



Jefferson County Water Authority
MONTHLY MEETING
711 WEST MAIN STREET, FESTUS, MO 63028
Thursday, June 26, 2025 at 10:00 AM

"OPEN TO PUBLIC"

Virtual Viewing on the City of Festus You Tube Channel
Link to City's channel can be found on main page at www.cityoffestus.org.

AGENDA

- I. Call to Order**
- II. Roll Call**
- III. Pledge of Allegiance**
- IV. Approve Minutes**
 - a. Minutes May 15, 2025
- V. Approval of Bills**

Vendor	Check Amount	Description
Miscellaneous Vendors	\$31,207.40	See Attached List "Unpaid"
Miscellaneous Vendors	\$29,798.65	See Attached List "Released"
Employee & Taxes (Released)	\$15,988.84	Payroll/Payroll Taxes for Pay Date 5/9/25
Employee & Taxes (Released)	\$16,130.05	Payroll/Payroll Taxes for Pay Date 5/23/25
UMB Bank (Released)	\$61,000.00	Debt Service Payment 2021A Due 6/5/25
UMB Bank (Released)	\$10,418.10	Debt Service Payment 2012 Due 6/15/25
TOTAL	\$164,543.04	

- VI. Old Business**
- VII. New Business**

Agenda for June 26, 2025 was posted on Wednesday, June 18, 2025 at Festus City Hall by Miranda O'Haleck at approximately 12:00 pm.

VIII. Resolutions

IX. Reports

a. Reports for Period Ending 5/31/25- **Informational Only**

- **Trial Balance**
- **General Ledger Cash Activity**
- **Revenue & Expenditure Report**

b. Plant Manager's Report Jun-25

c. JCWA Investment Schedule 6-16-25

d. SCADA Report Jun-25

X. Adjourn



MONTHLY MEETING
711 West Main Street, Festus, MO 63028

Meeting Minutes

Thursday, May 15, 2025

CALL TO ORDER:

Greg Camp called the meeting at approximately 10:00 a.m.

ROLL CALL:

Members Present: Greg Camp, Mark Johnson, Michael Christopher, Logan Jaskiewicz, Kevin Dennis (Zoomed)
Absent: Terry Thomas
Also Present: Jeff Crannick JCWA Plant Manager and Miranda O'Haleck

PLEDGE OF ALLEGIANCE

APPROVAL OF MINUTES:

Greg Camp entertained a motion to approve the minutes from April 17, 2025, minutes as presented.

Motion for Approval: Mark Johnson
Second: Michael Christopher
Ayes: 4
Nays: 0
Absent: 1

APPROVAL OF BILLS:

Greg Camp stated approval of bills is \$173,895.33. He entertained a motion.

Motion for Approval: Michael Christopher
Second: Kevin Dennis
Roll Call: Kevin Dennis, Greg Camp, Michael Christopher, Mark Johnson, Logan Jaskiewicz
Nays: 0
Absent: Terry Thomas

OLD BUSINESS: N/A



NEW BUSINESS:

2024 Water Quality Report: Greg Camp mentioned that the report came back great.

Set June Meeting Date: Greg Camp stated that June meeting would fall on Juneteenth when City Hall is closed, asked for preference to move meeting to week before or after. Michael Christopher stated he was good with either. Greg recommended meeting date be 6-26-25 at 10am.

Motion for Approval: Greg Camp
Ayes: 4
Nays: 0
Absent: Terry Thomas

RESOLUTIONS: 2025-2 Resolution Authorizing Changes to Internal Control Policy

Greg Camp stated that this was to adopt the new internal control policy changes as discussed in the last meeting.

Motion to Repeal & Adopt 2025-2: Mark Johnson
Second: Michael Christopher
Roll Call: Michael Christopher, Mark Johnson, Greg Camp, Kevin Dennis, Logan Jaskiewicz
Absent: Terry Thomas

REPORTS:

Treasurer Report for period ending 4/30/25 – Informational Only: No discussion by the board.

Plant Manager Reports:

Greg Camp noted that Jeffrey Schopp has achieved his DNR “B” certified license and stated that the level of certifications at the plan continue to rise.

Board of Directors:

Greg Camp: None
Kevin Dennis: None
Mark Johnson: None
Terry Thomas: Absent



Michael Christopher: None

Logan Jaskiewicz: None

ADJOURN:

Michael Christopher made a motion to adjourn the meeting, seconded by Mark Johnson. Motion carried unanimously.

These minutes were approved this _____ day of _____, 2025.

Greg Camp, President

Attest:

Jennifer Filkins, Secretary

Jefferson County Water Authority

Check Detail Register - UNPAID

1/3
June 18, 2025 11:10 AM

JCWA MEETING JUNE 26, 2025

Invoice Number	GL Number	Vendor Name	Check Amount	Comment
BROOKS & ASSOCIATES, INC.				
10964157	60-6000-53550.00	Maintenance & Repair	\$465.37	FLUORIDE FEED PUMP PARTS
Total for	BROOKS & ASSOCIATES, INC.		\$465.37	
FARM PLAN - BUCHHEIT'S				
87666693	60-6000-56400.00	Uniforms	\$139.95	BOOTS-PATTON
Total for	FARM PLAN - BUCHHEIT'S		\$139.95	
CEE KAY SUPPLY, INC.				
CK4532947	60-6000-56550.00	Chemicals	\$1384.63	BULK C02-14 TON
Total for	CEE KAY SUPPLY, INC.		\$1384.63	
CENTRAL POWER SYSTEMS & SERVICES				
R116009573:01	60-6000-54550.00	MAINTENANCE & SOFT	\$460.00	MAY 2025 GENERATOR QUARTERLY INSPECTION
Total for	CENTRAL POWER SYSTEMS & SERVIC		\$460.00	
CRYSTAL HEATING & COOLING, INC.				
126516404	60-6000-54550.00	MAINTENANCE & SOFT	\$385.00	HVAC QUARTERLY MAINTENANCE
Total for	CRYSTAL HEATING & COOLING, INC.		\$385.00	
CITY OF FESTUS				
18466	60-6000-51800.00	Computer Services Fee	\$20.00	MAILBOX + ONLINE MAY-25
	60-6000-51800.00	Computer Services Fee	\$23.00	FULL OFFICE VERSION MAY-25
SERVICES JUNE-25	60-6000-51190.00	Other Personal Services	\$882.42	PERSONAL SERVICES FOR JUNE-25
AMERICAN JUNE-25	60-0000-22820.00	American Fidelity Liab.	\$269.76	AMERICAN FIDELITY PREIMUMS FOR JUN-25
POSTAGE MAY-25	60-6000-54000.00	Postage	\$2.07	POSTAGE USED IN MAY-25
18510	60-6000-51800.00	Computer Services Fee	\$20.00	MAILBOX + ONLINE JUN-25
	60-6000-51800.00	Computer Services Fee	\$23.00	FULL OFFICE VERSION JUN-25
745781129	60-6000-57100.00	Advertising	\$669.24	2024 ANNUAL WATER QUALITY REPORT
Total for	CITY OF FESTUS		\$1909.49	
Grainger -				
9508604858	60-6000-59999.00	Other Capital Outlay	\$2060.87	PLANT LED LIGHTING IMPROVEMENTS
9524974152	60-6000-57000.00	DUES, LICENSES & PER	\$129.00	RED PASS ANNUAL MEMBERSHIP
9527321542	60-6000-59999.00	Other Capital Outlay	\$176.32	LED LIGHTING PROJECT
Total for	Grainger -		\$2366.19	

HOME DEPOT U.S.A., INC.

Jefferson County Water Authority

Check Detail Register - UNPAID

2/3
June 18, 2025 11:10 AM

JCWA MEETING JUNE 26, 2025

Invoice Number	GL Number	Vendor Name	Check Amount	Comment
7610084	60-6000-59999.00	Other Capital Outlay	\$299.11	LED LIGHTING PROJECT
Total for		HOME DEPOT U.S.A., INC.	\$299.11	
MCENERY AUTOMATION CORPORATION				
1432601	60-6000-59999.00	Other Capital Outlay	\$4960.00	SCADA IMPROVEMENT CAPITAL
Total for		MCENERY AUTOMATION CORPORATI	\$4960.00	
Mississippi Lime Company				
CD96696	60-6000-56550.00	Chemicals	\$10235.48	25.010TN QUICKLIME
Total for		Mississippi Lime Company	\$10235.48	
PREFERRED RESOURCE NETWORK, INC.				
15627	60-6000-52000.00	Health Insurance Expen	\$500.00	ANNUAL EAP SERVICES 3/1/25-2/28/25
Total for		PREFERRED RESOURCE NETWORK, IN	\$500.00	
PVS DX, INC.				
237000666-25	60-6000-56550.00	Chemicals	\$1870.00	2750LB HYDROFLUOROSILICIC ACIS
237000610-25	60-6000-56550.00	Chemicals	\$1850.40	2000# CHLORINE
237000558-25	60-6000-56550.00	Chemicals	\$1850.40	2000# CHLORINE
Total for		PVS DX, INC.	\$5570.80	
HD SUPPLY, INC.				
INV00711299	60-6000-56305.00	Lab Supplies	\$2430.81	SAMPLE PAKS, REAGANT, ACID PILLOWS
Total for		HD SUPPLY, INC.	\$2430.81	
Waste Management of St. Louis				
7509220-1840-3	60-6000-53250.00	Trash Service	\$100.57	(2) YARD DUMPSTER FOR JUN-25
Total for		Waste Management of St. Louis	\$100.57	

Jefferson County Water Authority
Check Detail Register - UNPAID

JCWA MEETING JUNE 26, 2025

Invoice Number	GL Number	Vendor Name	Check Amount	Comment
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Total Amount Being Paid: \$31207.40

JEFFERSON COUNTY WATER AUTHORITY

Check Detail Register - (RELEASED)

1/3
June 12, 2025 11:26 AM

JCWA MEETING JUNE 26, 2025

Invoice Number	GL Number	Vendor Name	Check Amount	Comment
AMERENUE				
RIVER METER MAY-25	60-6000-53100.00	Electricity	\$4829.11	RIVER METER FROM 4/22-5/21/25
PLANT METER MAY-25	60-6000-53100.00	Electricity	\$7546.67	PLANT METER FROM 4/22-5/21/25
Total for	AMERENUE		\$12375.78	
AT&T COMPANY				
287351353413-5/25	60-6000-54200.00	Telephone	\$97.13	CELLPHONE/TABLET PLAN
Total for	AT&T COMPANY		\$97.13	
Bauman Oil Distributors, Inc.				
130545	60-6000-55100.00	Gas, Oil & Antifreeze	\$411.99	DIESEL FUEL FOR GENERATOR
Total for	Bauman Oil Distributors, Inc.		\$411.99	
BRENNTAG MID-SOUTH, INC.				
BMS926226	60-6000-56550.00	Chemicals	\$10712.00	30,120 LBS AMMONIUM SULFATE
Total for	BRENNTAG MID-SOUTH, INC.		\$10712.00	
CHARTER COMMUNICATIONS				
INTERNET JUNE-25	60-6000-54200.00	Telephone	\$120.00	INTERNET SERVICE 5/24-6/23
Total for	CHARTER COMMUNICATIONS		\$120.00	
COMMERCE BANK - COMMERCIAL CARDS				
34602507372	60-6000-57000.00	DUES, LICENSES & PER	\$204.25	PERMIT FEE FOR 6/2025 + PROCESSING FEE
DMV 5/9/25	60-6000-57000.00	DUES, LICENSES & PER	\$74.71	TRAILER TITLE & PERM PLATES
HERKY COP 5/7/25	60-6000-55100.00	Gas, Oil & Antifreeze	\$55.79	19.719GAL GAL FOR TRUCK
HERKY COP 5/7/25 LM	60-6000-55100.00	Gas, Oil & Antifreeze	\$29.53	10.44 GAL GAS FOR LAWN MOWER
Total for	COMMERCE BANK - COMMERCIAL CA		\$364.28	
Family Support Payment Center-				
STROUP 5/23/25	60-0000-22500.00	Garnishment Liability	\$175.00	STROUP DEDUCTION FOR 5/23/25
STROUP 6/6/25	60-0000-22500.00	Garnishment Liability	\$175.00	STROUP DEDUCTION FOR 6/6/25
Total for	Family Support Payment Center-		\$350.00	
MISSOURI EMPLOYERS MUTUAL INS. CO.				
WORK COMP 4/1/25 ADD	60-0000-18010.00	Prepaid Expenses	\$567.00	ADDTL DUE ON POLICY AFTER FINAL AUDIT
WORK COMP 4/25 ADD	60-6000-57200.00	Insurance, Claims & Bon	\$13.00	2ND INJURY FUND SURCHARGE
Total for	MISSOURI EMPLOYERS MUTUAL INS.		\$580.00	

