ANDERSON REGIONAL
JOINT WATER SYSTEM

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

BOARD AGENDA

Board of Commissioners
September 2024

I. Minutes August 28, 2024

II. Informational Reports

1. Executive Committee Meeting Summary
2. Finance and Administration Report
3. Operations and Maintenance Report

Future planned Board meeting dates are:

- October 23, 2024
- **December 11, 2024**
- February 26, 2025

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MINUTES OF THE ANDERSON REGIONAL JOINT WATER SYSTEM August 28, 2024

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; Patrick Jackson, Starr-Iva; Matt Ruff, Big Creek-Hammond; Tracy Durham, Sandy Springs; Scott Banks, City of Anderson; John Lollis, West Anderson; Kevin Strickland, Town of Williamston; Don King, Homeland Park; Robin Gore, Powdersville Water; Mitch Ellenburg, Belton-Honea Path Water

OTHERS PRESENT: Jeff Caldwell, ARJWS; Kendall Cleary, ARJWS; Jodi Logan, ARJWS; Lisa Evatt, ARJWS; Justin Clemones, ARJWS; Billy Peele, Starr-Iva; Tony Putnam, Clemson University; Brandon Good, ARJWS; David Rogers

Chairman Patrick Jackson called the Board meeting of Anderson Regional Joint Water System to order at 12:00 p.m. on August 28, 2024.

Chairman Patrick Jackson asked for any Commissioner comments. Mr. Jackson recognized the loss of ARJWS employee Tristan Stone and Past Chairman of ARJWS board Dyke Spencer. He gave his condolences to the family of Mr. Stone and the ARJWS family. Mr. Jackson also gave his condolences to Mr. Spencer's family. He asked for a moment of silence in honor of these men. Mr. Jackson welcomed Mr. Stickland to the Board. Mr. Strickland will take Mr. Roger's seat for the Town of Williamston. Mr. Ruff requested that ARJWS make a donation to Water Mission International in honor of Mr. Stone and Mr. Spencer in the amount of $500.00 each. Mrs. Gore thanked members of the board for the emails, calls, and support that Powdersville Water received regarding Mr. Spencer's passing.

Chairman Patrick Jackson asked for any public comments. Mr. Rogers made a request that ARJWS name the board room after Dyke Spencer in honor of his years of service to the community and ARJWS.

Mrs. Durham made a motion to approve the June 26, 2024, minutes, and Mr. Lollis seconded. Motion carried.

I. Consent Calendar (Old Business)

1. None

II. Items Requiring Immediate Action

1. None

III. Discussion (New Business)

1. Strategic Plan Update

Mr. Caldwell presented the 2024-2029 ARJWS Strategic Plan to the Board. Mr. Caldwell spoke briefly on core values, objectives, and metrics. Mr. Caldwell called for questions. There was none. Mr. Caldwell requested the 2024-2029 ARJWS Strategic Plan be placed on the agenda for a vote at the October meeting.

2. Director's Report (Oral)

Mr. Caldwell gave the following updates on the SCIIP Projects. The Onsite Hypochlorite Generation System design is complete. ARJWS will advertise for bids in September with construction beginning in November. The Clemson Pump Station Ground Storage Tank design is complete. Mr. Caldwell received verbal approval for the stormwater permit from SCDES. ARJWS is currently holding the Raw Water Pump Station Improvements project until the other projects bid to make the best use of all available SCIIP funds remaining. There will be an Upper Savannah River Basin Council Meeting on Wednesday, September 11, 2024, at Starr-Iva Water from 10:00 a.m. until 2:00 p.m.

IV. Informational Reports

1. Executive Committee Meeting Summary
2. Finance and Administration Report (handed out)

Greene Finney, Cauley LLP has been on-site to conduct the Annual Audit for FYE 2024. A full report will be presented at the October Board meeting. Each Board member was given the board engagement letter.

3. Operations and Maintenance Report

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

V. Adjournment

With no further business, Mr. Ellenburg made a motion to adjourn at 12:40 p.m. and Mr. Lollis seconded. Motion carried.

Respectfully submitted,

Benjie McGill

Secretary/Treasurer

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COMMITTEE SUMMARY

Executive Committee
September 16, 2024
11:30 am

Discussion Summary

1. **Shared Resources**
   ARJWS staff evaluated ideas to provide shared resources to our members. This could be like the current monthly sampling arrangement where ARJWS staffs a position that is already funded by the members and the additional expenses are shared by the participating members. Several ideas were discussed by the staff and the committee including Public Relations, Equipment, Instrumentation and Control Integrators, Safety programming, Utility Locates, Water Quality, Projects like Valve and Hydrant Maintenance, Human Resources, etc. The committee recommended evaluating further to look for ways to prove the concept.

