

# Provo River Water Users Association

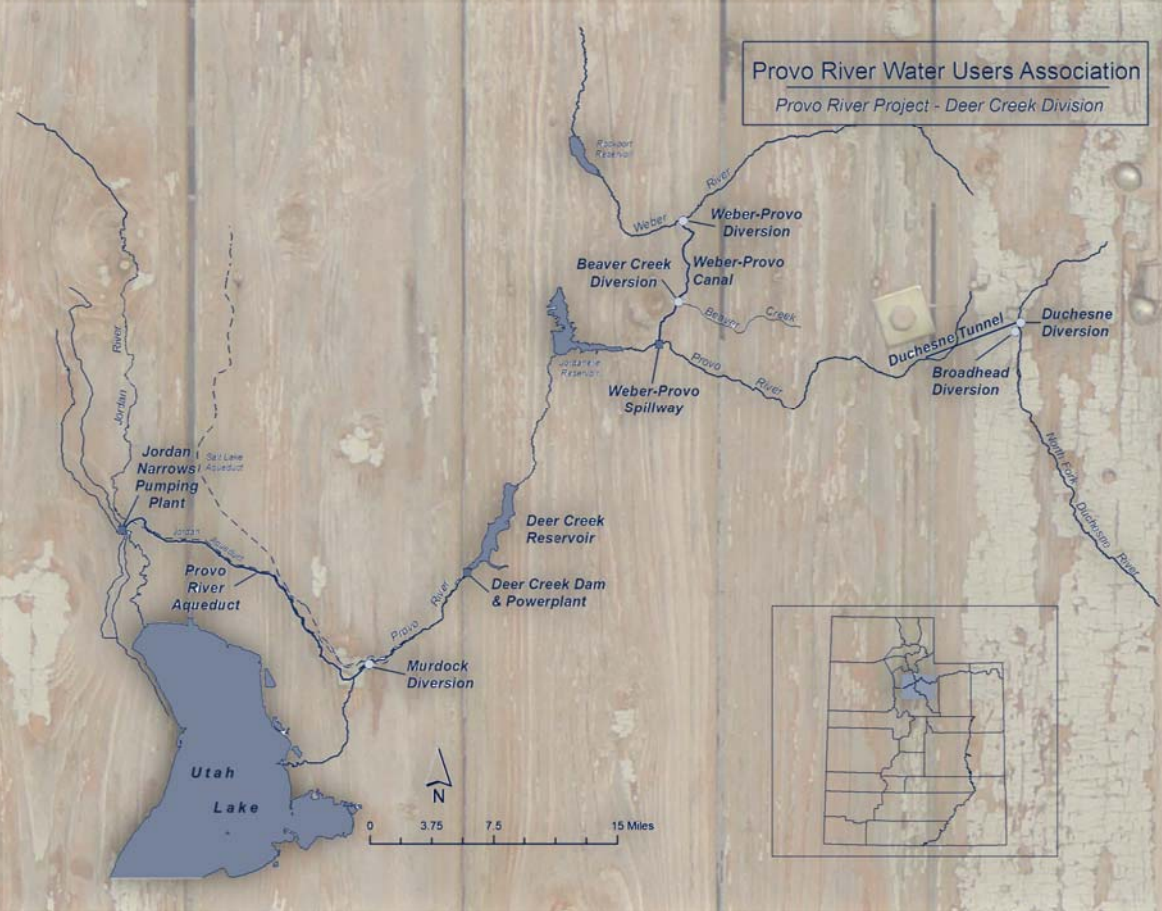


## 2019 Annual Report



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**Board of Directors**

Tom Godfrey	President
Christopher R. Tschirki	Vice-President
Laura Briefer	Art Hunter
Patricia Comarell	Dan Johnson
Jeffrey J. Bryant	John Kirkham
Joan Degiorgio	Donald Y. Milne
Michael J. DeVries	Tom Ward
Bart Forsyth	

**Employees**

Scott Brockbank	Troy Heap
Jeffrey D. Budge	Charlene Lenkart
Steven H. Cain	Shawna Orlando
G. Keith Denos	Travis Pool
Kerry Durrant	Jeffrey Purser
David Faux	Mark Rawle
Roger Ford	TJ Shepherd
Jerry Fox	Casey Snyder
Jeremy Gruber	John Whiting



The Association delivers Provo River Project water in a safe, efficient, and economical manner for the benefit of its shareholders and those they serve.

With integrity, the Association preserves and protects the quality of its resources through knowledgeable, dedicated, and innovative employees.

Cover Photo: Little Deer Creek



Provo River Water Users Association is a private non-profit corporation organized in 1935 for the purpose of sponsoring the Deer Creek Division of the Provo River Project, a US Bureau of Reclamation water project. The Project extends over five counties and diverts water from three river basins. Deer Creek Dam and Reservoir, with a capacity of over 153,000 acre-feet, is the primary Project feature. Other main features of the Project include the Duchesne Tunnel, the Weber-Provo Diversion and Canal, and the Provo River Aqueduct. The Association also operates and maintains many miles of river dikes as well as numerous diversions, checks, flumes and turnout structures as part of the Project.

The Project supplies a significant portion of the drinking water supply for approximately one million people along the Wasatch Front in north-central Utah. Project water is also used for supplemental irrigation of over 53,000 acres of agricultural land in Summit, Wasatch, Utah and Salt Lake Counties.

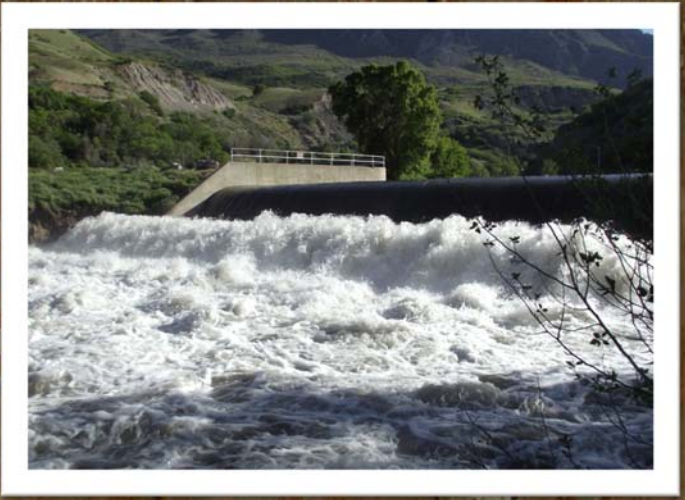
The Association is governed by an eleven-member Board of Directors, elected by its shareholders. Association shareholders include metropolitan water districts, irrigation companies, mutual water companies, two municipalities and a conservation district.



## Shareholders

<b>Metropolitan Water District of American Fork</b>	<b>Nobletts Creek Mutual Water Company &amp; Diamond Bar X Ranch, Inc.</b>
<b>Bar X Mutual Water Company</b>	<b>Metropolitan Water District of Orem</b>
<b>Beaver &amp; Shingle Creek Irrigation Company</b>	<b>Pleasant Grove Irrigation Company</b>
<b>Diamond Bar X Ranch, Inc.</b>	<b>Metropolitan Water District of Pleasant Grove</b>
<b>Dixon Irrigation Company</b>	<b>Provo Bench Canal and Irrigation Company</b>
<b>Highland Conservation District</b>	<b>Metropolitan Water District of Provo City</b>
<b>Lehi City Corporation</b>	<b>Provo Reservoir Water Users Company</b>
<b>Lindon City</b>	<b>South Kamas Irrigation Company</b>
<b>Metropolitan Water District of Salt Lake &amp; Sandy</b>	<b>Washington Irrigation Company</b>
<b>M.S.H. Corporation</b>	







## General Manager's Message

When I was a young man, I carried with me a small wire-bound notebook in which I kept an ongoing list entitled "Influential People". This list contained names of friends, teachers, coaches, bosses, co-workers and even friends' parents who had influenced me in some way. As I matured and my scope of acquaintances broadened, more and more names were added to the list. I kept the list faithfully for years and then apparently misplaced it during a move. I found the notebook many years later and pondered who I had missed adding in the years it was lost. I couldn't recall all the names that should have been on the list.