JEFFERSON COUNTY WATER AUTHORITY

Check Detail Register - (RELEASED)

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June 12, 2025 11:26 AM

JCWA MEETING JUNE 26, 2025

Invoice Number	GL Number	Vendor Name	Check Amount	Comment
METROPOLITAN LIFE INSURANCE COMPANY				
METLIFE JUNE-25	60-0000-22700.00	Life Insurance Liability	\$55.96	LIFE INSURANCE LIABILITY
	60-0000-22702.00	DENTAL INSURANCE LI	\$377.74	DENTAL INSURANCE LIABILITY
	60-0000-22703.00	VISION INSURANCE LI	\$65.88	VISION INSURANCE LIABILITY
	60-6000-48000.00	Misc. Income	-\$0.10	ROUNDING
Total for	METROPOLITAN LIFE INSURANCE CO		\$499.48	
NATIONWIDE TRUST COMPANY, FSB				
401K 6/6/25	60-0000-22360.00	401(K) Deferred Liabilit	\$773.81	PAYROLL DEDUCTION FOR PAY DATE 6/6/25
401K 5/23/25	60-0000-22360.00	401(K) Deferred Liabilit	\$777.23	PAYROLL DEDUCTION FOR PAY DATE 5/23/25
Total for	NATIONWIDE TRUST COMPANY, FSB		\$1551.04	
UNITED HEALTHCARE SERVICES, INC.				
HEALTH MAY & JUN-25	60-0000-22600.00	HEALTH INSURANCE LI	\$7469.68	HEALTH INSURANCE MAY & JUN-25 PREMIUMS
	60-0000-13900.00	Accounts Receivable Ot	-\$4732.73	2024 UHC SURPLUS REFUND
Total for	UNITED HEALTHCARE SERVICES, INC.		\$2736.95	

JEFFERSON COUNTY WATER AUTHORITY
Check Detail Register - (RELEASED)

JCWA MEETING JUNE 26, 2025

Invoice Number	GL Number	Vendor Name	Check Amount	Comment
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Total Amount Being Paid: **\$29798.65**

JCWA PAYROLL

Bi-Weekly Payroll

DATE: 5/09/25

PERIOD FROM: 4/20/25-5/03/25

NET PAY: \$ 11,697.66

TAXES: \$ 4,291.18

TOTAL \$ 15,988.84

 / 
AUTHORIZED ACH/VERIFIED

1498771
Confirmation No.


Processed By

 
FIT TAX SIT TAX

 
401K Done Supports

Albrecht:
Overtime (0)
Holiday Overtime (0)

Patton:
Overtime (0)
Holiday Overtime (0)

Schopp:
Overtime (12)
Holiday Overtime (0)

Shane:
Overtime (0)
Holiday Overtime (0)

Stroup:
Overtime (0)
Holiday Overtime (0)

JCWA PAYROLL

Bi-Weekly Payroll

DATE: 5/23/25

PERIOD FROM: 5/04/25-5/17/25

NET PAY: \$ 11,803.60

TAXES: \$ 4,326.45

TOTAL \$ 16,130.05


AUTHORIZED ACH/VERIFIED

#1558937
Confirmation No.


Processed By


FIT TAX


SIT TAX


401K Done


Supports

Albrecht:
Overtime (0)
Holiday Overtime (8) @ Straight Rate

Patton:
Overtime (2)
Holiday Overtime (8)

Schopp:
Overtime (12)
Holiday Overtime (8) @ Straight Rate

Shane:
Overtime (0)
Holiday Overtime (0)

Stroup:
Overtime (2)
Holiday Overtime (8)

Good Morning, Miranda Ohaleck

Digital Activity ?

TRANSACTION DETAILS

SEND ACH

UMB Bank N A

\$61,000.00

Tracking ID: 1470645

Created Date: 4/29/2025

PAYMENT DETAILS

Created By

Miranda Ohaleck

Authorized

04/29/2025 4:15 PM

Authorized By

Miranda Ohaleck

Process Date

05/29/2025

Effective

06/02/2025

From Account

Water Authority 9614

Total Payments

1

ACH Header

JEFFERSON COUNTY

SEC Code

PPD

Description

Copy of Copy of DEBT

Company Entry Description

JCWA 2021A

Subsidiary Name

JEFFERSON COUNTY

Tax ID

9030407826

RECIPIENT DETAILS

Name	Account	Type	Routing	Amount
UMB Bank N A	9801018981	Checking	101000695	\$61,000.00

Name	Account	Type	Routing	Amount
Recipient Information				
ACH Name				
UMB Bank N A				

Digital Activity ?

TRANSACTION DETAILS

SEND ACH

UMB Bank N A

Tracking ID: 1590474

\$10,418.10

Created Date: 5/27/2025

PAYMENT DETAILS

Created By

Miranda Ohaleck

Authorized

05/27/2025 9:53 AM

Authorized By

Miranda Ohaleck

Process Date

06/11/2025

Effective

06/13/2025

From Account

Water Authority 9614

Total Payments

1

ACH Header

JEFFERSON COUNTY

SEC Code

PPD

Company Entry Description

139101

Subsidiary Name

JEFFERSON COUNTY

Tax ID

9030407826

RECIPIENT DETAILS

Name	Account	Type	Routing	Amount
UMB Bank N A	9801018981	Checking	101000695	\$10,418.10

Name	Account	Type	Routing	Amount
Recipient Information				
ACH Name				
UMB Bank N A				

JCWA TRIAL BALANCE FOR CITY OF FESTUS

Balance As of 05/31/2025

GL Number	Description	24-25 Amended Budget	YTD Balance 05/31/2024 (Abnormal)	THRU Increase	YTD DR 05/31/2025 (Decrease)	THRU Increase	YTD CR 05/31/2025 (Decrease)	YTD Balance 05/31/2025 (Abnormal)
		Normal						Normal
Fund: 60 JCWA Fund								
Account Category: Assets								
Department: 0000 BALANCE SHEET ACCOUNTS								
60-0000-11005.00	JCWA Operating Cash Acct.		1,200,549.18		4,676,152.20		4,960,969.39	1,225,773.16
60-0000-11506.00	Wtr Replacement M/M Acct.		380,407.98		3,307,624.29		3,274,506.98	113,135.54
60-0000-11514.00	Water Reserve M/M Account		352,651.13		2,033,729.80		1,907,036.01	232,420.92
60-0000-12148.00	2012 PRINCIPAL INV. ACCT		9,570.83		28,518.68		19,047.68	9,522.26
60-0000-12149.00	2012 INTEREST INV. ACCT.		1,207.44		3,129.55		2,195.72	1,050.13
60-0000-12152.00	2021A DEBT SERVICE FUND		410,567.26		460,474.35		178,500.00	500,531.82
60-0000-12153.00	2021B DEBT SERVICE FUND		153,535.47		0.00		0.00	0.00
60-0000-13000.00	Investments		300,551.51		1,945,501.81		1,541,125.09	711,167.92
60-0000-13004.00	Wtr Replacement Invest.		1,566,297.98		2,564,502.04		3,061,782.23	1,297,998.51
60-0000-13005.00	Wtr Reserve Investment		599,978.93		1,878,421.00		1,667,132.88	1,215,243.19
60-0000-13010.00	Herculaneum A/R- 2001C		352,946.34		0.00		0.00	0.00
60-0000-13011.00	Herky Contra A/R - 2001C		(352,946.34)		0.00		0.00	0.00
60-0000-13015.00	Herculaneum A/R - 2002A		3,766,570.12		0.00		0.00	0.00
60-0000-13016.00	Herky Contra A/R - 2002A		(3,766,570.12)		0.00		0.00	0.00
60-0000-13740.00	Non-Profit Water Recv.		240,002.00		1,938,897.00		1,923,808.00	247,349.00
60-0000-13900.00	Accounts Receivable Other		0.00		14,732.73		10,000.00	4,732.73
60-0000-13910.00	Accrued Interest Recv.		18,705.70		0.00		0.00	35,845.38
60-0000-16000.00	Inventory & Supplies		75,330.81		0.00		0.00	94,449.38
60-0000-17000.00	Land		373,444.45		0.00		0.00	373,444.45
60-0000-17005.00	Land Improvements		44,063.00		0.00		0.00	44,063.00
60-0000-17006.00	A/D Land Improvements		(25,389.67)		0.00		0.00	(29,396.08)
60-0000-17100.00	Buildings		2,640,483.94		9,251.66		9,251.66	3,831,012.74
60-0000-17251.00	Accumulated Depr. Bldgs.		(70,055.82)		0.00		0.00	(193,929.56)
60-0000-17253.00	Accum. Depr. Water System		(6,897,620.88)		0.00		0.00	(7,363,266.16)
60-0000-17255.00	Accum. Depr. Tools, Equip		(158,947.80)		0.00		0.00	(189,797.03)
60-0000-17256.00	Accum. Depr. Pump Equip.		(197,966.12)		0.00		0.00	(275,605.10)
60-0000-17257.00	Accum. Depr. Vehicles		(17,564.11)		0.00		0.00	(20,757.59)
60-0000-17300.00	Water System		22,650,554.43		0.00		0.00	22,650,554.43
60-0000-17610.00	Machinery-Equipment		650,746.90		0.00		0.00	906,444.11
60-0000-17700.00	Pumping Equipment		1,049,761.70		493.46		493.46	1,082,615.00
60-0000-17800.00	Automobiles		31,934.75		0.00		0.00	31,934.75
60-0000-17950.00	Computer Equipment		20,950.59		0.00		0.00	20,950.59
60-0000-17951.00	Accum. Depr. Computer		(13,669.31)		0.00		0.00	(15,749.67)
60-0000-18000.00	Construction in Progress		1,442,329.06		9,745.12		9,745.12	0.00
60-0000-18010.00	Prepaid Expenses		48,460.97		117,200.00		90,958.10	40,746.66
Total Department 0000:			26,880,872.30		18,988,373.69		18,656,552.32	26,582,484.48
Assets			26,880,872.30		18,988,373.69		18,656,552.32	26,582,484.48
Account Category: Liabilities								
Department: 0000 BALANCE SHEET ACCOUNTS								
60-0000-21000.00	Accounts Payable		35,304.58		1,744,244.15		1,727,307.27	36,969.60
60-0000-22000.00	Accrued Payroll		7,108.76		0.00		0.00	10,314.61
60-0000-22050.00	Accrued Vacation Time		0.00		0.00		0.00	13,329.26
60-0000-22100.00	Fed. Withholding Tax Liab		0.00		22,704.47		22,704.47	0.00
60-0000-22200.00	State Withholding Tax Liab.		0.00		7,925.00		7,925.00	0.00
60-0000-22300.00	Social Security Tax Liab.		0.00		33,282.26		33,282.26	0.00
60-0000-22305.00	Medicare Tax Liability		0.00		7,783.78		7,783.78	0.00
60-0000-22360.00	401(K) Deferred Liability		0.00		44,527.77		44,527.77	0.00
60-0000-22500.00	Garnishment Liability		0.00		2,800.00		2,800.00	0.00

