ANDERSON REGIONAL
JOINT WATER SYSTEM

998 Hunters Trail Anderson, SC 29625 Phone: 864-332-6534 Fax: 864-224-6116

COMMITTEE AGENDA

Executive Committee
May 18, 2021
11:30 am

I. Discussion

1. Personnel
   A. Recruitment Update
2. Finance FY 2021-22 Operating Budget
3. Board Officer Nominations
4. Personnel Review

II. Adjournment

The Anderson Regional Joint Water System Executive Committee meets monthly. The next planned Executive Committee meeting dates (all times 11:30 am) are:

- **Wednesday, June 2, 2021**
- **Monday, July 12, 2021**
- **Monday, August 2, 2021**
- **Monday, September 13, 2021**
- **Monday, October 11, 2021**

ANDERSON REGIONAL
JOINT WATER SYSTEM

Your Community-Owned and Operated System

998 Hunters Trail Anderson, SC 29625
Phone: 864-332-6534 Fax: 864-224-6116
www.arjwater.com

MINUTES OF THE
ANDERSON REGIONAL JOINT WATER SYSTEM
April 22, 2021

LET THE MINUTES SHOW THAT THE MEDIA WERE NOTIFIED OF THIS MEETING IN ACCORDANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT.

A QUORUM OF THE BOARD IS PRESENT.

COMMISSIONERS PRESENT: Benjie McGill, City of Clemson; Douglas Locke, Broadway; Patrick Jackson, Starr-Iva; Mitch Ellenburg, Belton-Honea Path; Jeremy Gillespie, Sandy Springs; Tommy Phillips, Broadway; Dyke Spencer, Powdersville; David Rogers, Town of Williamston; Chuck Cortez, Big Creek-Hammond; Larry Harrell, Homeland Park; Evan Link; Town of Pendleton

ABSENT: Dwight Edwards, West Anderson; Jeff Caldwell, City of Anderson; Phillip Mishoe, Town of Central

OTHERS PRESENT: Scott Willett, ARJWS; Lisa Evatt, ARJWS; Natalie Whitaker, ARJWS; Kendall Cleary, AJRWS; Christopher Weber, ARJWS; Billy Bolger; Trey Burns, ARJWS

Chairman Benjie McGill called the Board meeting of Anderson Regional Joint Water System to order at 11:30 a.m. on April 22, 2021.

Chairman McGill asked for any Commissioner comments. Mr. Willett announced ARJWS celebrated its 19th anniversary this month. Mr. Spencer announced Powdersville Water celebrated its 50th anniversary. Mr. McGill introduced Mr. Link as the newly appointed Board representative from the Town of Pendleton.

There were no public comments.

Mr. Spencer made a motion to approve the February 18, 2021 minutes and Mr. Jackson seconded.
Motion carried.

I. Consent Calendar (Old Business)

None

II. Items requiring immediate action

1. FY 2021/22 Budget - First Reading

Mrs. Cleary presented a PowerPoint explaining the proposed annual budget for the fiscal year 2021/22. The discussion included an increase in operations cost due to an increased chemical cost associated with cold water settling. Maintenance cost increased due to the cost of inventory and parts related to the Ozone facility. Total Employee cost increased related to the addition of the Deputy Director position and a +1 Plant Operator. Mr. Willett asked for any comments, there were none. Mr. Jackson made a motion to approve the first reading of the proposed FY 2021/22 Annual Budget. Mr. Spencer seconded. The motion passed with ten yay votes and one nay vote.

2. Clemson University Wholesale Rate-FY 2021/22

Mr. Willett recommended increasing the water rate for service to Clemson University from $1.88 per thousand gallons to $2.05 per thousand gallons. The resulting expected rate increase is exacerbated by reduced System as well as University annual demand during the previous (COVID) previous year requiring the fixed cost for debt service to be spread over a significantly smaller base. Mr. Willett asked for any comments. Mr. Cortez inquired why one of his district rates is more than Clemson. Mr. Gillespie made a motion to increase the existing water rate for Clemson University to $2.05 per thousand gallons. Mr. Locke made a second. The motion was unanimous.

III. Discussion (New Business).

1. Executive Director's Report (Oral)

Mr. Willett gave an update on the State Budget that included: an Emergency Rental Assistance Program bill that would assist eligible households that are unable to pay rent, utilities, and other expenses incurred related to housing due to the Covid-19 pandemic; Senator Hugh Leatherman possible retirement; the Senate Medical Affairs restructure of DHEC; State Water Planning; and the Reallocation Study of Lake Hartwell.