At the time I found my notebook, I thought it was pointless for me to continue the exercise I had started when I was young. After all, years had passed, and I had missed adding a lot of influential names. My cynicism won out and I didn't continue adding names. I sincerely regret that short-sighted decision. How many hundreds more names would be on my list now?

I subscribe to the quote attributed to "Dilbert" comic strip creator Scott Adams: "...the most influential people in my life are probably not even aware of the things they've taught me." I have been richly blessed in my personal and professional life to be influenced by profound thinkers, hard workers, visionaries and men and women of integrity. I've worked for some of these influential people, and some have worked



for me. Many influential people have touched my life through the Association. They've been my co-workers, Board members, colleagues, and associates.

I've had 44 co-workers during my 25 years with the Association, not including temporary, part-time and contract workers. I've also had the privilege of serving with 34 of the 87 members of the Board of Directors over the Association's 84 years of existence. I can truthfully say that I've learned from every employee and every Director with whom I've worked. I'd like to highlight just a few of these influences.

Sherwin Allred was a quiet man of integrity that I'm grateful I had the privilege of knowing. A theme that stands out among my many memories of Sherwin is his concern for Association employees. He knew the importance of the workers on the front lines and he wanted to make certain they were treated fairly. He was always a champion of the little guy. Sherwin served on the Board for just over 14 years.



Mel Knapton was another hero of mine from the Board of Directors. Mel's tenure on the Board was the second-longest among all Directors in the Association's history, with almost 34 years of service before his retirement from the Board in 2002. Mel's knowledge of accounting and accounting principles was legendary, and he shared that knowledge freely as the long-time chair of the Finance Committee. I learned a lot of the "what" of accounting under Mel's tutelage but more importantly, I learned a lot of the "why."

When I think of Harold Ford, the long-time Chief Operator at Deer Creek Power Plant, the word "steady" comes to mind. Never too high, never too low; he was always calm regardless of the situation. Harold retired after 39 years with the Association and sadly passed away just 18 months later. I loved and respected Harold more than he ever knew.

Merril Bingham would never miss an opportunity to tell a story about his exploits in golf, fishing, woodworking or his latest public works project. His confidence in himself and his broad success professionally and personally was due to preparation and effort. I looked up to Merrill because of this, as well as his humor, his ability to relate with everyone and his sense of fairness. Merrill served almost 25 years as a Director on the Board.

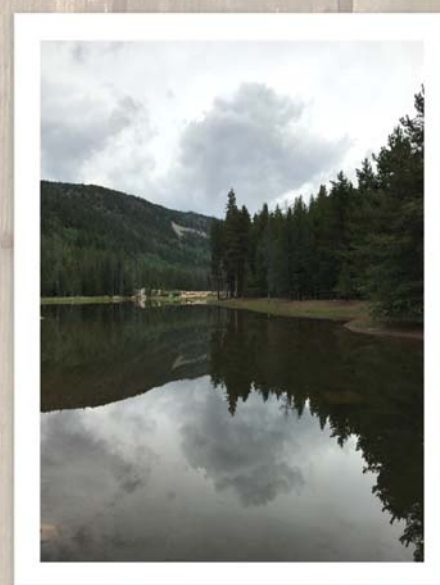
It is with sadness that I note the passing in 2019 of one of the members of the Association family and a long-time influence on me – retired maintenance technician

Farrell Hatfield. Farrell retired in April 2017 after 37 years with the Association and passed away in July 2019 due to heart complications. Farrell had a tough guy exterior but was really a kind-hearted soul who would do anything for anyone. He was an example of giving with no thought of "what's in it for me?" The Association lost an icon in 2019, but many people lost a great friend.

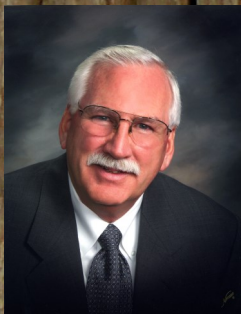
I could continue to list the impact on me from everyone I've worked with over the years, including current Directors and staff who are among my greatest influences. As the author Charles Stanley said: "There's no way to know how many people your life will influence. You never know who is watching, listening or learning from you."

I unfortunately stopped adding to my paper list long ago. Nevertheless, my list of Influential People continues to grow. I'm watching, listening and learning, even though they may be unaware I'm being taught.

-G. Keith Denos, P.E.







Tom Godfrey



Chris Tschirki, Don Milne, Laura Briefer, Mike DeVries, Bart Forsyth  
Pat Comarell, Dan Johnson, John Kirkham, Joan Degiorgio, Tom Ward

## Directors



Art Hunter served on the Board of Directors from February 2015 through January 2019. As a member of the Finance Committee his extensive experience in accounting and finance gained from his 41 years as Sandy City's Director of Finance proved invaluable.



Jeff Bryant retired from the Board of Directors in February 2019 after eight years of service. He was a member of the Engineering Committee during his entire tenure. Jeff worked for Jordan Valley Conservancy District for 35 years and served on numerous water boards and committees.

The Association welcomed John Kirkham, Pat Comarell and Bart Forsyth to the Board of Directors in February 2019. A retired natural resources attorney, Mr. Kirkham previously served on the Board from 2011 to 2014. Ms. Comarell is retired after a career in public planning for Ogden City and Salt Lake City and previously served on the Board from 2014 to 2016. Mr. Forsyth was recently appointed General Manager of Jordan Valley Water Conservancy District and has been employed by the district for 34 years.



## Board of Directors Project Tour

In August 2019, the Association Board of Directors and guests toured Deer Creek Dam and Power Plant for the annual Project tour. Ongoing and recently completed rehabilitation projects such as the penstock tunnel lighting project, the hydraulic piping replacement project, and the tube valve replacement project were discussed and viewed. The ongoing Deer Creek Intake Study and the upcoming Deer Creek Intake Project were also discussed.

In addition to the annual Project tour, Association staff provides tours of Project facilities for new Board members, shareholders and others. In May and June 2019, special tours to the Duchesne Tunnel diversion were conducted for Board members and their associates. These tours promote better understanding of Project facilities and operations and allow Directors and others to experience some of the remote areas of the Project.

