ANDERSON REGIONAL
JOINT WATER SYSTEM

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

BOARD AGENDA

Board of Commissioners
August 25, 2021
11:30 am

Call to Order / Determination of Quorum
Pledge of Allegiance
Commissioners' Comments
Public Comment

I. Approval of Minutes June 17, 2021

II. Consent Calendar (Old Business)

1. None

III. Items requiring immediate action

1. **None**

IV. Discussion (New Business)

1. ARJWS Interagency Communications Plan
2. Strategic Plan Review for FYE 2021
3. Executive Director's Report (Oral)

V. Informational Reports

1. Financial & Administration Report
2. Operations Report
3. Personnel Report

VI. Closed Executive Session

1. None.

VII. Adjournment

Future planned meeting dates of the Anderson Regional Joint Water System Board are:

- Wednesday, October 27, 2021
- Wednesday, December 22, 2021
- Wednesday, February 23, 2022

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Your Community-Owned and Operated System

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www.arjwater.com

MINUTES OF THE ANDERSON REGIONAL JOINT WATER SYSTEM June 17, 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; Patrick Jackson, Starr-Iva; Mitch Ellenburg, Belton-Honea Path; Tommy Phillips, Broadway; Dyke Spencer, Powdersville; David Rogers, Town of Williamston; Chuck Cortez, Big Creek-Hammond; Evan Link; Town of Pendleton; Phillip Mishoe, Town of Central; Jeff Caldwell, City of Anderson

ABSENT: Dwight Edwards, West Anderson; Douglas Locke, Broadway; Jeremy Gillespie, Sandy Springs; Larry Harrell, Homeland Park

OTHERS PRESENT: Scott Willett, ARJWS; Lisa Evatt, ARJWS; Erik Rolfe, ARJWS; Kendall Cleary, AJRWS; Christopher Weber, ARJWS; Jodi Logan, ARJWS; Trey Burns, ARJWS; David Gailey, ARJWS

Chairman Benjie McGill called the Board meeting of Anderson Regional Joint Water System to order at 11:55 a.m. on June 17, 2021.

Chairman McGill asked for any Commissioner comments. Mr. Spencer discussed details regarding Powdersville Water issues with USIC services. Mr. McGill announced that Mr. Caldwell has accepted a position with ARJWS and that this will be his last meeting on the Board of Commissioners. Mr. Caldwell served 2 terms as Chairman.

There were no public comments.

Mr. Spencer made a motion to approve the April 22, 2021 minutes and Mr. Cortez seconded. Motion carried.

I. Consent Calendar (Old Business)

1. FY 2021/22 Budget – Final Reading

Mrs. Cleary recommended the approval of the annual budget for fiscal year 2021/22 with slight changes since the first reading. The proposed annual budget is for $12.12 million. The budget will fund $5.36 million in annual operating expenses, and $1.57 million in system R&R. In total, the proposed budget represents a 4.00% net change over the approved FY 2020/21 budget. Mr. Willett asked for any comments, there were none. Mr. Jackson made a motion to approve the final reading of the proposed FY 2021/22 Annual Budget. Mr. Spencer seconded. The motion passed with nine yea votes and Mr. Rogers opposing.

2. Clemson University Wholesale Rate-FY 2021/22-Final Reading

Mr. Willett recommended the approval of the 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. Jackson made a motion to increase the existing water rate for Clemson University to $2.05 per thousand gallons. Mr. Mishoe made a second. The motion passed unanimously.

II. Items requiring immediate action

1. FY 2021/22 Board Officer Elections

Mr. Willett stated that ARJWS shall elect Board Officers each year with each member of the Board having 1 (one) vote. The Nominating Committee has made the recommendations for FY 2021/22 Board Officers: Chairman Dyke Spencer, Powdersville Water District; Vice Chairman Patrick Jackson, Starr-Iva Water District; Secretary Phillip Mishoe, Town of Central. The establishment of an Executive Committee is to provide additional advice and counsel to the Chairman. The recommendations for At-large Executive Committee members are Dwight Edwards, West Anderson Water District and Chuck Cortez, Big Creek-Hammond Water Districts. Mr. Willett noted that the elected will take office on July 1, 2021, and will serve until replaced. Mr. Willett asked for any comments or additions to the slate of nominated candidates, there were no comments. Mr. McGill requested a motion to nominate the listed Board Officers. Mr. Caldwell made a motion, Mr. Phillips seconded. The motion carried. Mr. McGill requested a motion to nominate the listed At-large members. Mr. Jackson made a motion, Mr. Caldwell seconded. The motion carried.