2. **Strategic Plan**
   ARJWS staff is currently working under the proposed plan and specifically the FY2025 focus areas. No comments have been received since the August board meeting. This item will be on the consent calendar agenda for the October board meeting.

3. **Memorializing**
   At the August board meeting, a recommendation was made during public comment to recognize and honor the service of former board members and staff. Several options include naming facilities and/or rooms, establishing a wall of recognition, etc. ARJWS will continue to research options and report back to the committee.

4. **Continuous Improvement**
   ARJWS is working with Life & Safety Consultants. They performed a gap assessment in our safety programs and reviewed our facilities to document current or potential safety concerns. Our safety committee reviewed the concerns and engaged our staff to help alleviate the current concerns. To help further engage our staff, ARJWS developed safety comment cards where staff can recommend additional safety concerns and document how they fix the problem or how the problem can be remedied (a success story we learned from ReWa).

   Prepared by: Jeff Caldwell, Deputy Director

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BOARD MEMORANDUM

September 10, 2024

Subject

Finance and Administration Report

Discussion

Billing

Meters were read on August 29, 2024, with average daily usage up 4.14% from last month and up 14.35% from last year. The average daily usage for each member agency is listed below.

AGENCY	PREV.YR SAME MONTH	LAST MONTH	CURRENT
# of Billing Days	**34**	**34**	**29**
Anderson	4,648,344	4,771,418	4,784,679
Big Creek	973,935	1,198,616	1,132,332
Broadway	898,775	893,377	981,279
Clemson	2,240,057	2,504,023	2,701,474
Clemson University	1,358,897	1,275,688	1,402,288
Hammond	2,236,560	2,878,074	2,811,667
Homeland Park	623,451	622,715	661,512
Pendleton	352,731	423,092	425,029
Powdersville	300,665	323,056	438,001
Sandy Springs	2,536,606	3,006,836	3,289,105
Starr-Iva	1,120,313	1,129,594	1,228,067
West Anderson	1,566,222	1,638,739	1,791,154
Williamston	563,379	559,099	560,969
Total Average Daily Usage	**19,419,934**	**21,324,328**	**22,207,556**

Finance/Budget Summary

For the month ending August 31, 2024, ARJWS is trending appropriately for revenues and expenses for the first (2) two months of the fiscal year.

See the Profit & Loss report for additional information.

Safety Training

July
Subject: **LOTO**
Training Date: **July 25, 2024**
Online Attendance
ARJWS Staff – 14

Prepared by: Jodi Logan, Billing/Purchasing Coordinator
Approved by: Kendall Cleary, Accounting Manager

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

ANDERSON REGIONAL
JOINT WATER SYSTEM

Profit & Loss
For the Month ending August 31, 2024

	Annual Budget	YTD Budget (2 months)	YTD Actual	2+10 Year End Projection	Ideal Percentage	% of Budget	YTD Variance	
Operating Revenue								
Operations and Maintenance	7,293,900	1,215,650	1,253,614	7,331,864	17%	17%	37,964	
Capital Charges	5,206,053	867,676	867,676	5,206,053	17%	17%	-	
Renewal and Replacement								
Water System	1,499,582	249,930	249,842	1,499,494	17%	17%	(88)	
Pump Station	67,764	11,294	11,304	67,774	17%	17%	10	
Miscellaneous	52,653	8,776	125,968	169,845	17%	239%	117,192	A
Total Operating Revenue	14,119,952	2,353,325	2,508,402	14,275,029				
Operating Expenses								
Salaries and Wages	1,901,000	316,833	346,832	1,930,999	17%	18%	29,999	
Payroll Taxes and Employee Benefits	830,200	138,367	172,308	864,141	17%	21%	33,941	
Operations and Maintenance								
Administrative Expenses	368,600	61,433	24,205	331,372	17%	7%	(37,228)	
Operations Expenses								
Lab Supplies/Uniforms/Safety Equipment	129,200	21,533	8,809	116,475	17%	7%	(12,725)	
Chemicals	1,185,700	197,617	182,751	1,170,834	17%	15%	(14,866)	
Sludge and Chemical Disposal	300,000	50,000	-	300,000	17%	0%	(50,000)	
Utilities and Security	1,598,900	266,483	297,835	1,630,252	17%	19%	31,352	
Maintenance Expenses	606,200	101,033	70,601	575,767	17%	12%	(30,433)	
Professional Fees	82,500	13,750	19,075	87,825	17%	23%	5,325	
Insurance	102,600	17,100	5,828	102,600	17%	6%	(11,272)	
Debt Expenses	5,406,053	870,748	870,843	5,406,053	17%	16%	95	
Source Water Protection	50,000	8,333	12,202	53,868	17%	24%	3,868	
Miscellaneous Expenses	109,000	18,167	15,565	106,398	17%	14%	(2,602)	
Total operating expenses before depreciatio	12,669,953	2,081,398	2,026,852	12,676,584				
Net operating income	1,449,999	271,928	481,551	1,598,445				
Raw Water								
Raw Water Income	60,024	10,004	26,200	76,220				
Raw Water O&M Expenses	-	-	53,885	53,885				
Raw Water Operating Income	60,024	10,004	(27,686)	22,334				