IV. Informational Reports

1. Finance and Administration Report
2. Operations Report
3. Staff Member Focus

These reports are for information and for each Member to review as written. A copy of each report is attached to the file copy of these minutes.

V. Adjournment

With no further business, Mr. Spencer made a motion to adjourn at 12:22 p.m. and Mr. Cortez seconded. Motion carried.

Respectfully submitted,

Jeff Caldwell
City of Anderson

ANDERSON REGIONAL
JOINT WATER SYSTEM

998 Hunters Trail Anderson, SC 29625
Phone: 864-332-6534 Fax: 864-224-6116

BOARD MEMORANDUM

May 6, 2021

Subject

Finance and Administration Report

Discussion

Billing

Meters were read on April 29, 2021 with usage up 10.44% from last month (for the same number of days) and up 6.07% from last year (for the same number of days).

AGENCY	PREV.YR SAME MONTH	LAST MONTH	CURRENT
# of Billing Days	**30**	**33**	**29**
Anderson	105,909,381	109,836,574	110,050,334
Big Creek	24,300,000	24,800,000	23,900,000
Broadway	20,236,262	20,885,892	19,883,658
Clemson	57,343,359	60,011,901	52,466,544
Clemson University	14,994,170	26,609,305	26,361,050
Hammond	56,944,260	54,965,750	57,654,257
Homeland Park	18,414,781	21,618,845	19,616,112
Pendleton	8,847,131	9,735,488	9,639,462
Powdersville	4,673,702	4,291,803	2,868,479
Sandy Springs	50,463,000	55,348,000	51,084,000
Starr-Iva	28,444,686	29,098,657	27,592,261
West Anderson	38,295,290	35,950,879	38,700,490
Williamston	13,475,058	14,149,493	13,723,489
TOTAL	**442,341,080**	**467,302,587**	**453,540,136**

Changes in State and Federal Rules

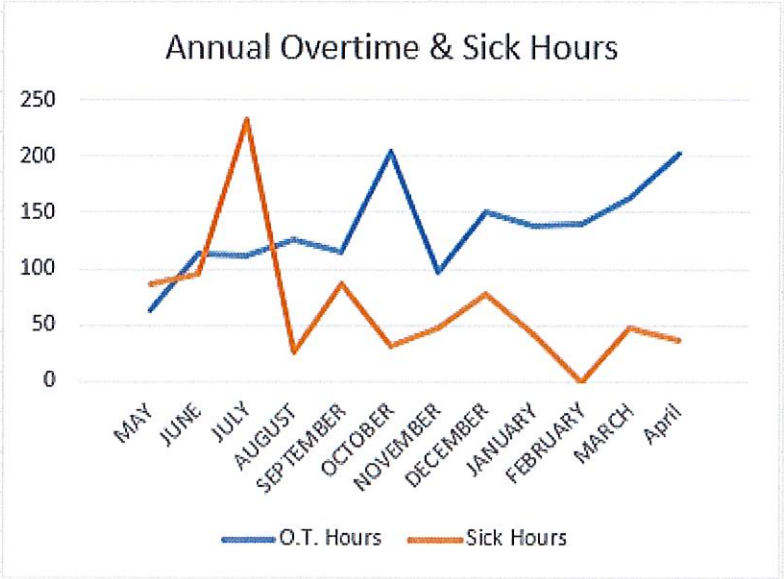
GASB Statement No. 87, "Leases"

GASB Statement number 87, Leases, eliminates operating leases. All contracts that meet the definition of lease should be accounted for as an asset and a liability by the lessee, similar to capital leases. For governments that are a lessee or a lessor will have to report these leases from when the lease began throughout the lease term. The requirement for this statement will take effect for financial statements for the fiscal year ending December 31, 2020. See the GFOA website for guidance and examples.

Safety
There have been 2,749 days since the last work-related injury at ARJWS.

As shown below on the Annual Overtime & Sick Hours Chart, there was a spike in sick leave in July 2020 due to one employee out on paternity leave and two employees out sick. Other months show overtime and sick hours trending accordingly.

May Safety Training was Safety Harness. ARJWS purchased 3 new safety harnesses. Caleb Hedden with Pinnacle Sales trained employees on proper harness fitting and adjustments, correct sizing and weight limits and the importance of following those guidelines, how to fall safely and correctly, how long you have once you do fall (before circulation issues arise) and possible backup procedures in place if that does happen.



