:

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| Assets: | | | | | |
| Current | \$62,022,286 | \$54,590,332 | \$54,213,600 | \$54,849,313 | \$44,819,066 |
| Restricted | 26,756,562 | 69,266,250 | 57,497,690 | 49,792,125 | 15,032,770 |
| Capital | 547,183,564 | 526,273,827 | 497,515,098 | 471,727,593 | 448,122,214 |
| Other | 18,891,468 | 19,566,111 | 19,136,178 | 15,429,418 | 16,903,556 |
| Total Assets | \$654,853,880 | \$669,696,520 | \$628,362,566 | \$591,498,449 | \$524,877,606 |
| Liabilities: | | | | | |
| Current | \$19,913,783 | \$18,216,397 | \$16,676,945 | \$17,229,860 | \$14,175,112 |
| Long-term | 319,841,344 | \$356,952,015 | 333,001,188 | 306,036,114 | 249,625,637 |
| Total Liabilities | 339,755,127 | 375,168,412 | 349,678,133 | 323,265,974 | 263,800,749 |
| Total Fund Net Assets | 315,098,753 | 294,528,108 | 278,684,433 | 268,232,475 | 261,076,857 |
| Total Liabilities & Fund Net Assets | \$654,853,880 | \$669,696,520 | \$628,362,566 | \$591,498,449 | \$524,877,606 |

Income Statement Summary for fiscal years ended June 30th:

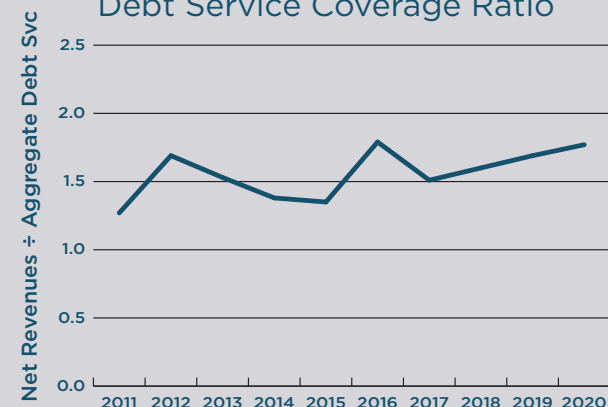
| | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---------------------|---------------------|---------------------|--------------------|---------------------|
| Revenues: | | | | | |
| Operating (water sales) | \$60,659,921 | \$53,222,432 | \$53,670,981 | \$52,108,797 | \$47,830,269 |
| Property taxes | 20,281,934 | 20,063,290 | 18,203,887 | 14,954,597 | 14,915,457 |
| Interest | 1,900,885 | 2,260,091 | 1,651,609 | 1,109,313 | 370,002 |
| Intergovernmental | 75,331 | 145,669 | 2,737 | 29,835 | 584,285 |
| Non-operating | 325,763 | 4,610,393 | 0 | 45,805 | 72,265 |
| Total Revenues | 83,243,834 | 80,301,875 | 73,529,214 | 68,248,347 | 63,772,278 |
| Expenses: | | | | | |
| Operating | 53,035,299 | 50,315,995 | 48,251,373 | 47,608,657 | 45,332,249 |
| Interest | 13,090,260 | 12,984,228 | 11,399,419 | 10,578,867 | 7,787,165 |
| Non-Operating | 0 | 281,244 | 1,182,207 | 588,989 | 0 |
| Total Expenses | 66,125,559 | 63,581,467 | 60,832,999 | 58,776,513 | 53,119,414 |
| Approximate Contribution to Capital Expenses^a | \$17,118,275 | \$16,720,408 | \$12,696,215 | \$9,471,834 | \$10,652,864 |

Other Cash Flow Information for fiscal years ended June 30th:

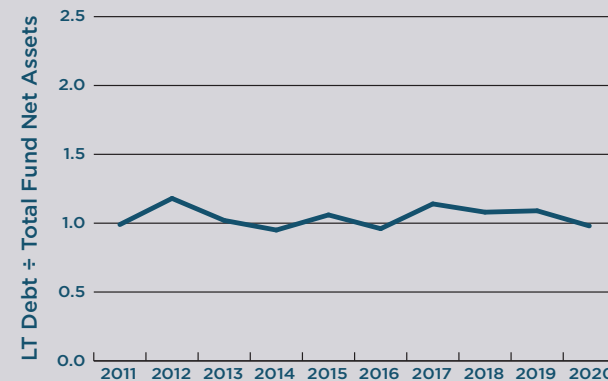
| | 2020 | 2019 | 2018 | 2017 | 2016 |
|-----------------------|--------------|--------------|--------------|--------------|--------------|
| Capital Improvements | \$31,928,931 | \$41,562,334 | \$36,367,448 | \$31,731,635 | \$31,801,417 |
| Debt Service Payments | \$22,003,217 | \$20,365,220 | \$20,437,815 | \$19,188,677 | \$15,291,092 |

a) Includes capital projects fund, development fee fund, general equipment needs, emergency reserves, self-insurance fund, operating reserves, and Revenue Stabilization Fund.

Debt Service Coverage Ratio



Long-term Debt to Equity



Executive Staff



Staff at press time:

Alex Mitchell
Alisha Kimmerle
Allen Curtis
Amanda Strack
Andy Adams
Ann Mecham
Bailey Anderson
Bailey Petty
Blake Mousley
Brad Boren
Brad Perez
Brayden Cluff
Brayden Jensen
Bryan Smith
Calin Perry
Casey Cannon
Chad Steadman
Chelsy Guedez
Christian Hernandez
Clayton Piatt
Clifton Smith
Clint Thurgood
Conor Tyson
Cory Collins
Courtney Brown
Cynthia Bee

Dan Claypool
Danny Siaperas
Danny White
Dave Beratto
Dave Hyde
Dave Mecham
Dave Spackman
David Garcia
David McLean
Debbie Gates
Dustin Brush
Eddie Ojeda
Edgar Estrada
Eduardo Cracchiolo
Ellen Bolliger
Ellisa Demetsky
Emilie Bashore
Eppie Trujillo
Eric Poulsen
Frank Montoya
Frank Smith
Gage Stewart
Gavin Clark
Glen McIntyre
Hayden Coziar
Heidi Nilsson

Jackie Buhler
Jared Brace
Jared Vigil
Jeanette Perry
Jed Brough
Jeff Betton
Jeff Burton
Jeff King
Jeff Small
Jeremy Toone
Jon Hilbert
Jordan Tomsic
Josh Ashcroft
Josh Shrewsbury
Joshua McDougall
JT Cracraft
Justin Spainhower
Kailob Szarek
Karen Karriker
Keenan Robertson
Ken Butterfield
Kevin Crane
Kevin Rubow
Kim Castelan
Kolby Parman
Kyle Chapman

Kyle Kennedy
Laina McGinty
Lisa Kasteler
Lorena Purissimo
Lorrie Cowles
Marcelo Anglade
Marcelo Del Rio
Margaret Dea
Martin Feil
Matt Fussell
Matt Hinckley
Megan Jenkins
Michele Guy
Mike Axelgard
Mike Gonzales
Mike Lorenc
Natalie Boyack
Nathan Talbot
Nick Bradshaw
Nick McDonald
Paul Mattinson
Quintin Rubio
Ray Stokes
Robert Squire
Ryan Forsyth
Rylan Walker

Savidtri Thanasilp
Scott Fitzpatrick
Shaun Moser
Shaun Proctor
Sheldon Sharrard
Stan Grundy
Steve Beck
Steve Blake
Steve Crawford
Steve Hansen
Steve Minch
Steve Schmidt
Tanner Palmer
Teresa Atkinson
Tim Rainbolt
Todd Peterson
Todd Schultz
Travis Christensen
Troy Black
Troy Tucker
Twila Brantley
Vai Eteaki
Val Cossey
Wade Tuft
Wayne Sims, II
Yvette Amparo

Exceptional Employees

Delivering Quality Every Day[®]



JORDAN VALLEY WATER
CONSERVANCY DISTRICT