2. Future Board Meeting Dates

Mr. Willett made a recommendation to establish the fourth Wednesday of each month for future Board meetings. COVID related changes to facility availability required several member agencies to adjust their meeting schedules leading to a continuing conflict with the System Board dates. Ad Hoc changes to the planned meeting dates have created further conflict for other Commissioners resulting in reduced attendance threatening the ability to obtain the quorum necessary to legally conduct business. To address this issue, management is proposing the adoption of the fourth Wednesday of each month be reserved for Board meetings with meeting times remaining at 11:30 – 1:00. Normal business needs allow the Board to conduct required meetings during even months, but reserving each month provides a preplanned opportunity to

conduct any special business. Mr. Willett asked for any comments on future Board meeting dates, there were no comments. Mr. Mishoe made a motion to establish the fourth Wednesday of each month for future Board meetings, Mr. Cortez seconded. The motion carried.

III. Discussion (New Business).

1. Executive Director's Report (Oral)

Mr. Willett gave an update on the restructure of DHEC; State Water Planning, ARJWS strategic 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. Closed Executive Session

1. Personnel: Annual Executive Director's Performance Review

As stated by Chairman Benjie McGill:
A CLOSED EXECUTIVE SESSION HAS BEEN REQUESTED PURSUANT TO THE SC FREEDOM OF INFORMATION ACT SECTION 30-4-70(a)(1) FOR THE DISCUSSION OF EMPLOYMENT, APPOINTMENT, COMPENSATION, PROMOTION, DEMOTION, DISCIPLINE OR RELEASE OF AN EMPLOYEE REGULATED BY A PUBLIC BODY.

A motion was made by Mr. Spencer to enter a closed executive session at 12:32 p.m. and seconded by Mr. Jackson. Mr. Caldwell declared a potential conflict, exited the Boardroom and did not participate in the closed session.

A motion was made by Mr. Spencer to exit the closed executive session at 12:53 p.m. and seconded by Mr. Mishoe.

As stated by Chairman Benjie McGill:
The Board has concluded its Closed Executive Session and per the SC Freedom Act, a motion was made by Mr. Cortez to accept no actions taken on the Executive Director Performance Appraisal and was seconded by Mr. Mishoe. The motion was unanimous.

VI. Adjournment

With no further business, Mr. Spencer made a motion to adjourn at 12:54 p.m. and Mr. Rogers seconded. Motion carried.

Respectfully submitted,

Phillip Mishoe
Town of Central

ANDERSON REGIONAL
JOINT WATER SYSTEM

Communication Plan to Member Agencies

Why Communicate?

To be a true family of utilities, we must openly communicate with each other so that we can all do what we were created to do: serve the public. Trust starts amongst us before trust is built with the public.

What to Communicate?

Any and everything at ARJWS that falls under the following three "threat" levels:

1. **Should Not Affect** you now but could in the future.
    a. Ex: A scenario where we are one asset failure away from being able to treat or deliver water.
2. **May Affect** some of you.
    a. Ex: A line leak on the Clemson line.
3. **Will Affect** some or all of you.
    a. Ex: Anything affecting finished water quality (even aesthetic) or water delivery.

At any of these levels, ARJWS will communicate with all 15 member agencies.

How to Communicate?

We understand member agencies generally want to communicate directly with their customers, and we support that 100%. However, when we encounter an event that affects all of us, it would be in the best public interest that we all are communicating the same information.

An email chain will be started from ARJWS to create a common point of contact for all of us. Please "Reply All" when responding so that we are all receiving the same information and language, and so that we can have real time information as we troubleshoot from the plant.