JCWA TRIAL BALANCE FOR CITY OF FESTUS

Balance As of 05/31/2025

GL Number	Description	24-25 Amended Budget	YTD Balance 05/31/2024 (Abnormal)	THRU 05/31/2025 (Decrease)	YTD DR 05/31/2025 (Decrease)	THRU 05/31/2025 (Decrease)	YTD CR 05/31/2025 (Decrease)	YTD Balance 05/31/2025 (Abnormal)
Fund: 60 JCWA Fund								
Account Category: Liabilities								
Department: 0000 BALANCE SHEET ACCOUNTS								
60-0000-22600.00	HEALTH INSURANCE LIABILIT		3,349.16		24,986.84		31,808.68	7,469.68
60-0000-22700.00	Life Insurance Liability		54.20		442.56		498.52	55.96
60-0000-22702.00	DENTAL INSURANCE LIABILITY		359.76		2,967.98		3,167.96	377.74
60-0000-22703.00	VISION INSURANCE LIABILITY		65.88		527.04		566.66	65.88
60-0000-22820.00	American Fidelity Liab.		0.00		2,126.56		2,134.44	269.76
60-0000-26691.00	DEFERRED BOND PREMIUM 2001C & 2002A		53,670.55		0.00		0.00	0.00
60-0000-26692.00	ACCUM DEFERRED BOND PREMIUM 2001C/20		(53,670.55)		0.00		0.00	0.00
60-0000-26693.00	2021 BOND PREMIUM		1,702,852.90		0.00		0.00	1,702,852.90
60-0000-26694.00	2021 AMORT OF BOND PREMIUM		(248,332.70)		56,761.76		0.00	(333,475.34)
60-0000-28204.00	2021AB BOND PAYABLE		9,295,000.00		0.00		0.00	8,925,000.00
60-0000-28287.00	Accrued Interest Payable		92,998.26		2,650.40		2,650.40	90,347.86
60-0000-28300.00	2012 DIRECT LOAN PAYABLE		360,700.00		0.00		0.00	322,900.00
Total Department 0000:			11,249,460.80		1,953,730.57		1,887,157.21	10,776,477.91
Liabilities			11,249,460.80		1,953,730.57		1,887,157.21	10,776,477.91
Account Category: Fund Equity								
Department: 0000 BALANCE SHEET ACCOUNTS								
60-0000-30000.00	Fund Balance		14,565,730.09		0.00		0.00	15,407,611.84
Total Department 0000:			14,565,730.09		0.00		0.00	15,407,611.84
Fund Equity			14,565,730.09		0.00		0.00	15,407,611.84
Account Category: Revenues								
Department: 6000 JCWA								
60-6000-43005.00	CONTRIBUTED REVENUE	60,992.00	0.00		0.00		0.00	0.00
60-6000-43205.00	COUNTY REIMBURSEMENT	98,000.00	0.00		0.00		0.00	0.00
60-6000-47100.00	Water Revenue Interest	142,563.00	119,720.55		32.41		141,734.71	141,702.30
60-6000-48000.00	Misc. Income	0.00	124.57		0.00		130.53	130.53
60-6000-48005.00	Proceeds from Sale	0.00	1,400.00		0.00		0.00	0.00
60-6000-49211.00	Festus Water Sales	2,027,575.00	1,315,160.00		0.00		1,349,865.00	1,349,865.00
60-6000-49212.00	Herculaneum Water Sales	884,760.00	573,888.00		0.00		589,032.00	589,032.00
Total Department 6000:		3,213,890.00	2,010,293.12		32.41		2,080,762.24	2,080,729.83
Revenues		3,213,890.00	2,010,293.12		32.41		2,080,762.24	2,080,729.83
Account Category: Expenditures								
Department: 6000 JCWA								
60-6000-51000.00	Regular Salaries	397,669.00	231,001.93		257,778.61		0.00	257,778.61
60-6000-51100.00	Overtime	30,949.00	15,432.99		16,620.22		0.00	16,620.22
60-6000-51190.00	Other Personal Services	10,589.00	6,247.36		7,059.36		0.00	7,059.36
60-6000-51400.00	Legal Fees	4,000.00	3,302.50		1,805.50		0.00	1,805.50
60-6000-51450.00	BANK & CREDIT CARD FEES	3,196.00	1,454.38		5.35		0.00	5.35
60-6000-51500.00	Engineering Fees	5,000.00	0.00		0.00		0.00	0.00
60-6000-51600.00	Auditing Fees	11,500.00	11,500.00		11,500.00		0.00	11,500.00
60-6000-51800.00	Computer Services Fees	1,000.00	364.15		343.40		0.00	343.40
60-6000-52000.00	Health Insurance Expense	45,940.00	25,409.32		29,233.38		3,817.25	25,416.13
60-6000-52100.00	Life Insurance Expense	682.00	550.24		498.52		3.20	495.32
60-6000-52215.00	401(k) Match	43,016.00	28,445.71		35,669.70		0.00	35,669.70
60-6000-52300.00	FICA Tax Expense	32,789.00	18,290.31		20,533.02		0.00	20,533.02
60-6000-53100.00	Electricity	205,000.00	108,785.37		105,953.90		0.00	105,953.90

JCWA TRIAL BALANCE FOR CITY OF FESTUS

Balance As of 05/31/2025

GL Number	Description	24-25 Amended Budget	YTD Balance 05/31/2024 (Abnormal)	THRU Increase	YTD DR 05/31/2025 (Decrease)	THRU Increase	YTD CR 05/31/2025 (Decrease)	YTD Balance 05/31/2025 (Abnormal)
		Normal						Normal
Fund: 60 JCWA Fund								
Account Category: Expenditures								
Department: 6000 JCWA								
60-6000-53250.00	Trash Service	1,500.00	791.36		807.76		0.00	807.76
60-6000-53550.00	Maintenance & Repair	75,000.00	21,895.65		28,293.84		1.64	28,292.20
60-6000-54000.00	Postage	600.00	147.75		92.19		0.00	92.19
60-6000-54200.00	Telephone	2,500.00	1,682.79		2,122.90		4.70	2,118.20
60-6000-54300.00	Office Supplies	2,000.00	666.94		416.57		0.00	416.57
60-6000-54400.00	Printing	300.00	193.00		180.00		0.00	180.00
60-6000-54550.00	MAINTENANCE & SOFTWARE CONTRACTS	6,510.00	4,196.63		4,174.63		0.00	4,174.63
60-6000-55100.00	Gas, Oil & Antifreeze	2,000.00	433.93		718.70		0.00	718.70
60-6000-55350.00	LIGHT EQUIPMENT & MAINTENANCE	4,500.00	1,708.38		0.00		0.00	0.00
60-6000-55500.00	Equipment Rent	2,500.00	0.00		0.00		0.00	0.00
60-6000-56100.00	Other Supplies	2,500.00	1,324.76		1,844.74		0.00	1,844.74
60-6000-56305.00	Lab Supplies	15,000.00	7,951.85		10,975.67		0.00	10,975.67
60-6000-56400.00	Uniforms	2,450.00	628.31		753.72		0.00	753.72
60-6000-56450.00	Tools	4,000.00	0.00		1,079.50		0.00	1,079.50
60-6000-56460.00	Safety Supplies	3,000.00	2,184.56		421.03		126.49	294.54
60-6000-56550.00	Chemicals	250,000.00	146,185.66		150,654.80		0.00	150,654.80
60-6000-56999.00	Other Materials & Supplie	1,500.00	393.92		703.64		0.00	703.64
60-6000-57000.00	DUES, LICENSES & PERMITS	1,000.00	361.87		558.81		2.70	556.11
60-6000-57003.00	TTHM COMPLIANCE COSTS	500.00	6.75		4.05		0.00	4.05
60-6000-57010.00	Travel,Training & Lodging	4,000.00	241.20		356.90		33.37	323.53
60-6000-57100.00	Advertising	2,500.00	1,816.52		669.24		0.00	669.24
60-6000-57200.00	Insurance,Claims & Bonds	169,622.00	93,379.96		89,418.10		0.00	89,418.10
60-6000-57201.00	SLUDGE MAINTENANCE	25,000.00	17.00		0.00		0.00	0.00
60-6000-57999.00	Other Misc. Special Exp.	1,500.00	190.55		185.44		35.00	150.44
60-6000-59127.00	2021A/B AMORT OF BOND PREMIUM	(85,143.00)	(56,761.76)		0.00		56,761.76	(56,761.76)
60-6000-59834.00	2012 PRINCIPAL PYMT	37,800.00	18,900.00		18,900.00		0.00	18,900.00
60-6000-59835.00	2012 INTEREST PYMT	4,263.00	2,452.76		2,324.24		128.52	2,195.72
60-6000-59874.00	2021AB PRINCIPAL	375,000.00	0.00		0.00		0.00	0.00
60-6000-59875.00	2021AB INTEREST	357,000.00	183,543.75		181,021.88		2,521.88	178,500.00
60-6000-59999.00	Other Capital Outlay	969,637.00	59,293.36		762,092.30		0.00	762,092.30
Total Department 6000:		3,029,869.00	944,611.71		1,745,771.61		63,436.51	1,682,335.10
Expenditures		3,029,869.00	944,611.71		1,745,771.61		63,436.51	1,682,335.10
Total Fund 60:								
TOTAL ASSETS			26,880,872.30		18,988,373.69		18,656,552.32	26,582,484.48
BEG. FUND BALANCE			14,565,730.09		0.00		0.00	15,407,611.84
+ NET OF REVENUES & EXPENDITURES		184,021.00	1,065,681.41		(1,745,804.02)		(2,144,198.75)	398,394.73
= ENDING FUND BALANCE			15,631,411.50		0.00		0.00	15,806,006.57
+ LIABILITIES			11,249,460.80		1,953,730.57		1,887,157.21	10,776,477.91
= TOTAL LIABILITIES AND FUND BALANCE			26,880,872.30		(3,699,534.59)		(4,031,355.96)	26,582,484.48
Total All Funds		184,021.00	0.00		22,687,908.28		22,687,908.28	0.00