Prepared by: Kendall Cleary, Accountant
Approved by: Scott Willett, Executive Director

Attachments: Profit & Loss Summary – Budget, Actual and Forecast

ANDERSON REGIONAL
JOINT WATER SYSTEM

Profit & Loss
For the Month ending April 30, 2021

				10+2	Ideal Percentage:	83%	
	Annual Budget	YTD Budget (7 months)	YTD Actual	Year End Projection	% of Budget Used	YTD Variance	
Operating Revenue							
Operations and Maintenance	4,626,200	3,855,167	3,609,870	4,380,904	78%	(245,296)	
Capital Charges	5,392,245	4,493,538	4,493,538	5,392,245	83%	-	
Renewal and Replacement							
Water System	1,574,695	1,312,246	1,312,056	1,574,505	83%	(190)	
Pump Station	72,378	60,315	60,301	72,364	83%	(14)	
Miscellaneous	148,599	123,833	157,621	182,388	106%	33,789	
Total Operating Revenue	11,814,117	9,845,098	9,633,386	11,602,406			
Operating Expenses							
Salaries and Wages	1,403,800	1,169,833	1,127,399	1,361,366	80%	(42,434)	
Payroll Taxes and Employee Benefits	566,700	472,250	466,932	561,382	82%	(5,318)	
Operations and Maintenance							
Administrative Expenses	191,400	159,500	232,579	264,479	122%	73,079	A
Operations Expenses							
Lab Supplies/Uniforms/Safety Equipment	88,800	74,000	93,701	108,501	106%	19,701	B
Chemicals	446,900	372,417	479,007	553,490	107%	106,590	C
Sludge and Chemical Disposal	185,000	154,167	236,656	236,656	128%	82,489	D
Utilities and Security	1,112,500	927,083	808,684	994,101	73%	(118,399)	
Maintenance Expenses	281,700	234,750	272,755	319,705	97%	38,005	
Professional Fees	90,000	75,000	22,901	37,901	25%	(52,099)	
Insurance	93,100	77,583	752	93,100	1%	(76,831)	
Debt Expenses	5,490,245	4,575,204	4,151,343	5,066,384	76%	(423,861)	
Junior Lien Bond Payments	-	-	690,176	753,219	100%	690,176	E
Source Water Protection	51,000	42,500	22,339	30,839	44%	(20,161)	
Miscellaneous Expenses	115,300	96,083	69,409	88,626	60%	(26,674)	
Total operating expenses before depreciation	10,116,445	8,430,371	8,674,633	10,469,748			
Net operating income	1,697,672	1,414,727	958,753	1,132,658			
Raw Water							
Raw Water Income	57,646	48,038	218,694	228,302	379%	170,656	
Raw Water O&M Expenses	-	-	146,422	146,422	100%	146,422	
Raw Water Operating Income	57,646	48,038	72,272	81,880			

	Cash Balances	Days Cash on Hand
Operating Cash	1,675,685	60
Capital Project Fund	1,964,108	
R&R Funds (Restricted)	1,561,518	
	5,201,311	

A: Administrative expenses are over budget due to the payment to the Corp for purchased water of $72,000, the purchase of a vehicle for $22,000, and the payment for NetSuite implementation. The vehicle will be reclassed to assets during the year-end procedures.

B: Lab Supplies is over budget due to the purchase of turbidimeters for $14k.

C: Chemicals are over budget due to the use of Cedar Clear 757 during the cold weather months to help with settled water turbidity.

D: Sludge Disposal is over budget due to ARJWS allowing the project to exceed the budget by approximately $35,000 to make a more substantial impact in the effort to rid the lagoon from excess sludge caused by using PAC in prior years. This is a single event and the percentage of budget used should self correct as the fiscal year moves forward.

E: Junior Lien bond payments are non budget impacting and are paid for from reserves.

ANDERSON REGIONAL
JOINT WATER SYSTEM

998 Hunters Trail Anderson, SC 29625
Phone: 864-332-6534 Fax: 864-224-6116

BOARD MEMORANDUM

May 6, 2021

Subject
Operations Report

Discussion

Operations

As of May 6, 2021, Lake Hartwell's surface elevation was 661.51 ft., 1.51 ft. above full pool. Raw water is being drawn from the first gate of the intake structure. Water temperature at the first gate is 71.2°F. The Joint Water System reached 100% of settled water turbidity goals for the month of April. Raw water pH levels are relatively constant. Settled and Finished water pH levels are normal. The maximum day for April water production was 44% of Finished water capacity.