	Cash Balances	Days Cash on Hand
Operating Cash	2,586,521	75
Capital Project Fund	5,291,053	
System R&R Fund (Restricted)	195,322	
Pumped R&R Fund (Restricted)	550,695	
Raw Water O&M	89,991	
Raw Water R&R	287,568	
	9,001,151	

A: Over projected revenue due to $59k in interest income and $40k annual payment from Pioneer.

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BOARD MEMORANDUM

September 17, 2024

Subject

Operations and Maintenance Report

Discussion

As of September 17, 2024, Lake Hartwell's surface elevation was 654.58 ft, 5.33 ft. below full pool and 5.33 ft. below the guide curve. Raw water is being drawn from the top gate of the intake structure. Water temperature at the top gate is 82.4°F. Anderson Regional Water reached 100% of its settled water turbidity goals for the month of August. Raw water pH levels are relatively constant. Settled and finished water pH levels are normal. The maximum day for August water production was 64.8% of finished water capacity.

Operations and Maintenance Highlights

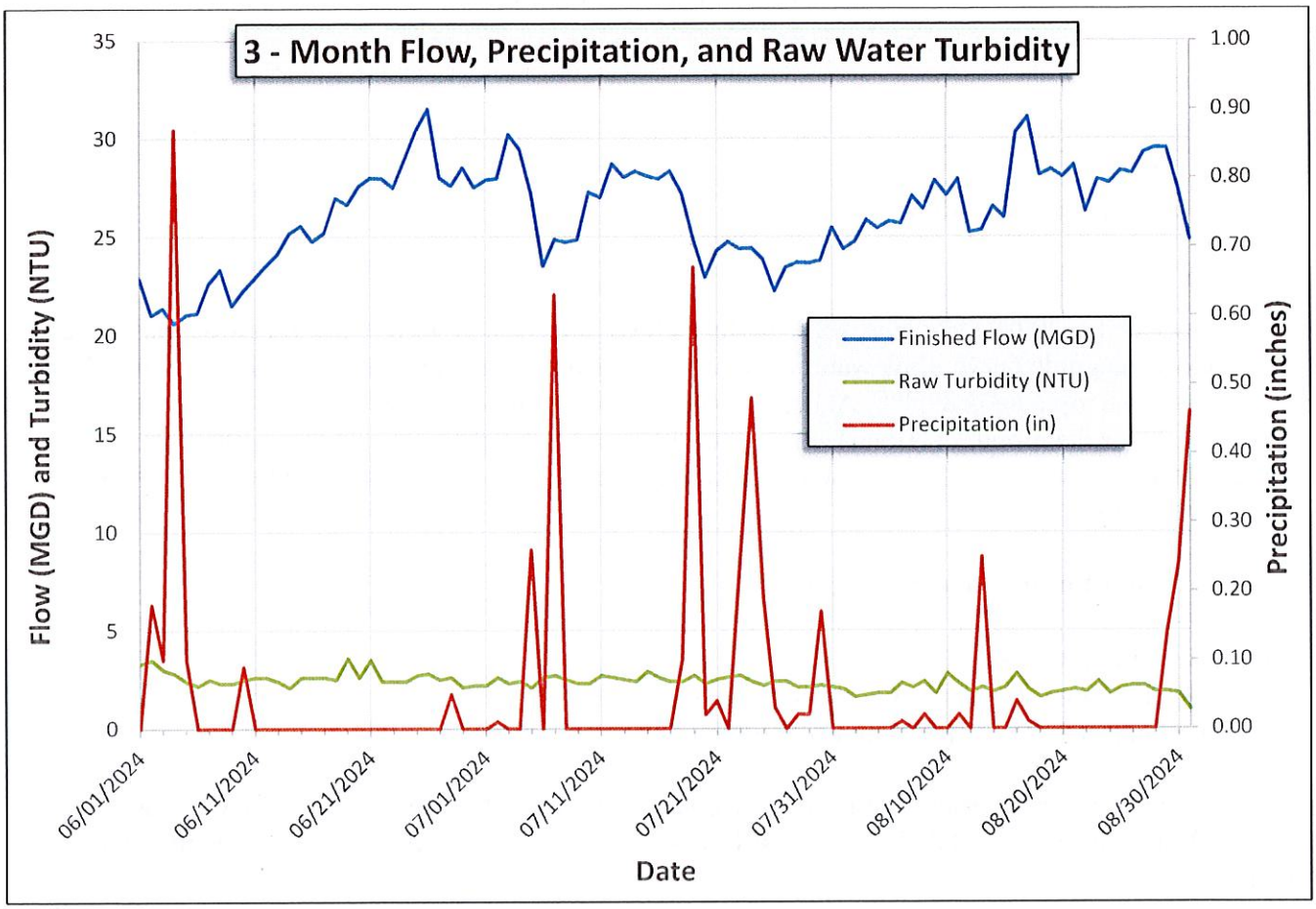
- Raw water pump #3 in-service
- Collected monthly power monitoring data for Ozone
- Temporary Chiller installed and running on Ozone