GL ACTIVITY REPORT FOR CITY OF FESTUS

From 05/01/2025 to 05/31/2025

Date	JNL	Type	Description	Reference #	Debits	Credits	Balance
05/01/2025			60-0000-11005.00 JCWA Operating Cash Acct.		BEG. BALANCE		1,188,795.71
05/01/2025	CD	CHK	COMMERCE BANK - COMMERCIAL CARDS	1220(E)		260.28	1,188,535.43
05/01/2025	CD	CHK	METROPOLITAN LIFE INSURANCE COMPANY	1221(E)		498.84	1,188,036.59
05/01/2025	GJ	JE	1/12TH OF ANNUAL RESERVE	0000122065		39,750.00	1,148,286.59
05/01/2025	GJ	JE	1/12TH OF DEPRECIATION & REPLACEMEN	0000122066		20,833.33	1,127,453.26
05/02/2025	GJ	JE	JCWA DEBT SERVICE PAYMENTS	0000122027		61,000.00	1,066,453.26
05/09/2025	PR	CHK	SUMMARY PR 05/09/2025			11,697.66	1,054,755.60
05/09/2025	CD	CHK	AMERENUE	1215(E)		11,466.21	1,043,289.39
05/09/2025	CD	CHK	Family Support Payment Center-	1216(E)		175.00	1,043,114.39
05/09/2025	CD	CHK	NATIONWIDE TRUST COMPANY, FSB	1217(E)		773.81	1,042,340.58
05/09/2025	GJ	JE	JCWA FEDERAL WITHHOLDING PYMT	0000122034		3,822.18	1,038,518.40
05/10/2025	CD	CHK	AT&T COMPANY	1218(E)		105.88	1,038,412.52
05/11/2025	CD	CHK	CHARTER COMMUNICATIONS	1222(E)		120.00	1,038,292.52
05/12/2025	GLJ	JE	FESTUS RECEIPT FOR CONTRACTUAL CONT	0000122057	166,650.00		1,204,942.52
05/12/2025	GJ	JE	HERKY RECEIPT FOR CONTRACTUAL WATER	0000122076	72,720.00		1,277,662.52
05/15/2025	CD	CHK	FARM PLAN - BUCHHEIT'S	1223(E)		16.58	1,277,645.94
05/15/2025	CD	CHK	HOME DEPOT U.S.A., INC.	1224(E)		38.70	1,277,607.24
05/15/2025	CD	CHK	HOME DEPOT U.S.A., INC.	1225(E)		19.56	1,277,587.68
05/15/2025	CD	CHK	Waste Management of St. Louis	1226(E)		100.68	1,277,487.00
05/15/2025	CD	CHK	DURKIN EQUIPMENT	1227(A)		1,966.05	1,275,520.95
05/15/2025	CD	CHK	CITY OF FESTUS	1228(A)		12.40	1,275,508.55
05/15/2025	CD	CHK	CITY OF FESTUS	1229(A)		1,152.18	1,274,356.37
05/15/2025	CD	CHK	Guarantee Electrical Const. Co	1230(A)		646.20	1,273,710.17
05/15/2025	CD	CHK	Mississippi Lime Company	1231(A)		10,255.95	1,263,454.22
05/15/2025	CD	CHK	PVS DX, INC.	1232(A)		1,850.40	1,261,603.82
05/15/2025	CD	CHK	Hydro-kinetics Corp.	271653		6,922.00	1,254,681.82
05/15/2025	CD	CHK	HD SUPPLY, INC.	271654		1,744.76	1,252,937.06
05/15/2025	GJ	JE	TRANSFER FUNDS TO COVER CAPITAL OUT	0000122122	2,060.87		1,254,997.93
05/21/2025	CD	CHK	MISSOURI EMPLOYERS MUTUAL INS. CO.	1219(E)		567.00	1,254,430.93
05/21/2025	CD	CHK	Bauman Oil Distributors, Inc.	1238(E)		411.99	1,254,018.94
05/22/2025	CD	CHK	BRENNTAG MID-SOUTH, INC.	271655		10,712.00	1,243,306.94
05/23/2025	PR	CHK	SUMMARY PR 05/23/2025			11,803.60	1,231,503.34
05/23/2025	GJ	JE	JCWA SIT TAX PAYMENT	0000122090		926.50	1,230,576.84
05/23/2025	GJ	JE	JCWA FEDERAL WITHHOLDING PYMT	0000122091		3,851.45	1,226,725.39
05/23/2025	CD	CHK	Family Support Payment Center-	1236(E)		175.00	1,226,550.39
05/23/2025	CD	CHK	NATIONWIDE TRUST COMPANY, FSB	1237(E)		777.23	1,225,773.16
05/31/2025			END BALANCE		241,430.87	204,453.42	1,225,773.16
05/01/2025			60-0000-11506.00 Wtr Replacement M/M Acct.		BEG. BALANCE		93,552.74
05/01/2025	GJ	JE	1/12TH OF DEPRECIATION & REPLACEMEN	0000122066	20,833.33		114,386.07
05/15/2025	GJ	JE	TRANSFER FUNDS TO COVER CAPITAL OUT	0000122122		2,060.87	112,325.20
05/22/2025	GJ	JE	RECORD 6-MONTH T-BILL MATURITY @ 4.	0000122097	315,000.00		427,325.20
05/22/2025	GJ	JE	RECORD 4-MONTH T-BILL MATURITY @ 4.	0000122098	202,000.00		629,325.20
05/22/2025	GJ	JE	RECORD 3-MONTH T-BILL INVESTMENT @	0000122102		201,835.23	427,489.97
05/22/2025	GJ	JE	RECORD 4-MONTH T-BILL INVESTMENT @	0000122103		314,661.20	112,828.77
05/31/2025	GJ	JE	JCWA INTEREST MAY-25	0000122193	306.77		113,135.54
05/31/2025			END BALANCE		538,140.10	518,557.30	113,135.54
05/01/2025			60-0000-11514.00 Water Reserve M/M Account		BEG. BALANCE		188,717.00
05/01/2025	GJ	JE	1/12TH OF ANNUAL RESERVE	0000122065	39,750.00		228,467.00
05/31/2025	GJ	JE	JCWA INTEREST MAY-25	0000122193	3,953.92		232,420.92
05/31/2025			END BALANCE		43,703.92		232,420.92
Grand Total					823,274.89	723,010.72	1,571,329.62

REVENUE AND EXPENDITURE REPORT FOR CITY OF FESTUS

Balance As of 05/31/2025
 % Fiscal Year Completed: 66.58

GL Number	Description	24-25 Amended Budget	YTD Balance 05/31/2025 (Abnormal)	Activity For 05/31/2025 (Decrease)	Balance 05/31/2025 Normal (Abnormal)	% Bdgt Used
Fund: 60 JCWA Fund						
Revenues						
OTHER REVENUES						
60-6000-43005.00	CONTRIBUTED REVENUE	60,992.00	0.00	0.00	60,992.00	0.00
60-6000-43205.00	COUNTY REIMBURSEMENT	98,000.00	0.00	0.00	98,000.00	0.00
60-6000-48000.00	Misc. Income	0.00	130.53	18.10	(130.53)	100.00
	OTHER REVENUES	158,992.00	130.53	18.10	158,861.47	0.08
INVESTMENT INCOME						
60-6000-47100.00	Water Revenue Interest	142,563.00	141,702.30	16,457.97	860.70	99.40
	INVESTMENT INCOME	142,563.00	141,702.30	16,457.97	860.70	99.40
WATER & SEWER COLLECTIONS & FEES						
60-6000-49211.00	Festus Water Sales	2,027,575.00	1,349,865.00	172,205.00	677,710.00	66.58
60-6000-49212.00	Herculaneum Water Sales	884,760.00	589,032.00	75,144.00	295,728.00	66.58
	WATER & SEWER COLLECTIONS & FEES	2,912,335.00	1,938,897.00	247,349.00	973,438.00	66.58
	Revenues	3,213,890.00	2,080,729.83	263,825.07	1,133,160.17	64.74
Expenditures						
PAYROLL & BENEFIT EXPENSE						
60-6000-51000.00	Regular Salaries	397,669.00	257,778.61	29,413.90	139,890.39	64.82
60-6000-51100.00	Overtime	30,949.00	16,620.22	1,835.22	14,328.78	53.70
60-6000-51190.00	Other Personal Services	10,589.00	7,059.36	882.42	3,529.64	66.67
60-6000-52000.00	Health Insurance Expense	45,940.00	25,416.13	(406.49)	20,523.87	55.32
60-6000-52100.00	Life Insurance Expense	682.00	495.32	55.96	186.68	72.63
60-6000-52215.00	401(k) Match	43,016.00	35,669.70	496.64	7,346.30	82.92
60-6000-52300.00	FICA Tax Expense	32,789.00	20,533.02	2,396.15	12,255.98	62.62
60-6000-56400.00	Uniforms	2,450.00	753.72	139.95	1,696.28	30.76
60-6000-57010.00	Travel, Training & Lodging	4,000.00	323.53	0.00	3,676.47	8.09
	PAYROLL & BENEFIT EXPENSE	568,084.00	364,649.61	34,813.75	203,434.39	64.19
OTHER EXPENSES						
60-6000-51400.00	Legal Fees	4,000.00	1,805.50	0.00	2,194.50	45.14
60-6000-51450.00	BANK & CREDIT CARD FEES	3,196.00	5.35	0.50	3,190.65	0.17
60-6000-51600.00	Auditing Fees	11,500.00	11,500.00	0.00	0.00	100.00
60-6000-57000.00	DUES, LICENSES & PERMITS	1,000.00	556.11	74.71	443.89	55.61
60-6000-57100.00	Advertising	2,500.00	669.24	669.24	1,830.76	26.77
60-6000-57999.00	Other Misc. Special Exp.	1,500.00	150.44	0.00	1,349.56	10.03
	OTHER EXPENSES	23,696.00	14,686.64	744.45	9,009.36	61.98
PROFESSIONAL SERVICES						
60-6000-51500.00	Engineering Fees	5,000.00	0.00	0.00	5,000.00	0.00
60-6000-51800.00	Computer Services Fees	1,000.00	343.40	43.00	656.60	34.34
	PROFESSIONAL SERVICES	6,000.00	343.40	43.00	5,656.60	5.72
UTILITIES & MAINTENANCE						
60-6000-53100.00	Electricity	205,000.00	105,953.90	12,375.78	99,046.10	51.68
60-6000-53250.00	Trash Service	1,500.00	807.76	100.68	692.24	53.85
60-6000-54200.00	Telephone	2,500.00	2,118.20	217.13	381.80	84.73
60-6000-54550.00	MAINTENANCE & SOFTWARE CONTRACTS	6,510.00	4,174.63	845.00	2,335.37	64.13
60-6000-55100.00	Gas, Oil & Antifreeze	2,000.00	718.70	111.13	1,281.30	35.94
60-6000-55350.00	LIGHT EQUIPMENT & MAINTENANCE	4,500.00	0.00	0.00	4,500.00	0.00