In addition to water quality sampling for the Lake Hartwell Water Treatment Plant, Joint Water System staff processed 190 Total Coliform distribution samples for local entities during the month of April.

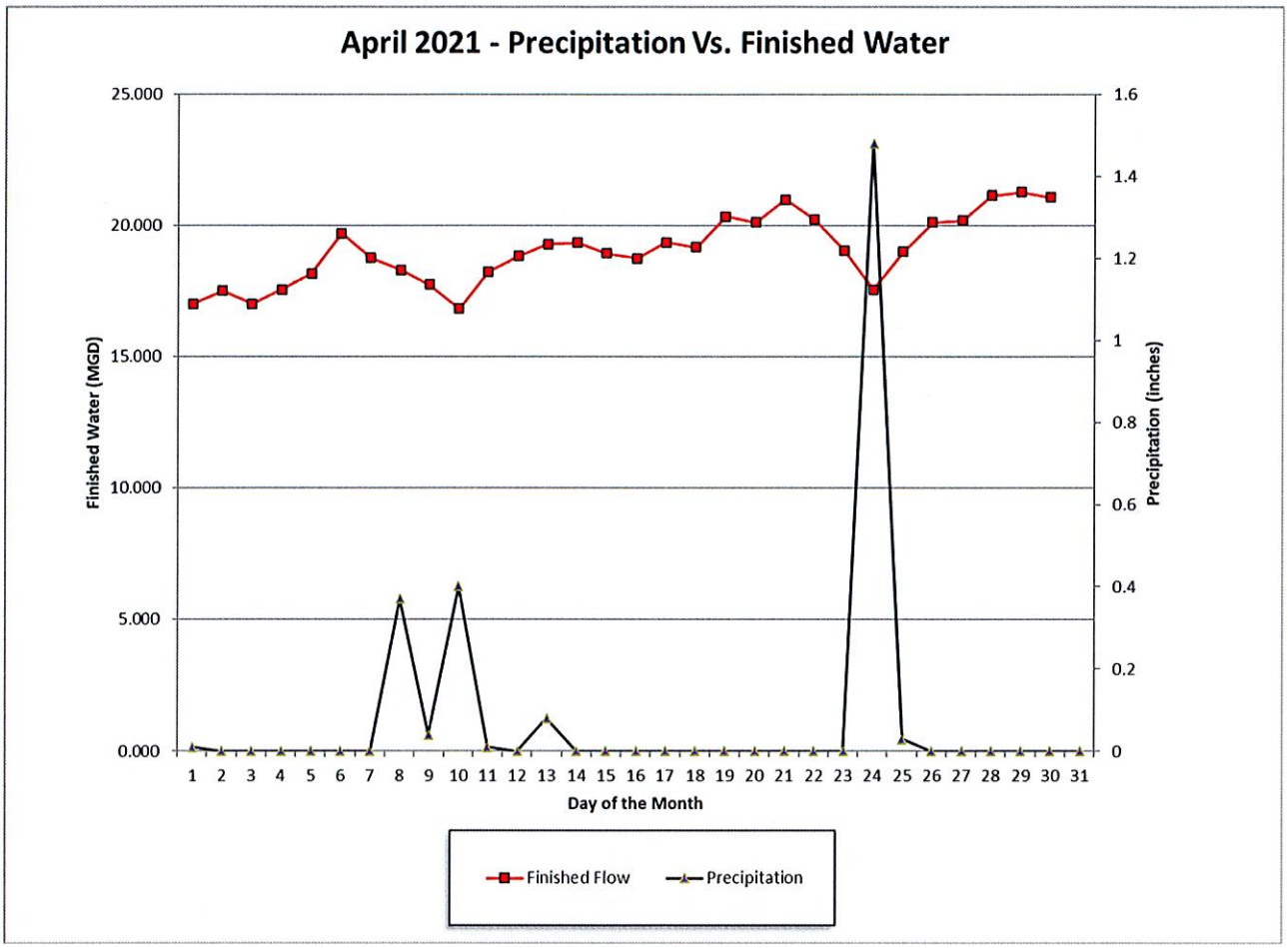
Weather Data

	Minimum	Maximum	Total
Rainfall	0.00 in.	1.48 in.	2.42 in.
Temperature	31.5° F	84.0° F	N/A
Humidity	19%	100%	N/A

Water Production Data

	Average	Minimum	Maximum	Total
Raw Water (MG)	18,923,000	15,810,000	22,706,000	567,688,000
Finished Water (MG)	19,056,000	16,828,000	21,285,000	571,676,000
Finished Max Capacity	39.7%	35.1%	44.3%	39.7%

NOTE: Percentages are finished water capacities.