In addition to water quality sampling for the Lake Hartwell Water Treatment Plant, Anderson Regional Water staff processed 276 Total Coliform distribution samples for local entities during the month of August.

Water Quality Data

	Raw	Settled	Finished
pH	7.10	6.63	7.16
Turbidity (NTU) Range	2.8 – 1.0	0.28 – 0.60	0.03 – 0.04
Turbidity (NTU) Average	2.00	0.45	0.04
Turbidity (NTU) Exceedance	-	0%	0%
Total Organic Carbon	1.76	-	0.98
Fluoride Average (ppm)	-	-	0.00
Phosphate Average (ppm)	-	-	0.39
Residual Disinfectant (ppm)	-	-	1.81
TTHM (DBP)	-	-	8.94 ppb
Methylisoborneol (MIB)	28.1 NG/L	-	<1.0 NG/L
Geosmin	6.6 NG/L	-	<1.0 NG/L

Weather Data



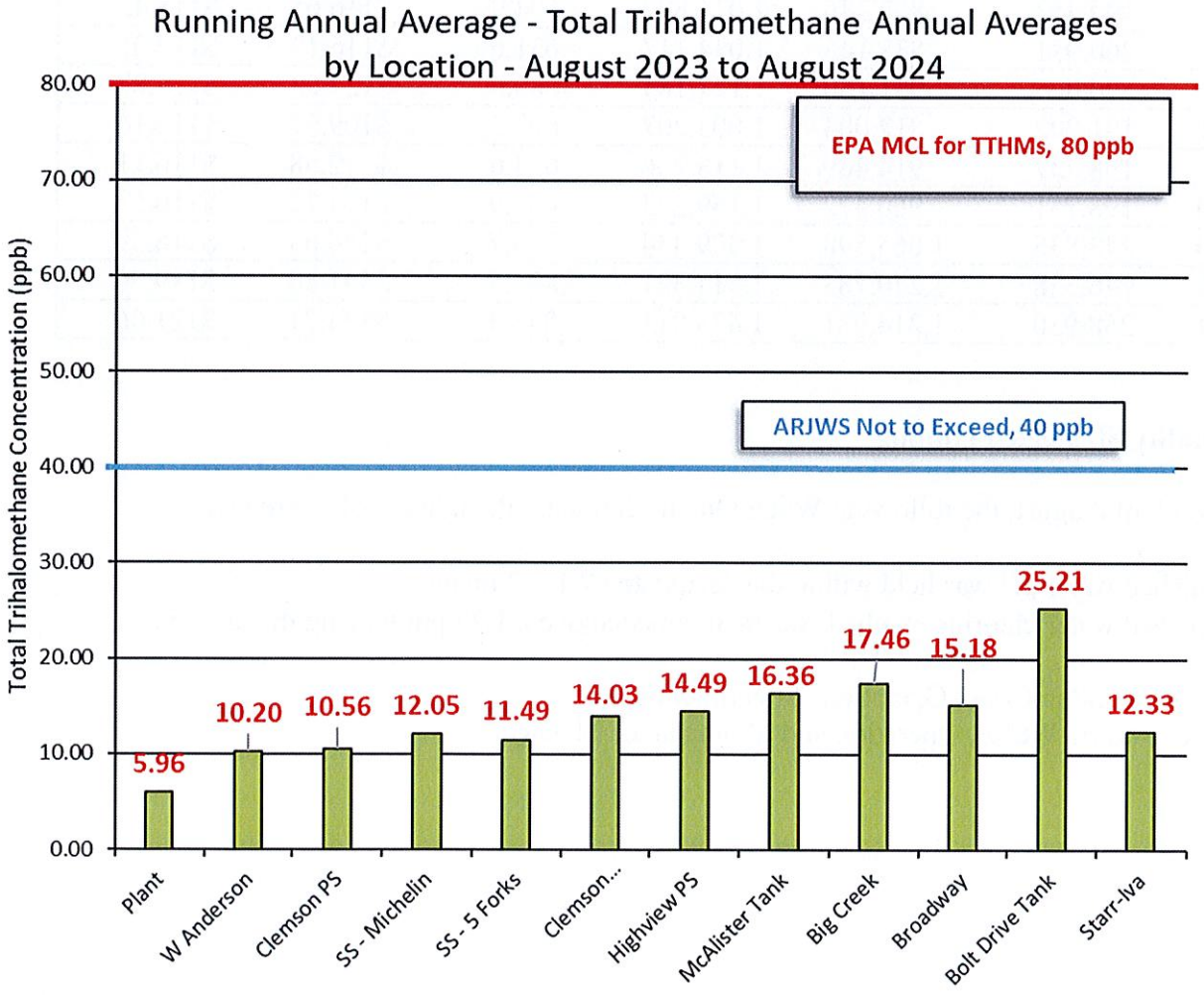
	Minimum	Maximum	Total
Rainfall	0.00 in.	0.46 in.	1.19 in.
Temperature	54° F	100.9° F	N/A
Humidity	31%	99%	N/A

Water Production Data

	Average	Minimum	Maximum	Total
Raw Water	26,399,000	21,625,000	32,933,000	818,372,000
Finished Water	27,269,000	24,380,000	31,100,000	845,328,000
Finished Max Capacity	56.8%	50.8%	64.8%	

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. ARJWS Operations Staff collects monthly, one-time samples, as a spot check for TTHM formation in the transmission system. The running annual averages of those results are shown in the figure below.



Monthly Power Consumption Update