REVENUE AND EXPENDITURE REPORT FOR CITY OF FESTUS

Balance As of 05/31/2025
% Fiscal Year Completed: 66.58

GL Number	Description	24-25 Amended Budget	YTD Balance 05/31/2025 (Abnormal)	Activity For 05/31/2025 (Decrease)	Available Balance 05/31/2025 Normal (Abnormal)	% Bdgt Used
Fund: 60 JCWA Fund						
Expenditures						
UTILITIES & MAINTENANCE						
UTILITIES & MAINTENANCE		222,010.00	113,773.19	13,649.72	108,236.81	51.25
REPAIRS & MAINTENANCE						
60-6000-53550.00	Maintenance & Repair	75,000.00	28,292.20	465.37	46,707.80	37.72
60-6000-57201.00	SLUDGE MAINTENANCE	25,000.00	0.00	0.00	25,000.00	0.00
REPAIRS & MAINTENANCE		100,000.00	28,292.20	465.37	71,707.80	28.29
MATERIALS & SUPPLIES						
60-6000-54000.00	Postage	600.00	92.19	2.07	507.81	15.37
60-6000-54300.00	Office Supplies	2,000.00	416.57	0.00	1,583.43	20.83
60-6000-54400.00	Printing	300.00	180.00	0.00	120.00	60.00
60-6000-55500.00	Equipment Rent	2,500.00	0.00	0.00	2,500.00	0.00
60-6000-56305.00	Lab Supplies	15,000.00	10,975.67	2,430.81	4,024.33	73.17
60-6000-56450.00	Tools	4,000.00	1,079.50	0.00	2,920.50	26.99
60-6000-56460.00	Safety Supplies	3,000.00	294.54	0.00	2,705.46	9.82
60-6000-56550.00	Chemicals	250,000.00	150,654.80	24,648.28	99,345.20	60.26
60-6000-56999.00	Other Materials & Supplie	1,500.00	703.64	0.00	796.36	46.91
MATERIALS & SUPPLIES		278,900.00	164,396.91	27,081.16	114,503.09	58.94
OFFICE SUPPLIES, POSTAGE, ADV, TRAVEL						
60-6000-56100.00	Other Supplies	2,500.00	1,844.74	0.00	655.26	73.79
OFFICE SUPPLIES, POSTAGE, ADV, TRAVEL		2,500.00	1,844.74	0.00	655.26	73.79
DUES & SUBSCRIPTIONS						
60-6000-57003.00	TTHM COMPLIANCE COSTS	500.00	4.05	0.00	495.95	0.81
DUES & SUBSCRIPTIONS		500.00	4.05	0.00	495.95	0.81
INSURANCE & BONDS						
60-6000-57200.00	Insurance,Claims & Bonds	169,622.00	89,418.10	10,930.54	80,203.90	52.72
INSURANCE & BONDS		169,622.00	89,418.10	10,930.54	80,203.90	52.72
Expenditures		1,371,312.00	777,408.84	87,727.99	593,903.16	56.69
Fund 60 - JCWA Fund:						
TOTAL REVENUES		3,213,890.00	2,080,729.83	263,825.07	1,133,160.17	64.74
TOTAL EXPENDITURES		1,371,312.00	777,408.84	87,727.99	593,903.16	56.69
NET OF REVENUES & EXPENDITURES:		1,842,578.00	1,303,320.99	176,097.08	539,257.01	



Meeting June 26th, 2025

Jefferson County Water Authority Board Report

Metered Water Averages for May 2025:

Raw-1.595 MGD Festus-0.933 MGD

Herculaneum-0.483 MGD Distribution-1.418 MGD

Warm weather seasonal water demand has kicked in during this report period just like we had expected it would. The recovery rate for the caissons of both wells has been outstanding regardless of river levels. Since we now have two operational wells and a total of four raw water pumps, we were able to establish a pump rotation cycle of every two weeks. This facilitates ample down time for each caisson to give them a rest, and the breaks in service between pumps will aid towards increasing the useful life span of each well in between cleanings. At this time, we do not have enough hard data to calculate frequency of future cleanings but will be able to make a better determination about that as time passes.

While the recent waves of rain and storms have proven to be an inconvenience, the plant for the most part has experienced only a few minor power bumps requiring equipment reset. It appears that all the surge protection the JCWA has invested in this past year is paying off. The biggest wet weather challenge has been keeping up with the grounds-maintenance. There again, the JCWA purchasing the proper equipment (a tractor and a zero-turn mower) has been instrumental for staying ahead of the mowing demands. This is key to giving the place a more presentable and professional appearance, as well as towards keeping snakes, rodents, and other critters at bay.

I mentioned in last month's report that McEnergy Automation was hired to conduct a full evaluation and risk assessment of our current SCADA system, with the primary goals of identifying any network strengths and weaknesses and providing a comprehensive written report outlining potential steps or recommended actions to take to repair any shortfalls found while ensuring our system technology stays current with the times. McEnergy's technician didn't disappoint, and we have already received the finished product. In fact, Nic and I participated in about a three-hour meeting going over the report. The assessment is cram-packed full of valuable information, and it will take some time to completely review and absorb all the contents.

Some of the initial key takeaways are that our system is currently in pretty good shape overall, and past actions to modernize and upgrade SCADA have kept us up to date. However, there are several areas the JCWA must pursue over time to ensure system reliability and to keep our network operational over the long haul. One such area relates to “server virtualization”. This is basically integrating redundancy and backup programs into our servers. The JCWA currently does not have such a program. Other recommendations include creating a specific “historian” program to log key processes and aid in troubleshooting; creating and updating a Plant Network CAD drawing showing each connection of our system for easier visual reference; set up Microsoft SQL Server Express and SSRS on a historian sever and incorporate automated data input for operator logs that are currently being performed manually; and create new HMI screens to give the plant a new dashboard to view UPS (Uninterruptible Power Supply) units at remote locations. Additional suggestions include connecting several plant process components such as flow meters, Carbon Dioxide and chlorine gas feed and injection systems, and aerator water level monitoring capabilities into our current SCADA programs. Apparently, we are not using our SCADA to near its fullest design potential. Again, we currently are doing well with our SCADA situation, and the recommended upgrades, modifications, and improvements can be planned out and implemented in conjunction with future annual budgets. The report itself is an outstanding written document and management tool that will be an indispensable aid for short term as well as long term communications network modernization planning.

We are currently coordinating with Guarantee Electric to schedule one of their fiber optic technicians to come onsite and do a comprehensive and thorough assessment of the fiber optic line running from the original well up to the water treatment plant. We do know from past service work performed on this line that there are some issues, and we may have only one good functioning pair of fiber on this run. The concept here is much the same as what it was for SCADA; perform an in-depth assessment of our fiber optic network, identify strong or weak points, and provide a written document outlining potential upgrade or repairs. We may also want to address contingency plans in the event our fiber network was to completely fail, such as installing Starlink or other communication system. Telemetry communications capability back and forth from the treatment plant to remote satellite components is critical for the success of our operation, and this study will be well worth the time and effort to complete. I’ll keep the Board abreast of the progress made.

Jeffrey M. Crannick, Plant Manager

Open		CLOSED	CLOSED	CLOSED	CLOSED	Open
INSTITUTION	Midwest	State Bank India	Commerce	Commerce	Commerce	Commerce
Customer No.	GI Inv. Acct. No.	8562836T8	912797NV5	912797PL5	912797NV5	912797PG6
PURCH DATE	GI Int. Acct. No.	12/12/2024	12/19/2024	2/6/2025	2/21/2025	2/21/2025
MAT DATE		6/11/2025	6/20/2025	6/3/2025	6/20/2025	7/31/2025
TYPE	CD	CD	CD	4-Month T-Bill	T-Bill	T-Bill
Yield Interest						
Water Replacemen	60-0000-13004		\$ 127,287.28	\$ 200,000.00		
interest	60-6000-47100		\$ 2,712.72	\$ 2,756.93		
Water Reserve	60-0000-13005 \$ 316,221.65	\$ 200,000.00	\$ 127,287.28	\$ 257,734.26		
interest	60-6000-47100 \$ 11,221.65	\$ 4,413.42	\$ 2,712.72	\$ 3,508.81		
Operating	60-0000-13000				\$ 199,239.64	\$ 199,261.19
interest	60-6000-47100				\$ 2,760.36	
TOT. @ PURCH	\$ 316,221.65	\$ 200,000.00	\$ 254,574.56	\$ 457,734.26	\$ 199,239.64	\$ 199,261.19
Total CY Interest	\$ 11,221.65	\$ 4,413.42	\$ 5,425.44	\$ 6,265.74	\$ 2,760.36	\$ -
Interest to Maturity	\$ 15,652.97	\$ 4,413.42	\$ 5,425.44	\$ 6,265.74	\$ 2,760.36	\$ 3,738.81
TOTAL @ MAT	\$ 331,874.62	\$ 204,413.42	\$ 260,000.00	\$ 464,000.00	\$ 202,000.00	\$ 203,000.00
YIELD	4.950%	4.450%	4.250%	4.270%	4.249%	4.280%
DAYS TO MATURITY	365					
	12-Months	6-Month	6-Month	4-Month	4-Month	5-Month
	Compounded Qtrly	Maturity	Maturity	Maturity	Maturity	Maturity
	11/7, 2/7, 5/7 & 8/7	6/11/2025	6/20/2025	6/3/2025	6/20/2025	7/31/2025

	Open		Open		Open		Open		Open		Open	
<u>INSTITUTION</u>	<u>Commerce</u>		<u>Commerce</u>		<u>Commerce</u>		<u>Midwest Regional</u>		<u>Commece Bank</u>		<u>Commerce Bank</u>	
<u>Customer No.</u>	<u>GI Inv. Acct. No.</u>	<u>912797PP6</u>	<u>GI Inv. Acct. No.</u>	<u>912797PU5</u>	<u>GI Inv. Acct. No.</u>	<u>912797QB6</u>	<u>GI Inv. Acct. No.</u>	<u>8025053</u>	<u>GI Inv. Acct. No.</u>	<u>912797PP6</u>	<u>GI Inv. Acct. No.</u>	<u>912797QU4</u>
<u>PURCH DATE</u>	<u>GI Int. Acct. No.</u>	<u>2/21/2025</u>	<u>GI Int. Acct. No.</u>	<u>3/4/2025</u>	<u>GI Int. Acct. No.</u>	<u>3/25/2025</u>	<u>GI Int. Acct. No.</u>	<u>4/3/2025</u>	<u>GI Int. Acct. No.</u>	<u>5/22/2025</u>	<u>GI Int. Acct. No.</u>	<u>5/22/2025</u>
<u>MAT DATE</u>		<u>8/21/2025</u>		<u>7/1/2025</u>		<u>7/22/2025</u>		<u>10/3/2025</u>		<u>8/21/2025</u>		<u>9/16/2025</u>
<u>TYPE</u>		<u>T-Bill</u>		<u>T-Bill</u>		<u>T-Bill</u>		<u>CD</u>		<u>T-Bill</u>		<u>T-Bill</u>
<u>Yield Interest</u>												
Water Replacemen	60-0000-13004	\$ 199,740.41	\$ 254,474.39	\$ -	\$ -	\$ -	\$ -	\$ 201,835.23	\$ 314,661.20			
interest	60-6000-47100											
Water Reserve	60-0000-13005				\$ 314,000.00							
interest	60-6000-47100											
Operating	60-0000-13000		\$ 312,667.09	\$ -								
interest	60-6000-47100											
TOT. @ PURCH		\$ 199,740.41	\$ 254,474.39	\$ 312,667.09	\$ 314,000.00	\$ 201,835.23	\$ 314,661.20					
Total CY Interest		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
Interest to Maturity		\$ 4,259.59	\$ 3,525.61	\$ 4,332.91	\$ 6,738.01	\$ 2,164.77	\$ 4,338.80					
TOTAL @ MAT		\$ 204,000.00	\$ 258,000.00	\$ 317,000.00	\$ 320,738.01	\$ 204,000.00	\$ 319,000.00					
YIELD		4.300%	4.250%	4.251%	4.280%	4.302%	4.302%					
DAYS TO MATURITY					183 Days	91	117					
		6-Month	4-Month	4-Month	6-Month Compounded	3-Month	3-Month					
		Maturity	Maturity	Maturity	Maturity	Maturity	Maturity					
		8/21/2025	7/1/2025	7/22/2025	10/3/2025	8/21/2025	9/16/2025					