Water Quality Data

	Raw	Settled	Finished
pH	6.91	7.13	7.13
Turbidity (NTU) Range	1.50 to 15.30	0.32 to 0.85	0.03 to 0.07
Turbidity (NTU) Average	2.73	0.55	0.04
Turbidity (NTU) Exceedance	-	0.00%	0.00%
Total Organic Carbon	1.73	-	1.40
Fluoride Average (ppm)	-	-	0.63**
Residual Disinfectant (ppm)	-	-	1.67
TTHM (DBP)	-	-	4.4 ppb
Methylisoborneol (MIB)*	<1.0 NG/L	-	<1.0 NG/L
Geosmin*	2.4 NG/L	-	<1.0 NG/L

*Note: For the general population, detection of MIB & Geosmin occurs at 10 NG/L.

**Note: DHEC has encouraged all water treatment plants to maintain Fluoride levels between 0.60-1.00 ppm. ARJWS will comply with this request, which will be reflected on future water quality data summaries.

Total Trihalomethane Discussion

Trihalomethanes (THMs) are one type of disinfection byproduct that can form during the treatment process and within the distribution system. THM concentrations vary primarily as a function of total organic carbon (TOC), temperature, disinfectant type, and residence time. THMs can have adverse health effects at high concentrations, and the EPA has established compliance criteria for these compounds in aggregate, termed Total Trihalomethanes (TTHMs). These criteria are established in Stage 2 of the Disinfection Byproduct Rule, which has a numerical MCL of 80 micrograms per liter (or parts per billion, ppb) based on a Locational Running Annual Average. The Operations Staff at ARJWS collect monthly, one-time samples, as a spot check for TTHM formation in the distribution system. The table below displays this month's readings, along with annual maximum, minimum, and overall averages at the designated sample locations.

Disinfection Byproduct Analysis Report

Sample Location	Current TTHM Reading	12 Month Maximum	12 month Minimum	12 Month Average
Broadway	19.7	24.3	4.0	12.8
Big Creek	26.1	26.1	2.3	14.7
Clemson Armory	16.5	18.5	3.4	10.3
Sandy Springs-Michelin	13.6	17.9	2.3	10.6
Sandy Springs-5 Forks	17.5	17.5	3.9	10.7
West Anderson	9.5	23.0	2.1	7.9
Bolt Drive Tank	26.5	28.6	4.5	16.2
McAlister Tank	19.3	25.4	3.8	14.1
Highview Pump Station	20.0	20.0	2.8	11.2
Starr-Iva Hydrant	55.9	58.1	1.3	15.9
Clemson Pump Station	14.0	17.9	1.5	9.3

Note: All TTHM results are in ppb, or parts per billion. Also, the Water Quality Data Table displays the plant TTHMs.

Water Quality Strategic Planning Discussion

For the month of April, the following Water Quality Strategic Planning goals were met:

- Finished water pH was held within the designated 7.1-7.2 range.
- Fluoride dosing average was kept within the approved 0.60 – 0.75 ppm range.
- Finished water Chlorine residual was maintained above a 1.2 ppm leaving the facility.
- Non-detect for taste and odor was achieved, despite detectable concentrations at the source.
- Achieved settled water turbidity goal < 1 NTU for the entire month.

Corrosion Discussion

Metal pipe naturally corrodes based on the chemical properties surrounding it. Corrosivity of water is directly related to pH. Lower pH concentrations, less than 7.0, are considered acidic, and therefore increase corrosion to metal piping. For this reason, The Lake Hartwell Water Treatment Plant adds lime to increase the pH levels to non-corrosive levels. In addition, orthophosphate is added to create a protective barrier on the inner linings of all distribution and premise piping. The added orthophosphate barrier keeps water from contact with bare metal.

pH adjustment technique-

The recommended pH range for orthophosphate to minimize lead, iron, and copper solubility is 7.4-7.8. For the month of April, the Lake Hartwell Water Treatment Plant Finished water pH was stable at 7.1.

Orthophosphate corrosion inhibitor technique-

The Lake Hartwell Water Treatment Plant has determined to adjust the baseline numbers for Orthophosphate to a running annual average to establish a consistent dose rate. During the month of April, the Lake Hartwell Water Treatment Plant Finished water running annual average dose rate is within the desired 1.0 ppm to 1.6 ppm protective barrier range at 1.3 ppm.