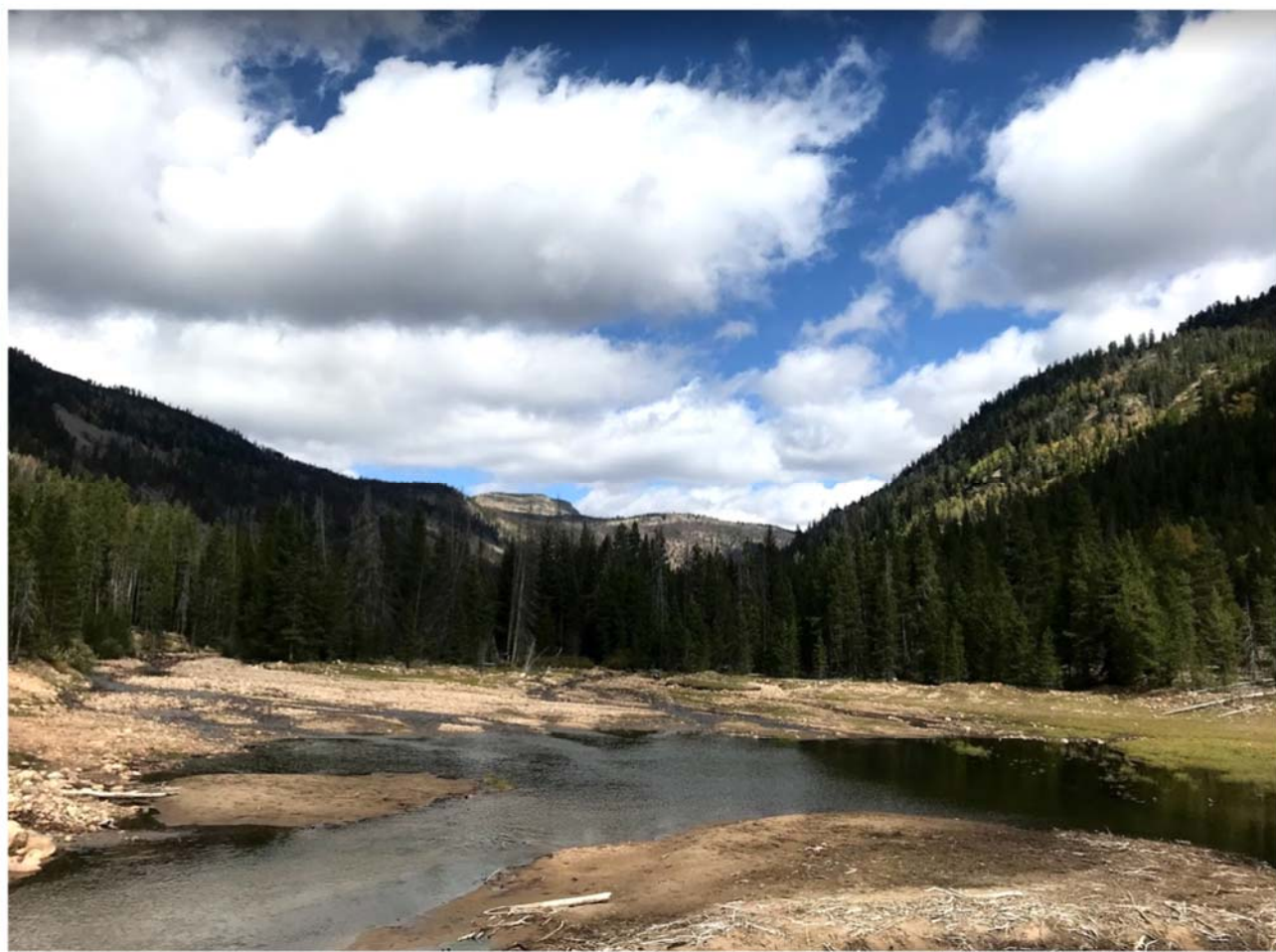
## Staff

Former Maintenance Supervisor Kerry Durrant retired in 2019 after 30 years with the Association. Kerry began his employment in 1989 as a maintenance technician and was appointed leadman in 2000. He excelled in planning the workflow and exhibited a high level of care for Project facilities in his tenure.

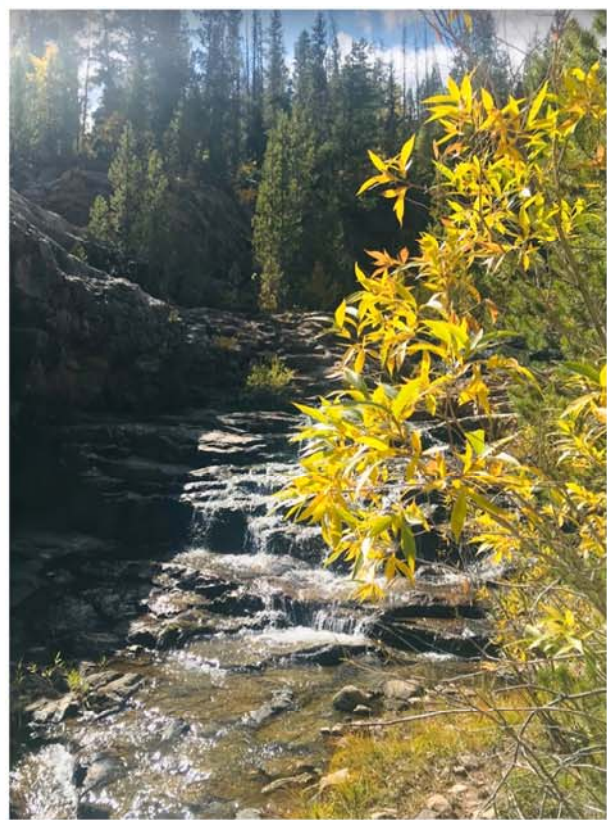
Former Office Administrator Charlene Lenkart left Association full-time work in 2016 and assisted with special projects and document retention efforts on a part-time basis through 2019. Charlene's spreadsheet and organizational skills contributed greatly to the success of the Provo Reservoir Canal Enclosure Project and other endeavors for the Association. She currently practices as a licensed mental health therapist.

In 2019 the Association welcomed new hires Jeremy Gruber as operations technician and PRA watermaster and TJ Shepherd as a maintenance technician. Jeremy has a degree in English and has been a middle school teacher, among other vocations. TJ brings experience with heavy equipment operation and maintenance as well as project planning. Both have been great additions to the Association.