New Investment				Investments Outstanding at 9/30/21	
INSTITUTION	Commerce Bank				
Customer No.	GI Inv. Acct. No.	912797QW0			
PURCH DATE	GI Int. Acct. No.	6/3/2025			
MAT DATE		9/30/2025			
TYPE		T-Bill			
Yield Interest					
Water Replacement	60-0000-13004	\$ 163,540.09	\$ 6,319,673.29	\$ 1,134,251.32	60-0000-13004
interest	60-6000-47100		\$ 105,811.44		
Water Reserve	60-0000-13005	\$ 300,000.00	\$ 3,324,620.74	\$ 930,221.65	60-0000-13005
interest	60-6000-47100		\$ 43,268.70		
Operating	60-0000-13000		\$ 2,252,293.01	\$ 511,928.28	60-0000-13000
interest	60-6000-47100		\$ 14,635.27		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
TOT. @ PURCH		\$ 463,540.09	\$ 10,602,550.52	\$ 2,576,401.25	COMBINED
Total CY Interest		\$ -	\$ 163,715.41		
Interest to Maturity		\$ 6,459.91	\$ 200,360.73		
TOTAL @ MAT		\$ 470,000.00	\$ 10,490,244.17		
YIELD		4.275%			
DAYS TO MATURITY		119			
		4-Month			
		Maturity			
		9/30/2025			

Project 14326

Jefferson County Water Authority

Control System Risk Assessment

Prepared by: McEnergy Automation

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Document Revision History

Name	Rev. Number	Date	Changes Made
Stape Crutchfield	1.1	6/11/2025	For Customer Review

1 Overview

McEnergy Automation performed site visit at the Jefferson County Water Authority plant. The goal was to review the existing control system and infrastructure to identify gaps / improvements and create a risk assessment for the following areas:

- PLC Hardware
- HMI and control software
- Instrumentation
- Historian
- Reporting
- Other app integrations

During the site visit, we met with key stakeholders, discussed major pain points, reviewed controls system hardware and design. The major pain point reported by the plant included:

- Lack of visibility on certain aspects of the system:
 - City tower operations are not included in the control system and operators have no insight to issues that could occur without calling the city water operators.
 - CO₂ valve monitoring is not tied into their system
- Process Interlocks:
 - Since the plant has installed their 2nd raw water well, they have observed that if any city water towers go offline, the pumps at the well will shut off.
 - They do not have visibility on why this occurs and would like to resolve this so they will not have interrupted water production.
- Plant Process network reliability:
 - The plant network design has two linear fiber optic legs
 - One leg goes out to the three vault panels -> Herculanum #1 -> Herculanum #2 -> Festus
 - One leg goes out to the river wells
 - If one fiber connection fails at a node, the plant will lose visibility on any node connected after it.
- Their reporting system is manual and relies on operators to enter process data hourly onto an Excel spreadsheet. This data can be missed if the operator is unavailable and working on an issue that takes them away from the control station.

Major process areas of the plant reviewed include:

- Plant Water Treatment
- Lime System
- Chemical Treatment System
- City Vault Operations
- River Water Wells

2 Major Takeaways

This section captures some of the major projects identified to improve areas of the Jefferson County Water Authority's plant where their control system is weaker. These are the top five things that McEnergy Automation believes will ensure your plant is positioned to be successful for long term.

2.1 Server Virtualization

While reviewing the infrastructure it was determined that virtualization was not used in the control system servers. Currently if one of the servers crashes / dies due to hardware / software failure, it is down and any functionality it provides will be down until the server is restored. This might not be a major issue currently as the plant only has two HMI servers and two operator workstations. As JCWA looks to grow the plant having a strong foundation to grow on is critical. Implementing virtualization allows for a level of redundancy that if one of the host servers fails the plant can continue to run on another server. Prior to building up a control system that leverages servers, virtualization should be strongly considered as a means to build a strong foundation. Additionally, Virtualization allows for easy growth, in that if another server / function is required no hardware purchase is required, its simply creating a new virtual server on the hosts.

Current Architecture:

- (x2) Dell PCs running Microsoft Windows Server 2016 – FactoryTalk View SE version 11 HMI servers. This operating system is no longer supported by Microsoft to get any major updates.
- (x2) Dell PCs running Microsoft Windows 10 – Operator Workstations. Microsoft Support for Windows 10 ends later this year.

Proposed Architecture:

- New Server Hosting Virtual Hypervisor (VMWare, HyperV, Proxmox)
- Virtual Machines/Servers to replace physical PCs:
 - FactoryTalk View version 15 servers (x2) – running Microsoft Windows Server 2022
 - Operator Workstations (x2) – Windows 10/11
- New Virtual Machines/Servers:
 - Engineering Workstation – Windows 10/11. Will help establish a computer that engineers can access to support the plant remotely
 - FactoryTalk Historian Server – Windows Server 2022
 - Domain controller / Firewall to establish a plant network isolated from the office network and Internet.

Project scope:

- Spec / Procure new virtual host servers
- Install and configure virtual host servers with a hypervisor/virtual machine manager.
- Migrate existing physical servers to virtual servers.
- Stand up new virtual servers here
- Purchase new Stratix 5200 switches to replace Stratix 5700 switches that are being discontinued (see hardware notes in Section 4)

It is strongly recommended by McEnergy Automation to implement a virtual server architecture in order to have a solid foundation for the control system

2.2 FactoryTalk Historian

While reviewing the control system it was noticed no process historian exists. Other similar type sites utilize Rockwell FactoryTalk Historian to log key process values, which are used to troubleshoot plant issues after the fact, and provide visibility into the system through other tools like SQL reporting. They do have historical data today, but they are all stored locally on the HMI server computers.

Project scope would include:

- Setup and configure new historian server
- Log tags based on review of tag list with JCWA
- Include various OPC/ODBC connectivity to be able to provide information.

2.3 Plant Network Design

While reviewing the control system, it was noticed that the plant did not have documentation on their plant's network layout for their control system. Creating a Plant Network Layout document will be an easy way to create documentation on how the plant's network is laid out and how to troubleshoot connections if communications are lost at any of the remote vaults or wells.

Project scope would include:

- Documenting all plant network connections between the PLC panels, vault sites, and wells.
- Creating a Plant Network CAD drawing showing each connection for easier visual reference.

2.4 Microsoft SQL Server Reporting (SSRS)

Today, all reporting and logs are entered manually into an Excel sheet that is stored locally on a third operator workstation that is not connected to the control system. This data entry relies on operators to write down key process values on an hourly, daily, and weekly basis based on values shown in historical logs from the HMI and samples taken manually. They also keep a log journal written down on paper for any major issues they have. A reporting system would benefit their plant so that logs can be kept digitally and reviewed at any time if needed. Reminders could also be sent to operators when readings need to be taken so data isn't lost.

Project scope would include:

- Prerequisite would be to have a historian server (as that makes it easier to log data to reports)
- Set up Microsoft SQL Server Express and SSRS on the Historian Server.
- Work with the plant to set up custom reports based on their existing Excel data.
- Spec out options (like Win911) for the plant to receive alerts for when to take readings and/or any other plant specific issues that need immediate attention.
- Modify PLC and HMI program to support any alarms that do not exist today, but would like to be added.

2.5 UPS Monitoring

Currently, the plant does not have any monitoring of their UPS powering their PLC panels. Having remote panels at each vault and well makes it difficult to troubleshoot if there is a power issue without driving down to each panel.

Project scope would include:

- Spec out options to collect data from the plant's UPS systems and feed it to the control system.
- Modify and/or create new HMI screens to give the plant a dashboard to view UPS status.

3 Key Process Areas

3.1 Plant Water Treatment

All water treatment is done at the main JCWA plant. Water is collected from the two raw water wells along the Mississippi river and pumped to the plant. The water flows from the river wells to the top of the Aeration unit to reduce iron, manganese, and CO₂. After the aerator, the water flows to the large Clarifier where the water is filtered further and also softened with their Lime system. The water is treated with chlorine, fluoride, and CO₂ before being pumped into their Clearwell storage tank. The Clearwell stores the water and maintains level that is sent to the city water towers via vaults.

Key takeaways / requirements:

- The water storage tanks as well as levels/weights of any chemicals are the main things monitored in the plant water treatment system.
- Levels and flows are logged hourly to their Excel reporting spreadsheet.
- These levels and setpoints could be logged automatically via a more robust Historian and reporting system so that operators could easily compare their manual readings to find any issues.
- The aerator does not have any level sensing equipment; the plant has to look outside to see if it is overflowing when they are setting initial level.
- The CO₂ system's flow valve is controlled by an external controller where they have to set a manual setpoint at the valve panel. This valve could be tied into the existing SCADA/PLC system for better operator control/visibility
- Automation of water treatment could be taken further by automating additional control valves and implementing more of a sequential or batch type control. Currently, paths and pumps are set by operators (and actuated automatically by the PLC).
- Their back flush sequence is automated, but does not function correctly according to operators. So currently, they manually set paths and pumps. This could be explored for better automatic control for easier setup and lower room for error.
- Their chlorine injection system is not currently tied into their control system properly. The plant has expressed that they want to keep batching amounts manual, but it would be good to have feedback into the SCADA system to see accurate injection rates.

3.2 Lime System

The Lime System at JCWA is part of their full water treatment system at the main plant building. This system is a separate PLC-code-based batch system from their main control system. The batching is done primarily from a separate controller using load cells and calibrated manually by the operator every so often. This system could be improved by implementing a FactoryTalk Batch solution, but being only a single process with a single destination, it may not be complex enough to warrant a full FT Batch system. However, PLC/HMI code could be implemented to allow for the operator to have more control and visibility on the dosing amounts. Additionally, it would be good to evaluate their current water softening measurement devices and metrics for approved batches.

Key takeaways / requirements:

- Implement more PLC-driven logic for their batching of the Lime system.
- Add measuring devices as needed to improve their ability to determine water has been treated properly.
- The lime system is controlled by a pinch-valve for injection rate. This could be replaced in the future with a pump and VFD with recirculation to help inject / control rates more closely.

3.3 Chemical Dosing

The plant will add certain chemicals to the water as it is transferred from the clarifier to the Clearwell storage tank. These include chlorine, fluoride, and CO₂. As with other parts of their system, these dosing systems are controlled by operators manually setting injection flow rates from their HMI and starting pumps. Several injection ratios are hard-coded in the PLC and cannot be modified by the operator.

Key takeaways / requirements:

- Implement a more PLC-code-driven sequence for chemical additions.
- Give the operator more control over injection ratios and other parameters that are key to the full process.
- Implement a recipe system of sorts to concisely show all the parameters for this system. As mentioned, a full FT Batch system may be too complex for the scale of this plant.

3.4 City Water Vaults

The JCWA plant services two cities across three vaults. These vaults house a flow control valves and metering devices to measure the water sent to the cities. Metering Vault 1 services a single water tower in Herculaneum, MO. Metering Vault 2 services 2 more water towers in Herculaneum, MO. Metering Vault 3 services 2 water towers as well as 2 storage tanks in Festus, MO. Currently, the plant has visibility on flow to each city through the vaults and basic levels of each water tower and storage tank. A pain point discussed with the plant was that if the city opens valves on their side and causes swings in demand, they have no idea what is happening without calling someone. McEnery Automation believes it would be in their best interest to have better integration with the city control systems so they can visualize issues better and coordinate times when water demand will be higher.