Monthly Power Consumption Data

Month	On Peak kW	Off Peak kW	Total kW	Finished Water MG	$/ MG	12 month Average
Apr – 20	180,000	861,600	1,041,600	533.1	$96.46	$100.17
May – 20	199,200	873,600	1,072,800	571.8	$92.87	$100.04
Jun – 20	228,000	969,600	1,197,600	621.3	$104.51	$101.57
Jul – 20	235,200	1,111,200	1,346,400	730.7	$104.09	$100.98
Aug – 20	259,200	1,137,600	1,396,800	675.3	$115.59	$101.75
Sep – 20	230,400	1,060,800	1,291,200	643.4	$112.53	$101.83
Oct – 20	208,800	945,600	1,154,400	619.7	$88.86	$100.45
Nov – 20	201,600	914,400	1,116,000	561.8	$84.53	$99.14
Dec – 20	172,800	864,000	1,036,800	550.6	$81.30	$97.43
Jan – 21	208,800	856,800	1,065,600	595.9	$86.81	$96.62
Feb – 21	194,400	871,200	1,065,600	530.6	$92.36	$96.48
Mar – 21	168,000	787,200	955,200	559.9	$75.67*	$94.39
Apr – 21	194,337	880,130	1,074,467	571.7	$89.46	$94.23

*Noting that last bill from Duke Energy was lower than historical normal. Conversations with Duke and others in the community seem to indicate that several power bills were low during the March billing cycle.

Monthly Power Consumption Update

For the month of April, ARJWS treated 571,676,000 gallons of water at a power cost of $89.46 per million gallons produced. This includes the power needed to produce Ozone continuously for effective taste and odor removal for the system. ARJWS also incurred a power rate increase, which went into effect on May 15, 2019. The 12 month Running Annual Average is currently at $94.23.

Discussion

April Operations Highlights

Staff development:
-Several staff passed water treatment operator and distribution exams.
-Candidate review and setting up interviews for an additional B Level Operator

Other Highlights:
- Completed spring clarifier cleanouts
- Completed transition from 757 coagulant back to alum

Prepared by: Chris Weber, Operations Manager
Approved by: Scott Willett, Executive Director

ANDERSON REGIONAL
JOINT WATER SYSTEM

998 Hunters Trail Anderson, SC 29625
Phone: 864-332-6534 Fax: 864-224-6116

BOARD MEMORANDUM

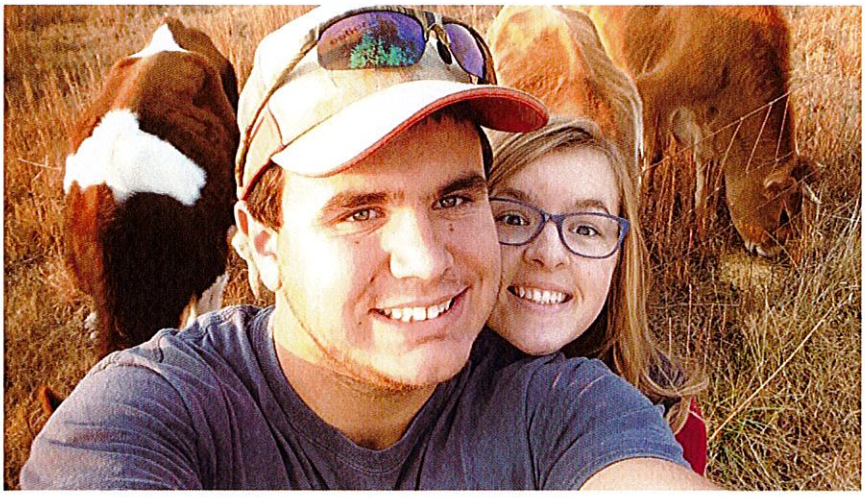
May 03, 2021

Subject

Personnel Report: Staff Member Focus

Discussion

Anderson Regional Joint Water would like to introduce Austin Satterfield. Austin was hired in October 2020, as a Water Maintenance Assistant. Austin previously worked at US Engine Valve in Westminster after graduating from Tri-County Technical College with his Industrial Electronics Technology degree.

Austin lives in Westminster with his parents. He has been dating his high school sweetheart, Faith Smith, for 5 years. Austin grew up and continues to show Old English Game Bantams and has won many competitions. Austin's hobbies include raising meat goats, gardening, farming, hunting, fishing, and watching sports.

Austin loves his job because "the hours are nice, benefits are good, and the people I work with are entertaining."