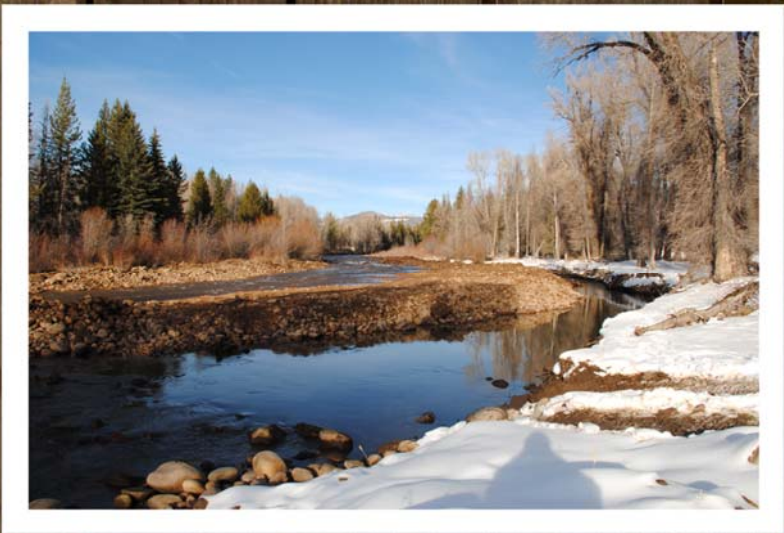






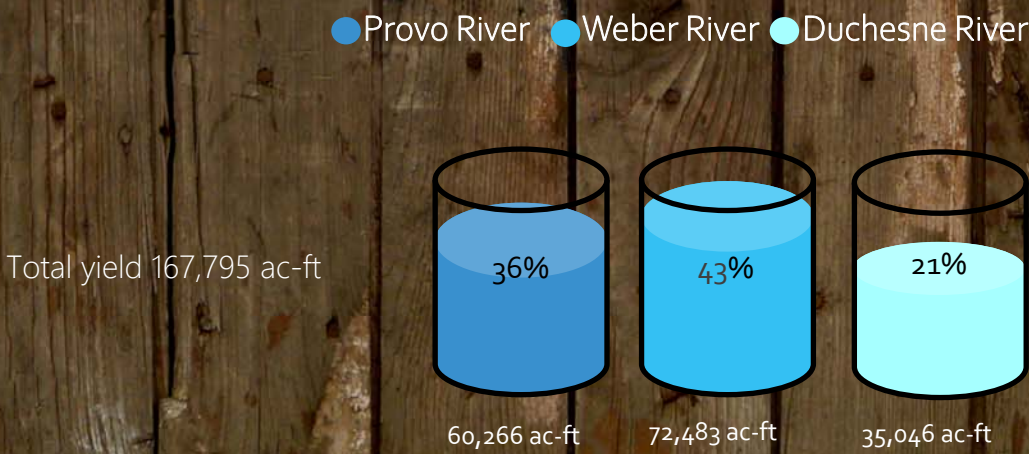


# Water Supply

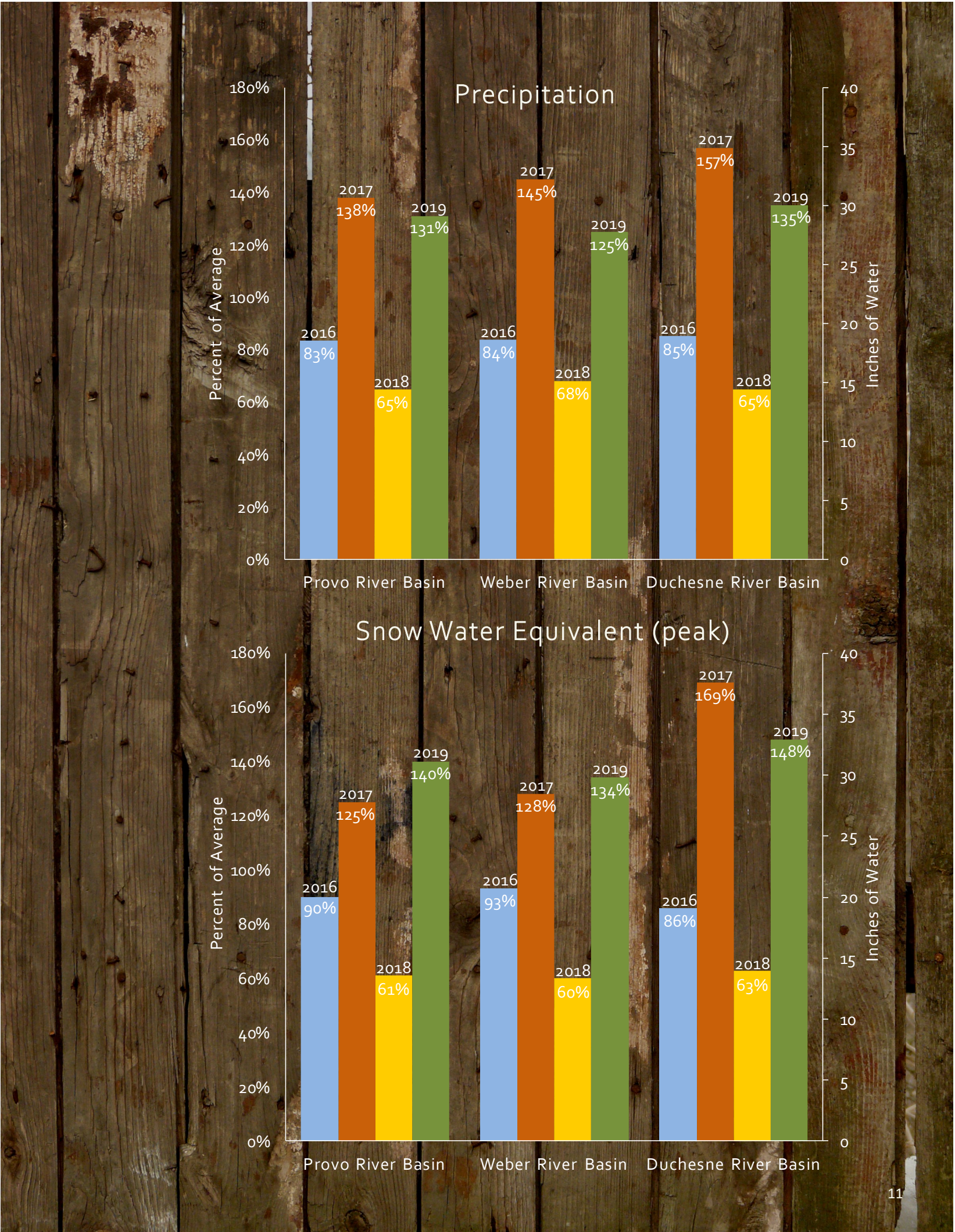


Water year 2019 continued the cycle that, since 2016, has alternated from poor to excellent for Provo River Project water supply sources. After a great water year in 2017 and a poor water year in 2018, water year 2019 swung the pendulum back to excellent. In 2019 Deer Creek Reservoir was able to fill and spill and the Association was granted extra allotment water to deliver to shareholders during the peak runoff period. The snowpack for winter 2019 averaged 130% of median and the spring runoff generated a total of 167,795 acre-feet for Project water supplies. With the high yield from the 2019 runoff and extra allotment water, Association shareholders were able to retain a healthy balance of 74,781 ac-ft of holdover water in Deer Creek Reservoir going into the 2020 water year. The total volume of water in the reservoir at the beginning of the 2019 water year on November 1, 2018 was 95,340 acre-feet or 62 percent of capacity. The volume in Deer Creek Reservoir at the end of the 2019 water year on October 31, 2019 was 127,519 acre-feet or 84 percent of capacity.

## 2019 WATER SOURCES



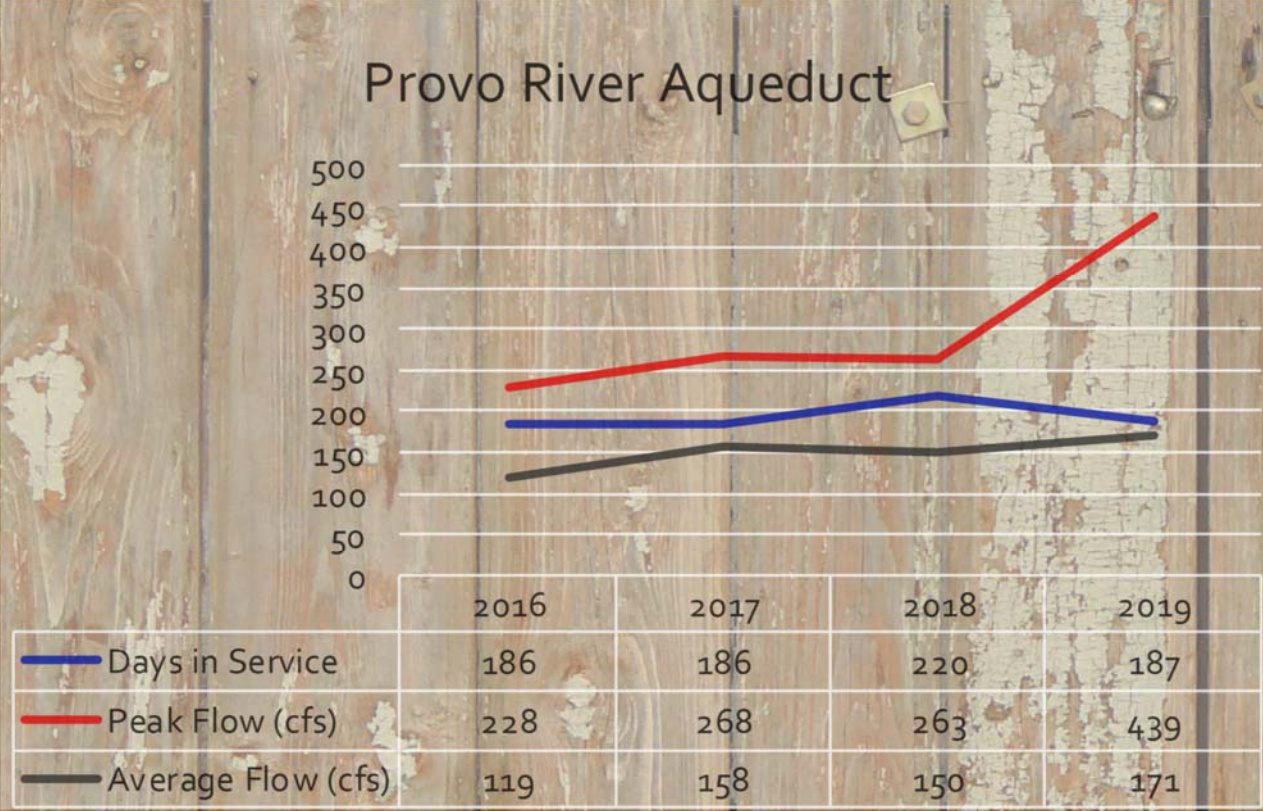








The Murdock Canal Trail along much of the Provo River Aqueduct corridor has become one of the most utilized trails in Utah since its opening in May 2013. The trail averages approximately 1,000,000 visitors annually with bicyclists accounting for just over half of all users. Joggers and walkers make up the majority of other users on the trail. The popularity of the trail provides a level of security that is considered beneficial to the Association and the cities along the trail. The trail also provides excellent access to PRA facilities for Association operations and maintenance personnel. Motorized vehicles are prohibited on the trail with the exception of Association, public safety and other limited authorized vehicles.









# Deer Creek Dam & Power Plant Outlet Works Intake Project

The intake structure, tunnel and guard gates that supply the Deer Creek Power Plant penstocks and outlet works are original features of Deer Creek Dam, placed in service in 1941. These critical features are almost 80 years old and have exceeded their original design life. This aging infrastructure, combined with the threat of a possible Quagga mussel infestation, prompted the Association's Board of Directors and staff to evaluate the need for refurbishment or replacement of these features. A study completed in 2018 by the engineering team of Bowen Collins & Associates and HDR recommended replacement of the intake structure and refurbishment or replacement of the guard gates. In November 2019, the Association selected the design engineering team of AE2S and Black & Veatch to conduct preliminary studies and provide engineering design services for this project. Preliminary studies and geotechnical investigations are planned throughout 2020, with NEPA and final engineering design scheduled for 2021 and construction anticipated to begin in 2022. The estimated cost for the Intake Project is approximately \$40,000,000. The Association will pursue financing through a combination of low-interest federal and state loan programs to fund the majority of the project.