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BOARD MEMORANDUM

August 11, 2021

Subject

Finance and Administration Report

Discussion

Billing

Meters were read on July 29, 2021, with usage up 0.34% from last month (for the same number of days) and down 8.15% from last year (for the same number of days).

AGENCY	PREV.YR SAME MONTH	LAST MONTH	CURRENT
# of Billing Days	**30**	**34**	**29**
Anderson	136,278,948	132,285,618	136,475,393
Big Creek	30,400,000	33,700,000	23,400,000
Broadway	22,164,313	24,324,086	18,370,026
Clemson	60,502,227	56,843,931	55,748,815
Clemson University	29,505,225	32,908,881	26,075,500
Hammond	81,777,103	85,933,793	61,478,189
Homeland Park	21,575,603	23,803,914	18,954,312
Pendleton	12,608,828	12,703,691	9,533,120
Powdersville	8,584,689	4,448,132	7,948,744
Sandy Springs	66,182,000	71,266,779	57,919,347
Starr-Iva	31,525,790	35,810,631	33,313,498
West Anderson	47,533,290	53,950,309	38,985,698
Williamston	15,934,220	17,690,193	13,062,193
TOTAL	**564,572,236**	**585,669,958**	**501,264,835**

Safety Training

July: Lock-Out/Tag-Out

Dennis Setser with Rogers & Callcott came onsite to teach employees on the following:

- Company and Employee Responsibilities
- LOTO Definitions
- Energy Identification,
- Types of Energy
- Tag Limitations
- Energy Control Procedures
- Applications and Release of LOTO
- Group LOTO

- Procedures for Shift Changes
- Procedure for Multiple Energy Sources
- Outside Contractor Requirements
- Periodic Inspections

August: **Safe Handling of Sodium Hypochlorite**

Days since the last work-related injury at ARJWS: **2,841**

Prepared by: Kendall Cleary, Accountant
Approved by: Jeff Caldwell, Deputy Director

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

ANDERSON REGIONAL
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Profit & Loss
For the Month ending July 31, 2021

Ideal Percentage: 8%

1+11

	Annual Budget	YTD Budget (1 month)	YTD Actual	Year End Projection	% of Budget Used	YTD Variance	
Operating Revenue							
Operations and Maintenance	5,363,635	446,970	433,244	5,349,910	8%	(13,725)	
Capital Charges	5,221,245	435,104	435,104	5,221,245	8%	-	
Renewal and Replacement							
Water System	1,498,635	124,886	131,206	1,504,954	9%	6,319	
Pump Station	67,738	5,645	6,030	68,123	9%	385	
Miscellaneous	51,105	4,259	40,693	87,539	80%	36,434	A
Total Operating Revenue	12,202,358	1,016,863	1,046,277	12,231,772			
Operating Expenses							
Salaries and Wages	1,650,100	137,508	178,534	1,691,126	11%	41,026	
Payroll Taxes and Employee Benefits	645,700	53,808	49,175	641,066	8%	(4,634)	
Operations and Maintenance							
Administrative Expenses	417,435	34,786	8,944	391,593	2%	(25,842)	
Operations Expenses							
Lab Supplies/Uniforms/Safety Equipment	136,700	11,392	4,378	129,687	3%	(7,013)	
Chemicals	572,000	47,667	58,762	583,095	10%	11,095	
Sludge and Chemical Disposal	150,000	12,500	-	-	0%	(12,500)	
Utilities and Security	1,105,600	92,133	109,268	1,122,734	10%	17,134	
Maintenance Expenses	299,200	24,933	15,427	289,693	5%	(9,507)	
Professional Fees	110,000	9,167	-	100,833	0%	(9,167)	
Insurance	94,900	7,908	1,469	88,461	2%	(6,439)	
Debt Expenses	5,221,245	435,104	435,318	5,221,459	8%	214	
Junior Lien Bond Payments	-	-	18,000	18,000	100%	18,000	
Source Water Protection	51,000	4,250	-	46,750	0%	(4,250)	
Miscellaneous Expenses	131,000	10,917	2,586	122,670	2%	(8,330)	
Total operating expenses before depreciation	10,584,880	882,073	881,861	10,447,167			
Net operating income	1,617,478	134,790	164,416	1,784,604			
Raw Water							
Raw Water Income	58,223	4,852	238,517	291,888	410%	233,665	
Raw Water O&M Expenses	-	-	15,207	15,207	100%	15,207	
Raw Water Operating Income	58,223	4,852	223,310	276,682			