Key takeaways / requirements:

- Help identify equipment / valves on the city side of operations that could be better monitored by the plant.
 - This may involve automating and/or adding sensors on existing manual valves so that the plant can identify what issues faster.
- Integrate the layout of valves on the city side into P&ID drawings and HMI screens for reference.
- Integrate individual city water usage reports in more detail (requires integrating a new reporting system)
- Integrate any control system overviews the city may have into the plant's system as read-only informational screens.

3.5 River Water Wells

The JCWA plant has two raw water wells located on the Mississippi River. Both well sites are capable of pumping water from natural wells along the river over to the main plant for processing. Operators have control of the pumps and are able to take manual control or remotely allow the control system to manage flow setpoints. One identified issue is that when a city vault goes offline, the newer River Well #2 will interlock and prevent the pumps from running, which will cause the operators to have to clear a fault before the pumps can run again. The two processes – well water collection and city vault distribution – are not directly connected, so it does not make sense to interlock the pumps on the condition described.

Key takeaways / requirements:

- Better alarming descriptions on what happens when the pumps are interlocked so operators can identify issues better.
- Review current interlocks in place to understand what is there now and ensure both well sites are controlled the same and do not have unnecessary interlocks.
- Implement more PLC-driven sequence controls vs. operator managed setpoints.
- Complete PLC panel and I/O drawings to ensure Well #2 is included.

4 Summary of Control System Infrastructure

4.1 Servers & Workstations

While reviewing the control system it was determined that virtualization is not used for the servers. Section 2.1 talks more about virtualization and path forwards.

While reviewing the control system, there is currently no way to remotely support the PLC program software. To aid in remote support, suggest adding virtual engineering workstation. Key takeaways / requirements:

- The plant mentioned that previous integrators could gain remote access, but believe it involved tying the plant network to the office network / Internet. There is a risk there of exposing the control system to the Internet.
- Short term can do a screen share / take control of the operator workstation, however that is not ideal as we would still have to jump to the HMI server to access PLC programming software, and requires coordination with the site.
- A long-term solution is to have a virtual environment setup, to ensure the system can grow
- Create new virtual desktop PC on the virtual host system, with FactoryTalk View Studio, Studio 5000, Logix 5000, and other various Rockwell tools to enable remote support.

4.2 PLC Hardware

While reviewing the control system, it was noted that the plant was in a good place with their PLC hardware. The plant has recently upgraded all of their PLC hardware to the latest Allen-Bradley CompactLogix 5069 series controllers. The only upgrade path here is to upgrade the firmware of their controllers as needed.

While reviewing the control system it was noticed that PlantPAX library of process objects was used in the PLC/HMI. Additionally, it seemed the plant's alarming system on the HMI utilized PlantPAX alarms at the controller level. The only upgrade path here is to keep the PlantPAX library of process objects up-to-date as required.

4.3 Field Devices & Instrumentation

While reviewing the control system it was noted that the plant had various field devices that could be upgraded to improve the operators' abilities to control and monitor the system. As mentioned, the CO₂ system valve is not controlled by the main SCADA system and requires operators to go out to it to manually set a setpoint during plant startup and shutdown. Another device that could be upgraded to improve control was the affluent valve on the clarifier. The main valve there is controlled by an old external controller above the clarifier that can no longer be replaced if it fails. Tying this valve into the control system SCADA/PLC system would be a good path forward. Additionally, the smaller pipe into the clarifier could get an automated valve installed to help with proper flow.

The plant's pump controls were also reviewed while onsite. The Main Service pumps in the main PLC were Ethernet Invertek Optodrive ECO drives. The Backwash pump was also an Invertek drive, but it did not seem to be over Ethernet. The low service pumps were Powerflex 400 drives, but again, were not controlled over Ethernet. Various other motors were controlled by motor starters and / or by other drives that I could not get eyes on while onsite. The Lime system pumps were all Eaton AN16DN0 motor starters. There is no variable speed control of these pumps. The raw water wells have been upgraded to PowerFlex 75x drives over Ethernet. Key takeaways / requirements:

- On failure of the Eaton motor starters would recommend upgrading them to new Allen-Bradley M100 motor starters. These are more compact and reduce wiring complexity. Ethernet drives could be an option if variable speed control is needed.
- Switching to Ethernet IP protocol for existing VFDs is recommended and would require cat5 (or better) cabling be pulled to each drive, along with a large enough switch to support the

Ethernet connections. The advantage would be that if one failed in the middle of the night, no one would have to go in and configure trip points, the PLC could perform automatic device configuration, which would reduce the time to recover from a failure.

- Additionally, if upgraded, it is recommended to pull back some of the additional data for power consumption / to aid in troubleshooting. This information could be shown on the screen to help the operators diagnose issues with voltage, and would provide engineering power consumption information to aid in determining when pumps need replacing.

4.4 Plant Management Overview

While reviewing the control system it was noticed that management doesn't have direct insight into issues going on at the plant. Providing a remote notification system (like Win911) would help to address those issues. Section 2.4 provides more detail about Win911 and path forwards and other Reporting system options.

While reviewing the control system it was noticed that no reporting system was implemented. All system KPIs are recorded on an Excel spreadsheet manually throughout the day. A reporting system could streamline this operation and make viewing daily / monthly / hourly reports easier. Other reports could be implemented like a report on the most common alarms to allow operators identify areas in the process that have issues. Another report that could be implemented is one that displays if devices are in operator manual control or bypassed. When using PlantPAX, there are ways to put devices into a variety of bypassed modes for purposes of temporary workaround while fixing device issues, such as failed limit switches. This then requires a report to tell us what devices are bypassed or in operator manual control so that they can quickly be identified and audited on a fairly frequent period. Key takeaways / requirements:

- Prerequisite would be to have a SQL Report server.
- Would require setting up FactoryTalk Alarm and Events to log alarms to a database

While reviewing the control system it was noticed that operations didn't have a way to view what was going on in the city-side systems without calling the local water sites. More detailed screens of each city site could be created with specific alarms for each site so that the plant can have better visualization of what is happening at the local sites.

- Create / modify screens to show a complete overview of the local city distribution system.
- Add actuators and/or open/close limit switches to any important manual valves in the city-side systems.
- Integrate any local site reports and or screens as needed.

4.5 Hardware Inventory

While reviewing the hardware there was an immediate need to create an inventory document of what hardware was utilized in the current control system. This will help the plant maintain spare parts. All PLC hardware had been upgraded recently and has no need for upgrading. All in all, the hardware at the JCWA plant was in good shape with a few notes above, summarized here:

- Would recommend upgrading the Eaton motor starters in the Lime system to newer motor starters in the event of a failure.
- Recommend upgrading existing VFDs to ethernet where applicable, as it would allow for automatic device configuration to take place (set IP, plug in, PLC takes care of the rest, can even get fancy with switch to assign the IP address)
- The same upgrade would be recommended for any motor starters that would benefit from more precise speed control and maintenance support.
- The Stratix 5700 managed switches in each PLC cabinet are discontinued and slated to be unavailable for sale in September of 2025. It would be wise to migrate to the Stratix 5200 series switches as Rockwell has indicated that these will be the proper replacement. This could be done in conjunction of creating a virtualized process controls network.

5 Supporting Documentation

The below are screen shots of the Allen-Bradley devices configured on the plant network. Note: no obsolescence data is shown as the workstation PC was not connected to the Internet to get this data:

ControlFLASH Plus™

Flash Devices

Manage Firmware

Manage Favorites

Refresh Firmware

Settings

Help

Browsing from path: JCWA-SERVER01ethernet (Levels: 2)

63 devices

Filter by device

Device	Address	In Device	Flash To	Latest from Download Center
ethernet				
FactoryTalk Linx - Desktop, JCWA-SERVER01	192.168.1.5	12.001	No firmware found	
1789-A17(A Virtual Chassis 2				
FactoryTalk Linx - Desktop, JCWA-SERVER02	192.168.1.6	12.001	No firmware found	
1789-A17(A Virtual Chassis 3				
FactoryTalk Linx - Desktop, JCWA-QWS01	192.168.1.7	12.001	No firmware found	
1789-A17(A Virtual Chassis 4				
FactoryTalk Linx - Desktop, JCWA-QWS02	192.168.1.8	12.001	No firmware found	
1789-A17(A Virtual Chassis 5				
1789-BMS20CL, 1789-BMS20CL Stratic 5700	192.168.1.10	12.004	No firmware found	
1789-BMS06SL, 1789-BMS06SL Stratic 5700	192.168.1.11	12.004	No firmware found	
1789-BMS06SL, 1789-BMS06SL Stratic 5700	192.168.1.12	12.004	No firmware found	
1789-BMS10CL, 1789-BMS10CL Stratic 5700	192.168.1.13	12.004	No firmware found	
1789-BMS06SL, 1789-BMS06SL Stratic 5700	192.168.1.14	12.004	No firmware found	
1789-BMS06SL, 1789-BMS06SL Stratic 5700	192.168.1.15	12.004	No firmware found	
Stratic 5800 - MM510	192.168.1.17	7.003	No firmware found	
PanelView Plus 7 Standard 700, PVP46121	192.168.1.40	11.001	No firmware found	
PanelView Plus 7 Standard 700, PVP3849-Fluidid	192.168.1.41	11.001	No firmware found	
PanelView Plus 7 Standard 1500, PVP11836	192.168.1.42	13.001	No firmware found	
5069-L320ERP, Main	192.168.1.50	33.011	33.011	
EtherNet 2				
15 Slot 5069 Backplane				
5069-L320ERP, Main	0	33.011	33.011	
5069-IA16, 5069-IA16/A	1	3.012	No firmware found	
5069-IA16, 5069-IA16/A.1	2	3.012	No firmware found	
5069-IA16, 5069-IA16/A.2	3	3.012	No firmware found	
5069-IA16, 5069-IA16/A.3	4	3.012	No firmware found	
5069-IA16, 5069-IA16/A.4	5	3.012	No firmware found	

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Flash Devices

Manage Firmware

Manage Favorites

Refresh Firmware

Settings

Help

Browsing from path: JCWA-SERVER01Ethernet (Level: 2)

63 devices [Filter by device](#)

Device	Address	In Device	Flash To	Latest from Download Center
5069-IA16, 5069-IA16/A	1	3.012	No firmware found	
5069-IA16, 5069-IA16/A.1	2	3.012	No firmware found	
5069-IA16, 5069-IA16/A.2	3	3.012	No firmware found	
5069-IA16, 5069-IA16/A.3	4	3.012	No firmware found	
5069-IA16, 5069-IA16/A.4	5	3.012	No firmware found	
5069-IA16, 5069-IA16/A.5	6	3.012	No firmware found	
5069-IA16, 5069-IA16/A.6	7	3.012	No firmware found	
5069-IA16, 5069-IA16/A.7	8	3.012	No firmware found	
5069-OW4/A, 5069-OW4/A	9	2.012	No firmware found	
5069-OW4/A, 5069-OW4/A.1	10	2.012	No firmware found	
5069-OW4/A, 5069-OW4/A.2	11	2.012	No firmware found	
5069-OW4/A, 5069-OW4/A.3	12	2.012	No firmware found	
5069-OW4/A, 5069-OW4/A.4	13	2.012	No firmware found	
17-Node USB CIP Port				
5069-L320ERP, River	192.168.1.51	33.011	33.011	
Ethernet 6				
4 Slot 5069 Backplane 4				
5069-L320ERP, River	0	33.011	33.011	
5069-IA16, 5069-IA16/A	1	3.012	No firmware found	
5069-OW4/A, 5069-OW4/A	2	2.012	No firmware found	
5069-IF8, 5069-IF8/A	3	2.011	No firmware found	
17-Node USB CIP Port 5				
5069-AENTR, 5069-AENTR/A	192.168.1.52	4.012	No firmware found	
18 Slot 5069 Backplane				
5069-AENTR, 5069-AENTR/A	192.168.1.53	4.012	No firmware found	
5 Slot 5069 Backplane				
5069-AENTR, 5069-AENTR/A	192.168.1.54	4.012	No firmware found	
5 Slot 5069 Backplane 2				