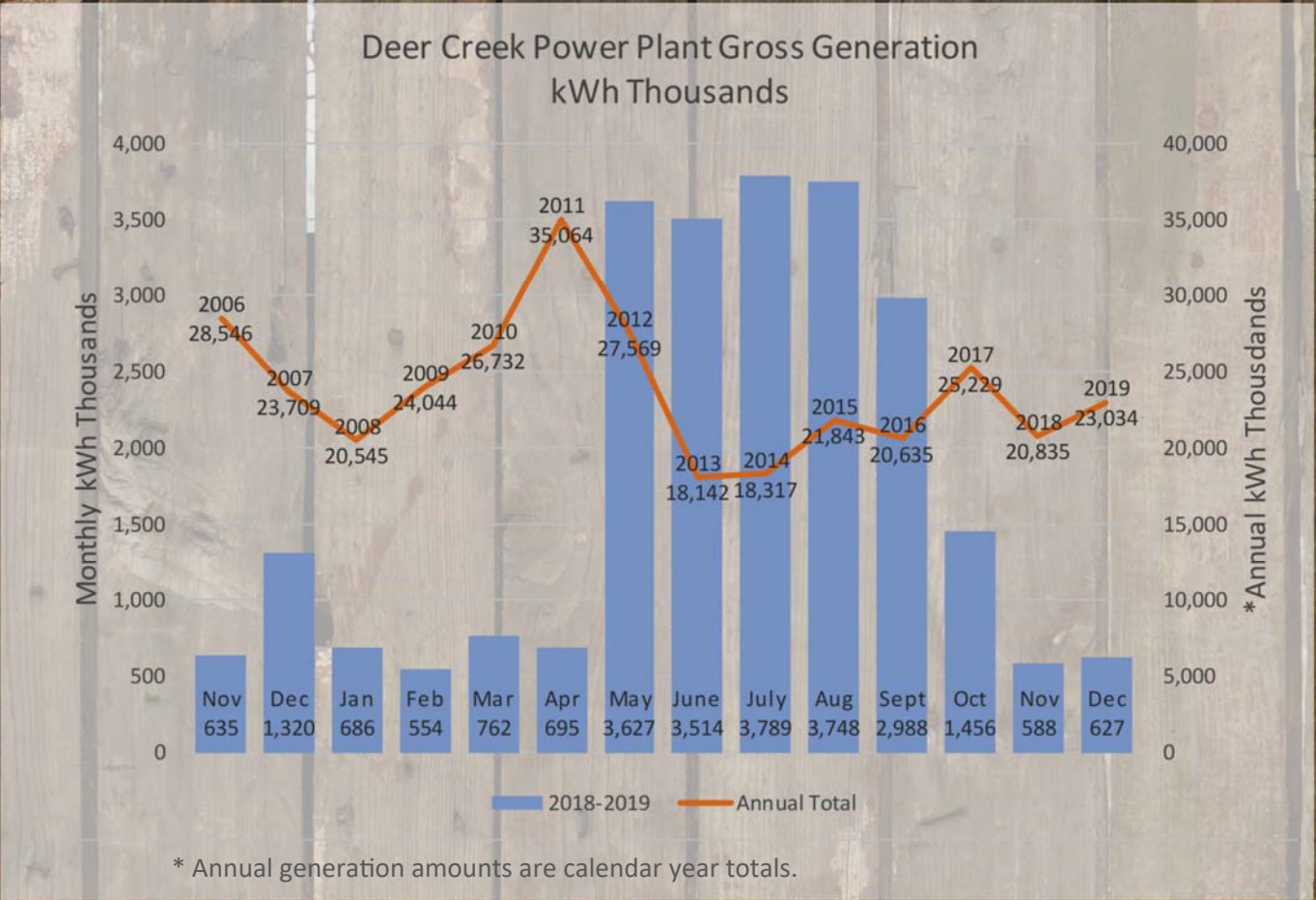
## Tube Valve Replacement Project

The original 52-inch tube valves at the outlet of the Deer Creek Power Plant were put into service in the 1940's. Each valve is required to pass up to 750 cfs for a combined flow of 1,500 cfs. Prior to the construction of the power plant, these valves served as the primary control valves to release water below the dam into the Provo River. Since their installation both valves have been refurbished but have now reached their life expectancy.

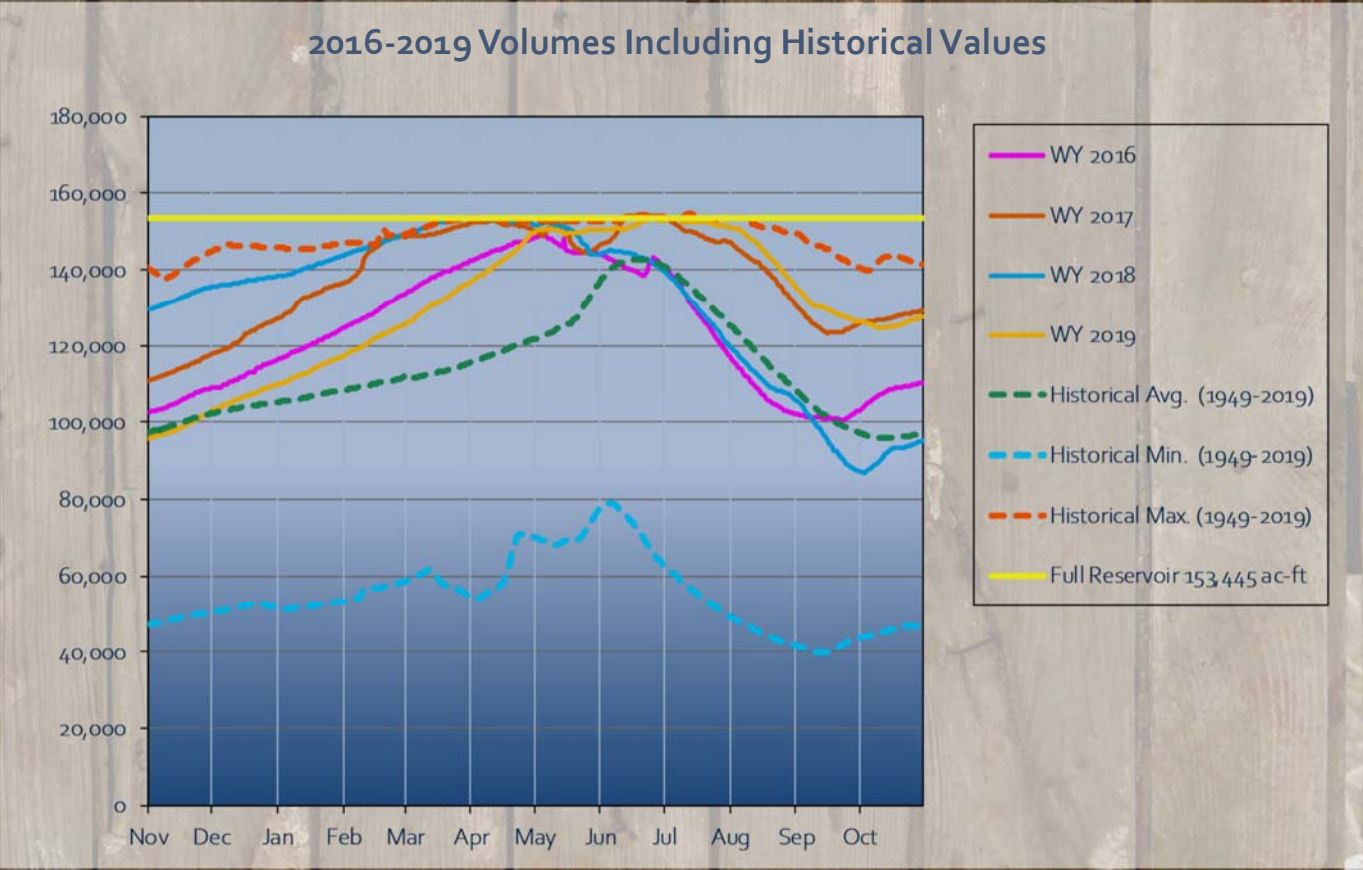
The Deer Creek Tube Valve Replacement Project will replace the original valves with 54-inch plunger valves. Replacing the original valves will require the removal of the existing 52-inch valves, modification of the existing valve vaults to accommodate the new 54-inch plunger valves, installation of new electrical lines and SCADA programming.