	Cash Balances	Days Cash on Hand
Operating Cash	1,594,456	55
Capital Project Fund	1,964,623	
R&R Funds (Restricted)	1,979,773	
	5,538,852	

A: Over budget due to the annual Pioneer payment of $40,000.

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BOARD MEMORANDUM

August 5, 2021

Subject
Operations Report

Discussion

Operations

As of August 5, 2021, Lake Hartwell's surface elevation was 660.22 ft., 0.22 ft. above full pool. Raw water is being drawn from the top gate of the intake structure. Water temperature at the top gate is 84.0°F. The Joint Water System reached 100% of settled water turbidity goals for the month of June. Raw water pH levels are relatively constant. Settled and Finished water pH levels are normal. The maximum day for July water production was 49.2% of Finished water capacity.

In addition to water quality sampling for the Lake Hartwell Water Treatment Plant, Joint Water System staff processed 149 Total Coliform distribution samples for local entities during the month of July.

Weather Data

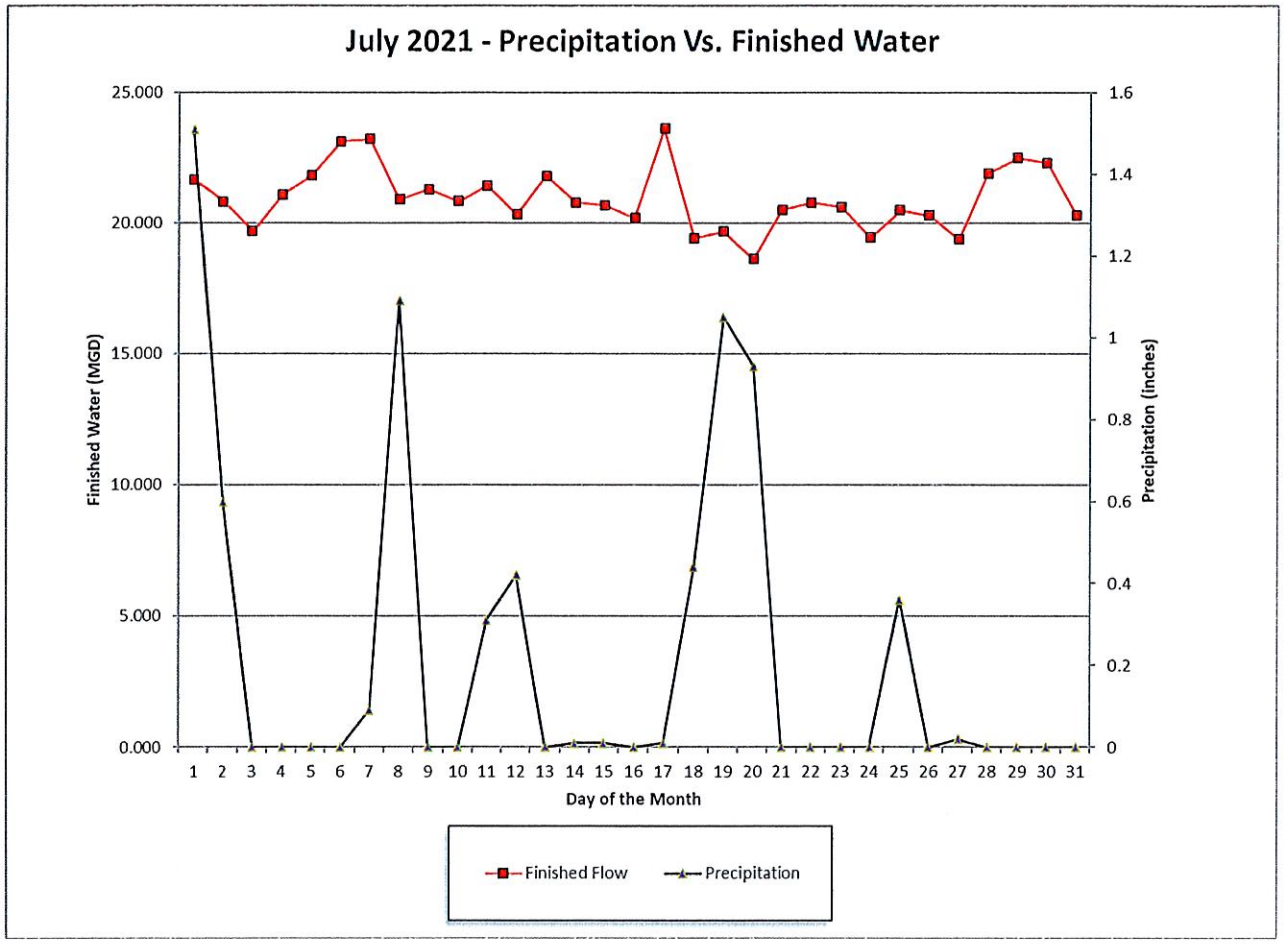
	Minimum	Maximum	Total
Rainfall	0.00 in.	1.51 in.	6.85 in.*
Temperature	55.8° F	90.5° F	N/A
Humidity	26%	100%	N/A