For the month of August, ARJWS treated 845,328,000 gallons of water at a power cost of $134.71 per million gallons produced. The 12-month running annual average is currently $121.06.

Monthly Power Consumption Data

Month	On Peak kWh	Off Peak kWh	Total kWh	Finished Water MG	$/ MG	12 month Average
Aug – 23	232,084	1,171,026	1,403,110	734.2	$124.00	$113.36
Sep – 23	263,763	1,153,081	1,416,844	700.3	$133.20	$116.80
Oct – 23	215,805	1,026,506	1,242,311	672.3	$111.46	$118.88
Nov – 23	193,321	980,965	1,174,286	651.4	$108.25	$118.06
Dec – 23	199,553	832,346	1,031,899	604.9	$116.05	$118.43
Jan -24	200,971	833,145	1,034,117	631.6	$116.13	$117.05
Feb-24	196,025	931,160	1,127,185	580.6	$124.03	$115.87
Mar – 24	191,202	812,004	1,003,207	602.3	$109.97	$115.16
Apr – 24	198,737	914,469	1,113,206	633.6	$112.68	$116.11
May – 24	198,751	960,472	1,159,223	664.9	$114.75	$116.53
June – 24	243,835	1,065,598	1,309,434	756.7	$126.63	$118.29
July – 24	246,538	1,270,783	1,517,321	803.5	$141.86	$119.90
Aug – 24	258,930	1,214,981	1,473,911	845.3	$134.71	$121.06

Water Quality Strategic Planning

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

- Finished water pH was held within the designated 7.1-7.3 range.
- Finished water chlorine residual was maintained above a 1.2 ppm leaving the facility.

Prepared by: Brandon Good, Operations Superintendent
Reviewed by: Chris Weber, Operation and Maintenance Manager