The valves will be replaced in successive winter construction periods in 2019-2020 and 2020-2021 with project completion anticipated by January 2021.





## Deer Creek Reservoir



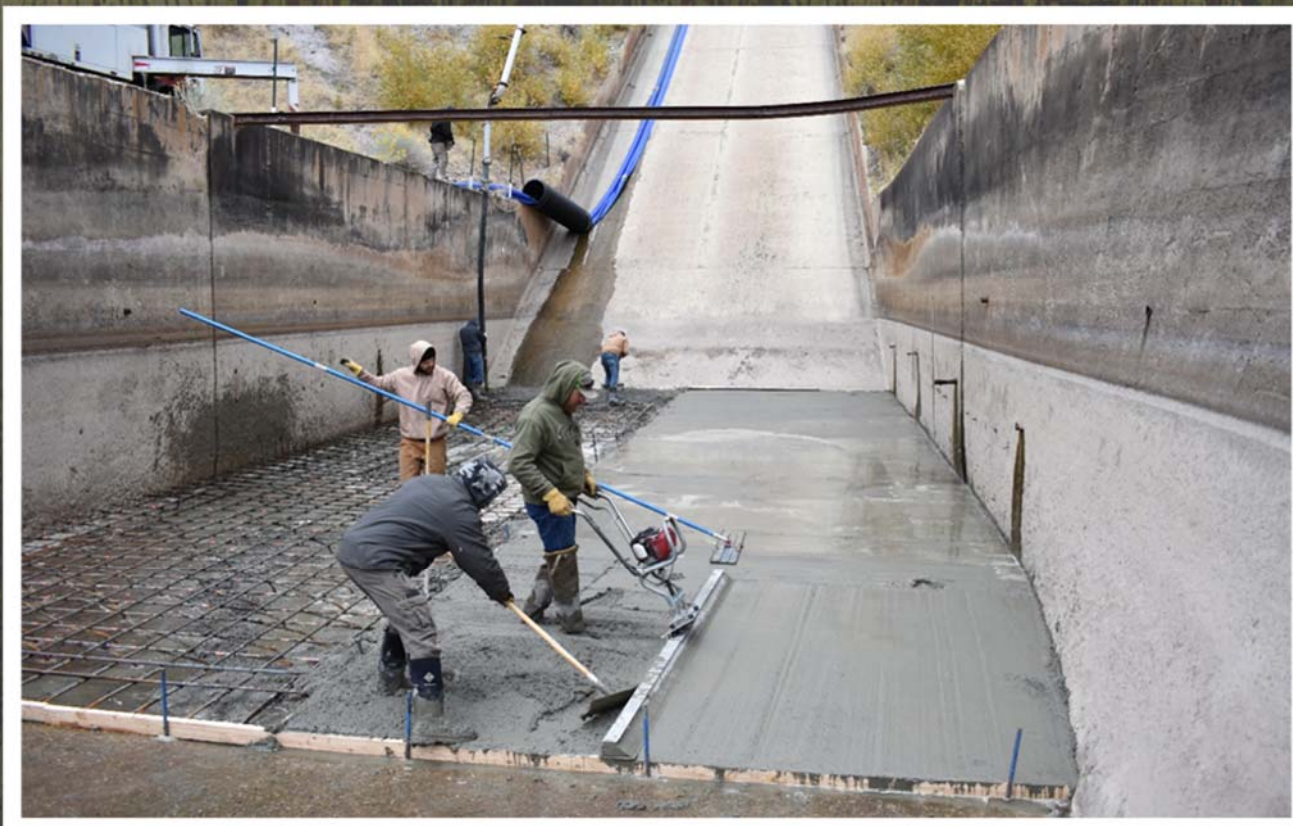


# Maintenance

Throughout each year maintenance personnel perform a wide range of tasks from typical preventative maintenance activities to the support of water delivery operations. This can include inspection and commissioning of Provo River Project facilities prior to runoff. The annual maintenance of high-elevation facilities occurs in the summer. As the water delivery season winds down, maintenance activities focus on preparing the Project for the oncoming winter.

As the Association undertakes capital improvement projects, maintenance personnel contribute expertise to help defray the overall cost of these projects or help construct the interfaces between the old facility and the new improvement. Maintenance personnel and resources were critical in the success of the Weber-Provo Diversion Metering Project and the Speed Creek Diversion Modification Project.

In October 2019, maintenance personnel replaced the deteriorating floor of the Weber-Provo Canal Francis spillway. The project required 70 cubic yards of high-strength concrete with several thousand pounds of reinforcing. The entire pour was completed in a single monolithic placement.





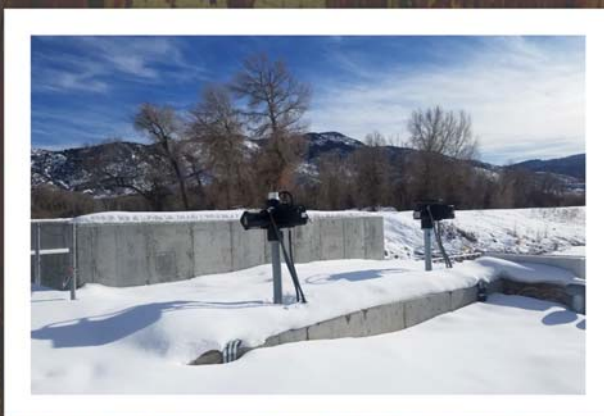
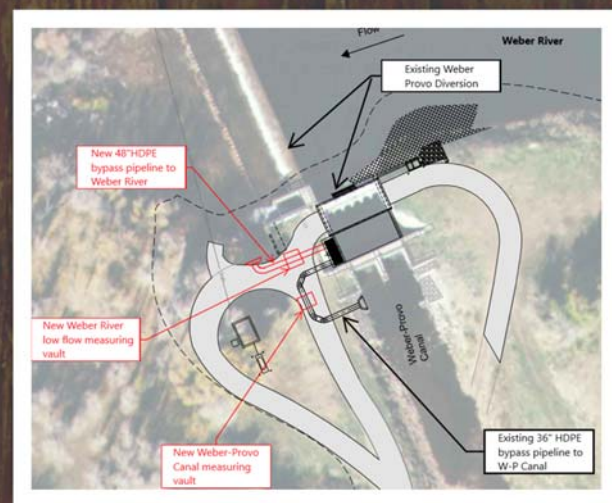
# Weber-Provo Diversion Metering Project

Accurate low flow measurement at the Weber-Provo Diversion is crucial to the operation of the Weber River and the three Reclamation projects that divert water from the river. Improving low flow measurement at this critical location is a high priority for Reclamation, the State of Utah and water users on both the Weber and Provo Rivers.

Historically, all Weber River water passing the Weber-Provo Diversion down river was measured either by a 150-foot-long Ogee weir structure across the river or by orifice calculations through the radial bypass gate. Flows through this bypass gate and over the weir were at best reasonable approximations of the actual low flows.

The Weber-Provo Metering Project installed a 48-inch bypass pipeline and metering vault from the Weber-Provo Diversion forebay to the Weber River. Another metering vault was installed in the existing 36-inch bypass pipeline from the Weber-Provo Diversion forebay to the Weber-Provo Canal.

With the Weber-Provo Metering Project in place, the Weber River Commissioner will be able to immediately and accurately adjust flows as needed to ensure the proper distribution of water both into the canal and to the downstream water right holders on the Weber River.