*NOTE: Weather station at the plant reported 7.69 and 5.28 inches of rain for 7/23 and 7/24, respectively. Cross reference with other weather reporting applications showed zero rain for these two days. Data was adjusted to zero for these two days.

Water Production Data

	Average	Minimum	Maximum	Total
Raw Water (MG)	20,949,000	17,092,000	26,799,000	649,416,000
Finished Water (MG)	20,955,000	18,626,000	23,628,000	649,613,000
Finished Max Capacity	43.6%	38.8%	49.2%	43.6%

NOTE: Percentages are finished water capacities.



Water Quality Data

	Raw	Settled	Finished
pH	6.81	6.63	7.14
Turbidity (NTU) Range	1.20 to 5.30	0.32 to 0.79	0.03 to 0.05
Turbidity (NTU) Average	1.92	0.46	0.04
Turbidity (NTU) Exceedance	-	0.00%	0.00%
Total Organic Carbon	1.65	-	1.02
Fluoride Average (ppm)	-	-	0.50
Residual Disinfectant (ppm)	-	-	1.69
TTHM (DBP)	-	-	6.0 ppb
Methylisoborneol (MIB)*	3.5 NG/L	-	<1.0 NG/L
Geosmin*	2.7 NG/L	-	<1.0 NG/L

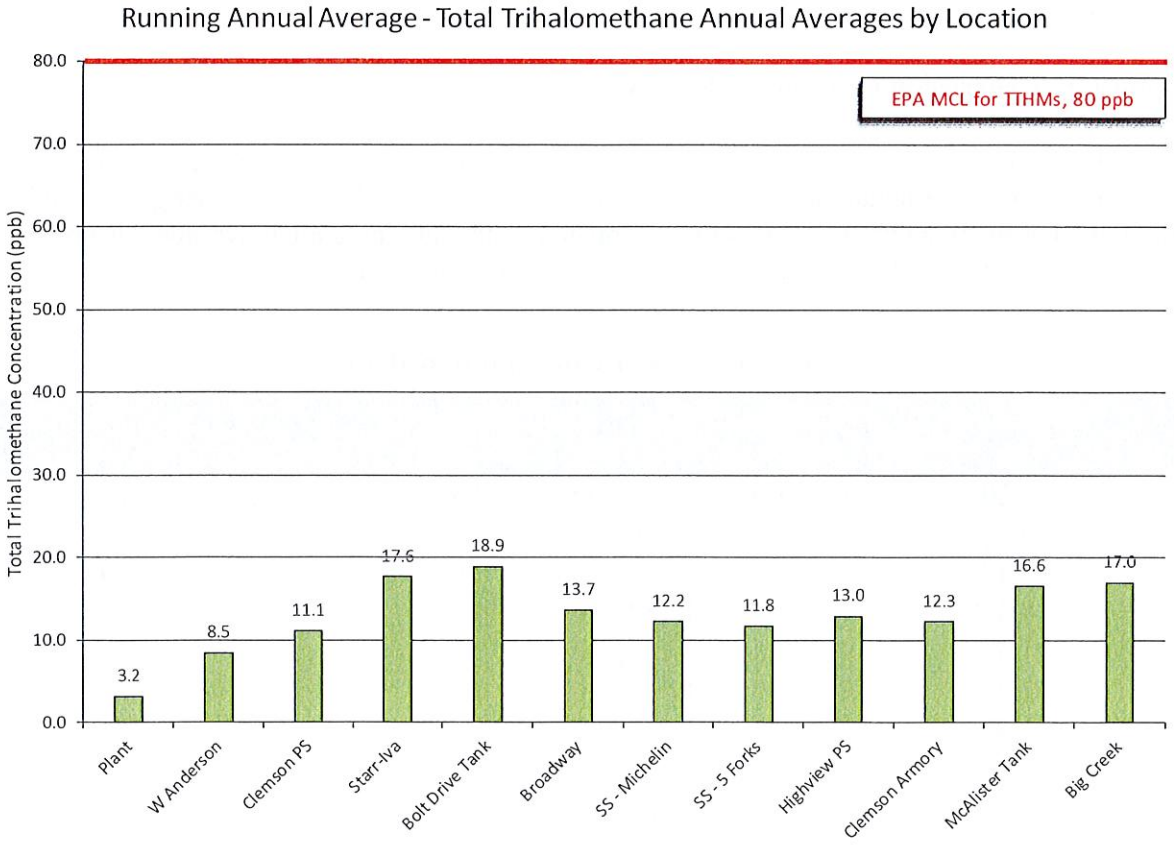
*Note: For the general population, detection of MIB & Geosmin occurs at 10 NG/L.

**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



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 July, the following Water Quality Strategic Planning goals were met:

- Finished water pH was held within the designated 7.1-7.2 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.

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 July, 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 1.5 ppm.

Monthly Power Consumption Data

Month	On Peak kW	Off Peak kW	Total kW	Finished Water MG	$/ MG	12 month Average
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
May – 21	215,996	909,415	1,125,411	662.4	$74.97*	$92.58
Jun – 21	218,574	1,098,505	1,317,079	667.4	$94.20	$94.16
Jul – 21	271,224	947,223	1,218,447	649.6	$122.47	$94.06