## Speed Creek

Speed Creek is the local vernacular for the Washington and South Kamas Irrigation Companies canal that diverts water from the upper Provo River in Woodland, Utah. The Speed Creek Diversion was rebuilt as part of the Provo River Channel Revision Project in the 1960's, but in recent years operation of the diversion gate has become increasingly difficult and unsafe.

Rehabilitation of the diversion in fall 2019 consisted of removing and replacing sections of the concrete walls and floor, refurbishing and installing a wedge gate, and construction of an access bridge and handrail. The new wedge gate is fully automated and allows for safe operation of the diversion.



## Safety & Security

The Association's emphasis on safety continued through 2019 with no reportable accidents or injuries during the year. As a result of this and previous good safety years, the Association's worker's compensation insurance experience modifier fell to 0.69 by the end of 2019, resulting in a significant reduction in worker's compensation insurance rates.

In September, the Association participated in a large-scale exercise of the Emergency Action Plan (EAP) for Deer Creek Dam and Reservoir. This exercise was held in cooperation with Reclamation, the State of Utah, county jurisdictions, several cities and towns along the Provo River and other water providers. The procedures in the EAP, as well as various methods of communication in case of an emergency, were functionally tested. Everyone who participated found the exercise productive and helpful.

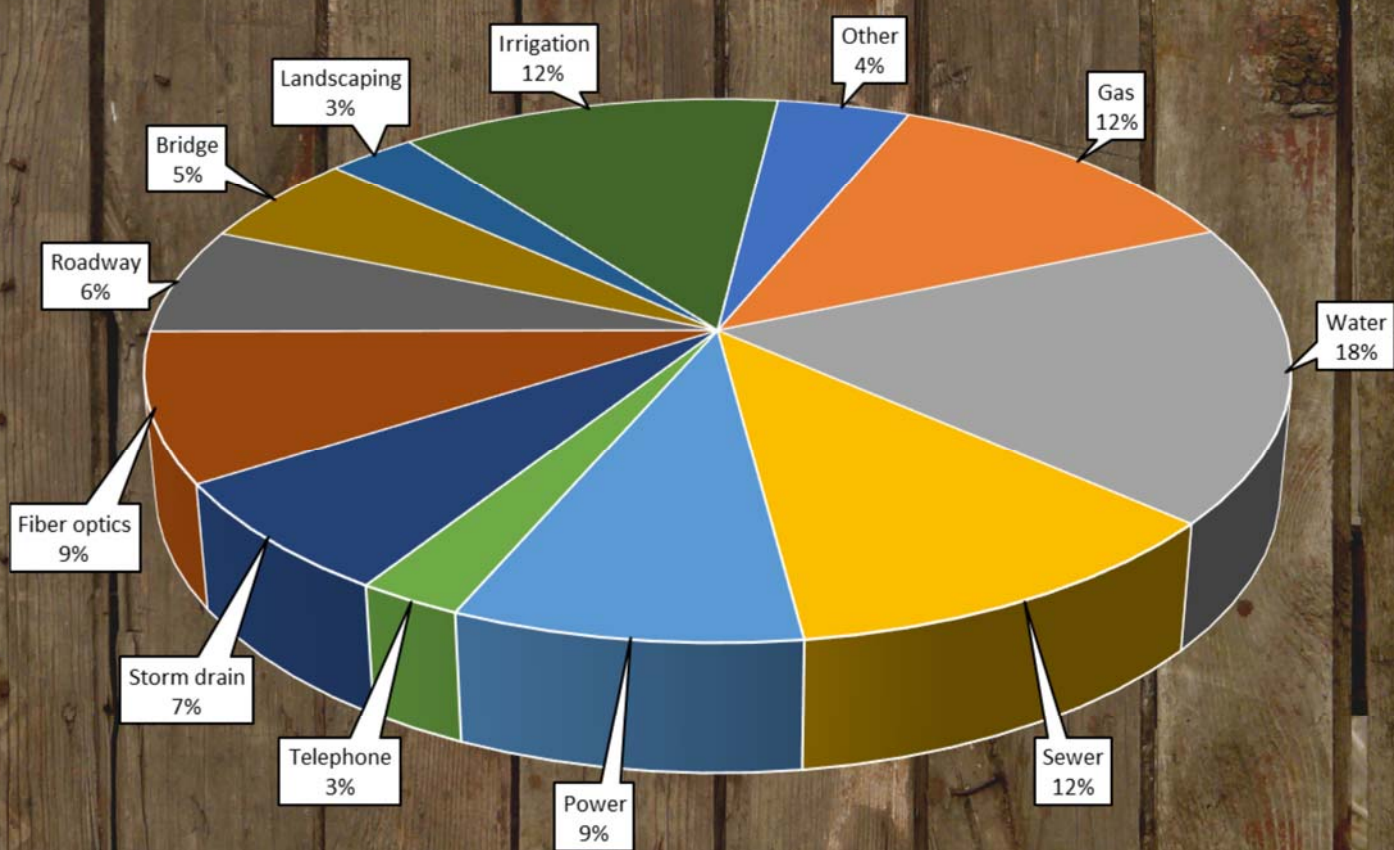


# Lands

Association staff has continued to work with the Utah Department of Transportation (UDOT) to finalize an agreement to make consistent and codify all of the interactions between the two entities along the Provo River Aqueduct (PRA). One of the features of this agreement will be the completion of a set of transactions originally begun in 1971 to exchange and resolve land title issues at the intersection of the PRA and Interstate 15 near the Point of the Mountain.

Many of the areas within the Provo River Project continued to experience growth and development during 2019. Applications for license agreements increased – particularly along the PRA and the Weber-Provo Canal. Licensed uses include new turnouts along the PRA, box culvert roadway crossings, and various types of utility crossings.

## Provo River Aqueduct License Agreements



- License Agreements are authorized encroachments
- 348 License Agreements on the Provo River Aqueduct
- Also administered on other Project lands, facilities



# Balance Sheet

Provo River Water Users Association

December 31, 2019

Assets

Current Assets

Cash and cash equivalents	\$ 1,653,136
Accounts receivable	809,659
Due from Cental Utah Water Conservancy District, current portion	41,902
Due from Lindon City, current portion	10,000
Prepaid expenses	39,659
Total current assets	2,554,356

Property, Plant, and Equipment, net

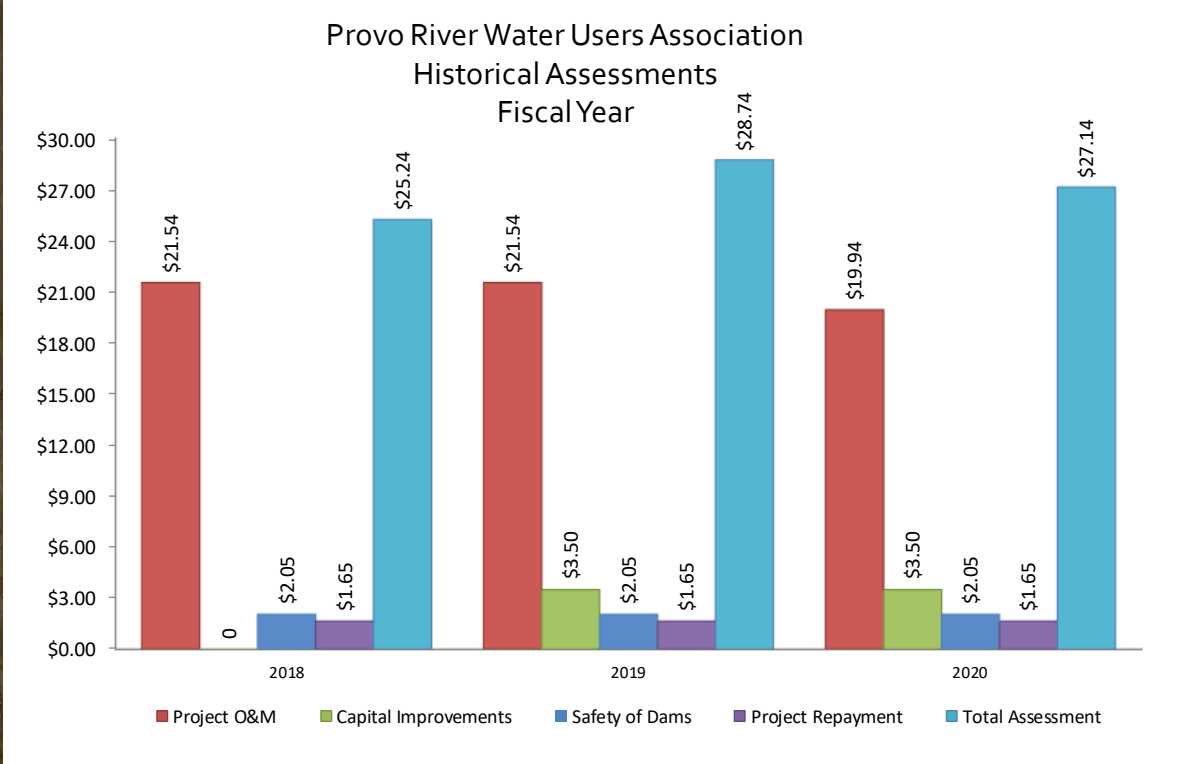
223,765,157

Other Assets

Cash and cash equivalents - restricted	1,482,810
Investments	1,795,532
Investments - restricted	644,499
Due from Central Utah Water Conservancy District, less current portion	167,606
Due from Lindon City, less current portion	10,000
Beneficial interest in water rights	24,070,460
Total other assets	28,170,907

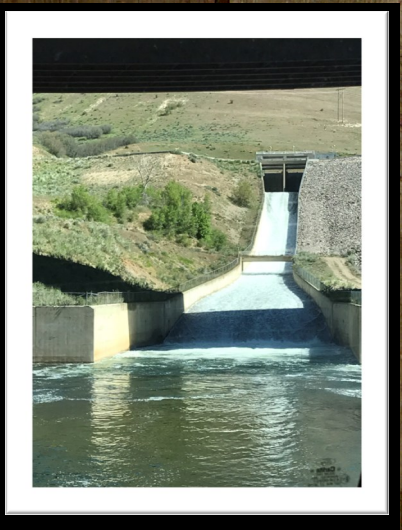
Total assets

\$ 254,490,420





Liabilities and Stockholders' Equity	
<b>Current Liabilities</b>	
Accounts payable	\$ 271,270
Accrued expenses	66,180
Retention payable	35,367
Accrued compensated absences	155,714
Accrued interest	744,033
Unearned revenue	107,711
Current portion of bonds payable	705,000
Current portion of notes payable	526,232
Total current liabilities	<u>2,611,507</u>
<b>Long-term Liabilities</b>	
Bonds payable, less current portion	21,616,000
Notes payable, less current portion	2,517,921
Less debt issuance costs, net of accumulated amortization of \$248,603	(271,680)
Total long-term liabilities, less unamortized debt issuance costs	<u>23,862,241</u>
Total liabilities	<u>26,473,748</u>
<b>Stockholders' Equity</b>	
Capital stock	23,915,867
Stock subscriptions receivable	(1,811,753)
Net capital stock	<u>22,104,114</u>
Retained earnings	
Restricted for Provo River Aqueduct operations & maintenance	169,826
Unrestricted	<u>205,742,732</u>
Total retained earnings	<u>205,912,558</u>
Total stockholders' equity	<u>228,016,672</u>
Total liabilities and stockholders' equity	<u>\$ 254,490,420</u>





2019 Water Use

2019 Water Use		2019	2019 Allotment 100.00%		Extra Allotment	Holdover from Water Year 2018				Holdover Towards 2020
October 31, 2019	Shares	Total Use (AF)	Allocated (AF)	Used (AF)	Used (AF)	Available (AF)	Used (AF)	Evap (AF)	Spill (AF)	2020 (AF)
MWD of Salt Lake & Sandy										
Account #1	500	500	500	500	0	0	0	0	0	0
Account #2	200	200	200	200	0	0	0	0	0	0
Account #3	15,000	5,100	15,000	5,100	0	5,225	5,100	100	25	9,900
Account #4	46,000	23,124	46,000	9,652	13,472	46,000	10,990	667	34,343	36,348
Account #5	200	200	200	200	0	345	0	0	345	0
Total	61,900	29,124	61,900	15,652	13,472	51,570	16,090	767	34,713	46,248
Orem MWD										
Account #1	1,300	0	1,300	0	0	1,300	605	17	678	1,300
Account #2	200	175	200	175	0	91	35	0	56	25
Account #3	754	454	754	454	0	0	0	0	0	300
Total	2,254	629	2,254	629	0	1,391	640	17	734	1,625
Dixon Irrigation Company	300	267	300	84	0	193	89	2	102	216
Provo MWD	8,000	2,454	8,000	1,691	763	10,156	3,133	149	6,873	6,309
American Fork MWD	500	154	500	154	0	24	0	0	24	346
Beaver/Shingle Creek	900	124	900	124	0	418	417	1	0	776
Diamond Bar X	86	86	86	86	0	9	0	0	9	0
Bar X Mutual Water Co.	10	10	10	10	0	0	0	0	0	0
MSH Corporation	10	10	10	10	0	0	0	0	0	0
Noblett's Creek Mutual Water	19	19	19	19	0	0	0	0	0	0
Highland Conservation District										
Highland Conservation Dist.	1,710	498	1,710	493	5	771	28	15	728	1,217
Highland City	2,099	392	2,099	392	0	1,342	0	26	1,316	1,707
Lehi City	796	23	796	23	0	470	0	9	461	773
American Fork City	405	125	405	125	0	0	0	0	0	280
Total	5,010	1,037	5,010	1,032	5	2,583	28	49	2,505	3,978
Lehi City	500	14	500	14	0	323	0	6	317	486
Lindon City	200	6	200	6	0	345	0	7	338	194
Pleasant Grove Irrigation										
Pleasant Grove Irrigation	363	92	363	92	0	156	0	3	153	271
Pleasant Grove MWD	648	407	648	407	0	756	0	15	741	241
Total	1,011	499	1,011	499	0	912	0	18	894	512
Pleasant Grove MWD	300	490	300	203	0	300	0	6	294	97
Provo Bench Irrigation										
Orem MWD	1,055	295	1,055	295	0	682	314	8	360	760
Provo Bench	197	6	197	6	0	646	0	12	634	191
Pleasant Grove MWD	175	83	175	83	0	204	0	4	200	92
Lindon City	548	16	548	16	0	805	0	15	790	532
CUWCD	26	26	26	26	0	26	0	1	25	0
Total	2,000	424	2,000	424	0	2,363	314	40	2,009	1,576
Provo Reservoir Water Users Co.										
JVWCD	10,753	8,489	10,753	2,268	6,221	9,521	6,670	71	2,780	8,485
Orem MWD	2,635	718	2,635	718	0	1,698	781	20	897	1,917
Alpine District	769	392	769	280	112	888	3	17	868	489
Pleasant Grove MWD	220	356	220	124	232	220	6	4	210	96
Highland City	574	107	574	107	0	49	0	1	48	467
Lehi City	247	251	247	7	244	99	0	2	97	240
Lehi Irrigation	394	65	394	65	0	0	0	0	0	329
American Fork City	184	59	184	59	0	0	0	0	0	125
Lindon City	130	72	130	4	68	224	5	4	215	126
Orem District	93	3	93	3	0	176	0	3	173	90
Total	16,000	10,511	16,000	3,634	6,877	12,875	7,464	123	5,288	12,365
South Kamas Irrigation	500	500	500	500	0	0	0	0	0	0
Washington Irrigation	500	442	500	448	0	0	0	0	0	52
Total	100,000	46,774	100,000	25,219	21,117	83,436	28,175	1,186	54,076	74,781



# Definition of Terms

ac-ft/ AF	acre-feet
Association	Provo River Water Users Association
Board	Association Board of Directors
cfs	cubic feet per second
CUWCD	Central Utah Water Conservancy District
Directors	Association Board of Directors
EAP	Emergency Action Plan
kW	kilowatt
kWh	kilowatt hours
MWD	Metropolitan Water District
NEPA	National Environmental Policy Act
O&M	Operations and Maintenance
PRA	Provo River Aqueduct
Project	Provo River Project
PRP	Provo River Project
PRWUA	Provo River Water Users Association
Reclamation	US Bureau of Reclamation
SCADA	Supervisory Control and Data Acquisition
UDOT	Utah Department of Transportation







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