*Noting that the March and May bills from Duke Energy were lower than historical normal.

Monthly Power Consumption Update

For the month of July, ARJWS treated 649,613,000 gallons of water at a power cost of $122.47 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 $94.06.

Discussion

July Operations Highlights

- Robert Yates joined ARJWS on July 19th. He is an "A" licensed operator with a wealth of water and wastewater experience.
- Ozone generator #2 went down with electrical problems in early June. Currently, there is no impact to operations. We have been working diligently with Xylem to get generator #2 back online.
- Working towards bulk hypochlorite for disinfection.

Prepared by: Chris Weber, Operations Manager
Approved by: Jeff Caldwell, Deputy Director

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BOARD MEMORANDUM

August 05, 2021

Subject

Personnel Report: Staff Member Focus

Discussion

Anderson Regional Joint Water would like to introduce Quentin Ervin. Quentin was hired in October 2020, as a Water Treatment Plant Operator Trainee. Quentin currently maintains his Water Treatment Class "D" license. Quentin graduated from Tri-County Technical College with his Associates in General Engineering in April 2020.

Quentin resides in Anderson with his wife, Suzanna Ervin and dog, Ginger. They are expecting their firstborn baby girl, Laura Kate Ervin in October. Quentin's hobbies include boating, fast cars, disc golf, going to the beach, and grilling out with family and friends.

Quentin enjoys the relationships he has made thus far at ARJWS and the education he has received. "I am dedicated to working at ARJWS because treating the water for the people of Anderson County is important for the future. I am continuously learning new things every day about the treatment process and water."