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Create Favorite List

Next

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5/23/2025

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Flash Devices | Manage Firmware | Manage Favorites

Refresh Firmware | Settings | Help

Browsing from path: JCWA-SERVER01Ethernet (Level: 2)

63 devices | Filter by device

Device	Address	In Device	Flash To	Latest from Download Center
5069-L320ERP, River	0	33.011	33.011	
5069-IA16, 5069-IA16/A	1	3.012	No firmware found	
5069-OW4/A, 5069-OW4/A	2	2.012	No firmware found	
5069-IF8, 5069-IF8/A	3	2.011	No firmware found	
17-Node USB CIP Port 5				
5069-AENTR, 5069-AENTR/A	192.168.1.52	4.012	No firmware found	
18 Slot 5069 Backplane				
5069-AENTR, 5069-AENTR/A	192.168.1.53	4.012	No firmware found	
5 Slot 5069 Backplane				
5069-AENTR, 5069-AENTR/A	192.168.1.54	4.012	No firmware found	
5 Slot 5069 Backplane 2				
5069-L320ERP, River_2	192.168.1.55	33.012	33.011	
EtherNet 8				
4 Slot 5069 Backplane 5				
17-Node USB CIP Port 7				
5069-L320ERP, R1	192.168.1.102	33.011	33.011	
EtherNet 3				
4 Slot 5069 Backplane				
5069-L320ERP, R1	0	33.011	33.011	
5069-IA16, 5069-IA16/A	1	3.012	No firmware found	
5069-IF8, 5069-IF8/A	2	2.012	No firmware found	
5069-OF4, 5069-OF4/A	3	2.012	No firmware found	
17-Node USB CIP Port 2				
5069-L320ERP, R2	192.168.1.103	33.012	33.011	
EtherNet 4				
4 Slot 5069 Backplane 2				
5069-L320ERP, R2	0	33.012	33.011	
5069-IA16, 5069-IA16/A	1	3.012	No firmware found	

Create Favorite List | Next

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ControlFLASH Plus™

Flash Devices | Manage Firmware | Manage Favorites

Refresh Firmware | Settings | Help

Browsing from path: JCWA-SERVER01Ethernet (Level: 2)

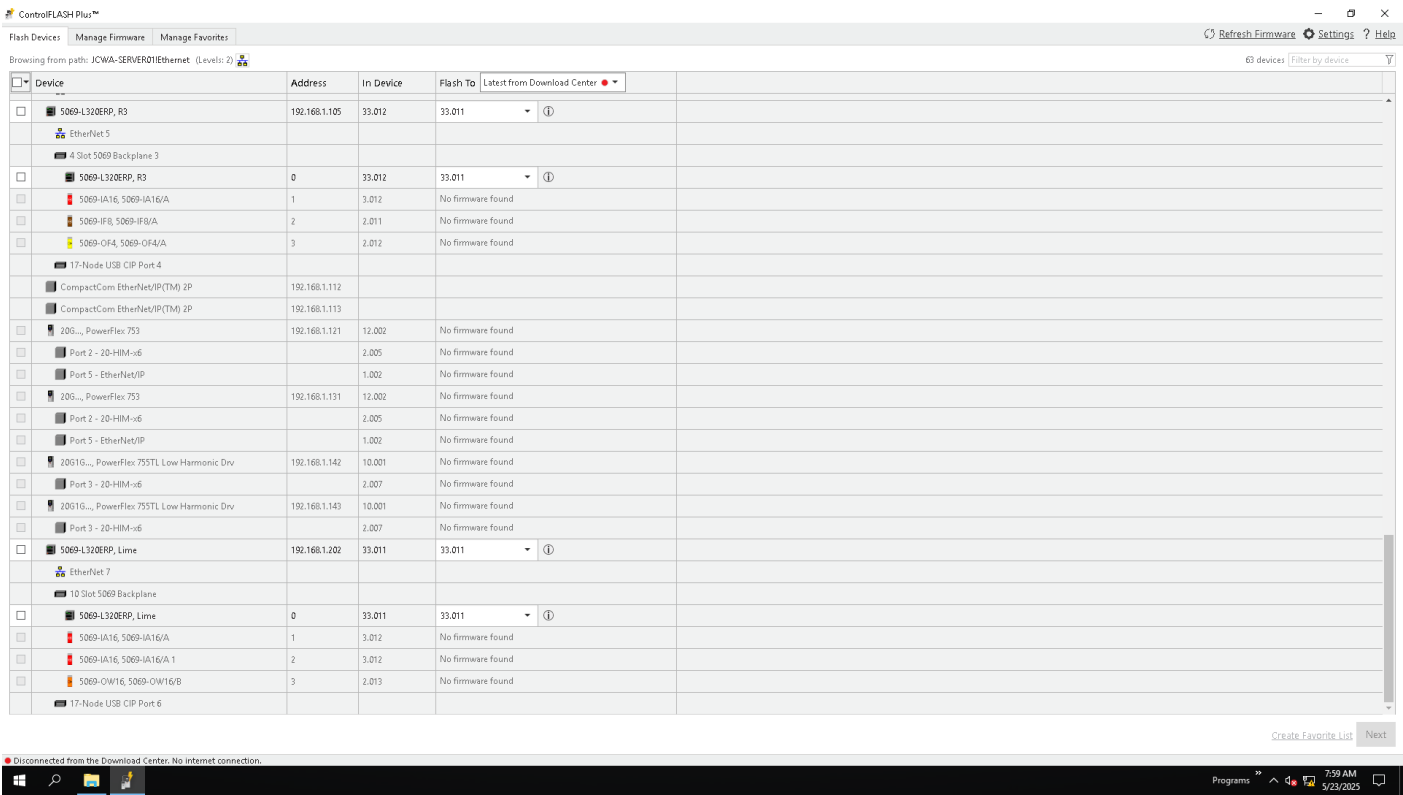
63 devices | Filter by device

Device	Address	In Device	Flash To	Latest from Download Center
5069-L320ERP, R2	192.168.1.103	33.012	33.011	
EtherNet 4				
4 Slot 5069 Backplane 2				
5069-L320ERP, R2	0	33.012	33.011	
5069-IA16, 5069-IA16/A	1	3.012	No firmware found	
5069-IF8, 5069-IF8/A	2	2.011	No firmware found	
5069-OF4, 5069-OF4/A	3	2.012	No firmware found	
17-Node USB CIP Port 3				
1747-L552E, PLC_R3	192.168.1.104	3.005	No firmware found	
DF1 Point-to-Point				
5069-L320ERP, R3	192.168.1.105	33.012	33.011	
EtherNet 5				
4 Slot 5069 Backplane 3				
5069-L320ERP, R3	0	33.012	33.011	
5069-IA16, 5069-IA16/A	1	3.012	No firmware found	
5069-IF8, 5069-IF8/A	2	2.011	No firmware found	
5069-OF4, 5069-OF4/A	3	2.012	No firmware found	
17-Node USB CIP Port 4				
CompactCom EtherNet/IP(TM) 2P	192.168.1.112			
CompactCom EtherNet/IP(TM) 2P	192.168.1.113			
20G... Powerflex 753	192.168.1.121	12.002	No firmware found	
Port 2 - 20-HIM-u6		2.005	No firmware found	
Port 5 - EtherNet/IP		1.002	No firmware found	
20G... Powerflex 753	192.168.1.131	12.002	No firmware found	
Port 2 - 20-HIM-u6		2.005	No firmware found	
Port 5 - EtherNet/IP		1.002	No firmware found	
20G10... Powerflex 753TL Low Harmonic Dv	192.168.1.142	10.001	No firmware found	
Port 3 - 20-HIM-u6		2.007	No firmware found	

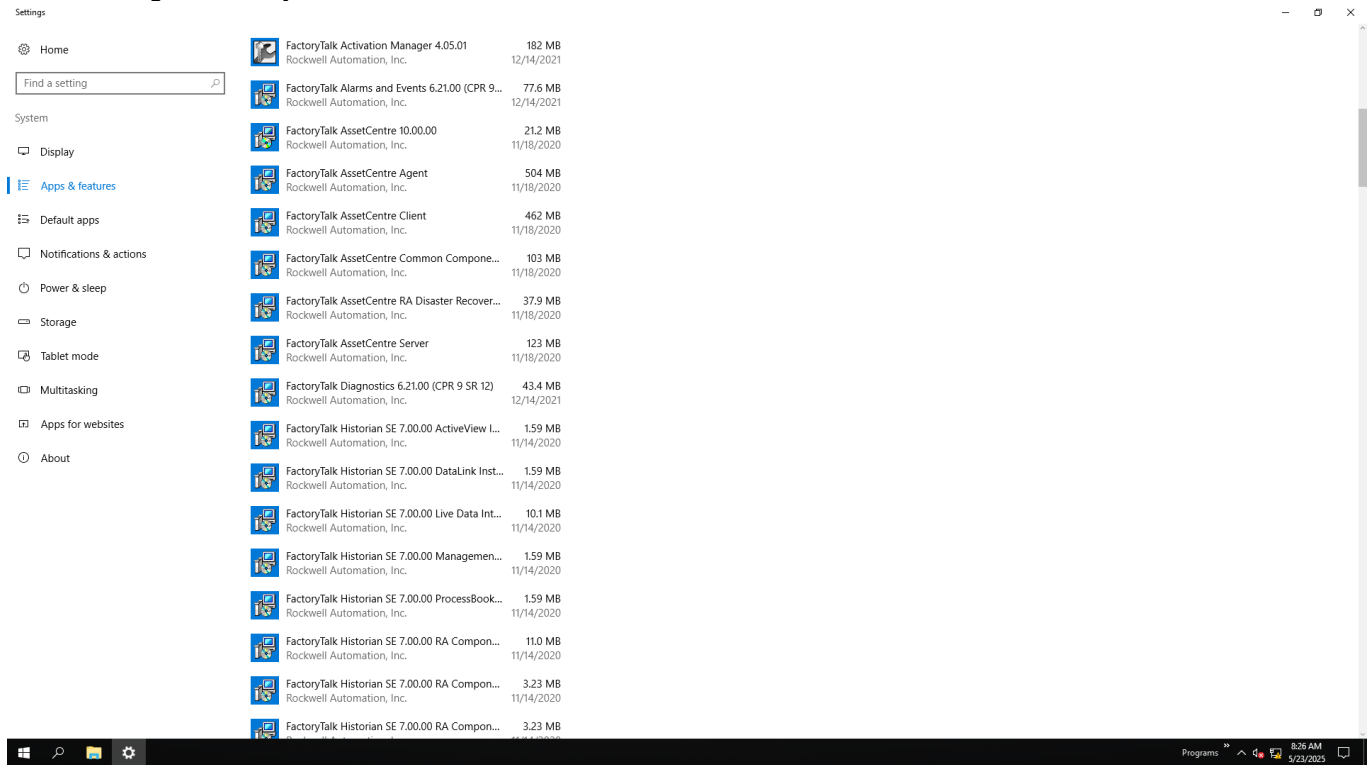
Create Favorite List | Next

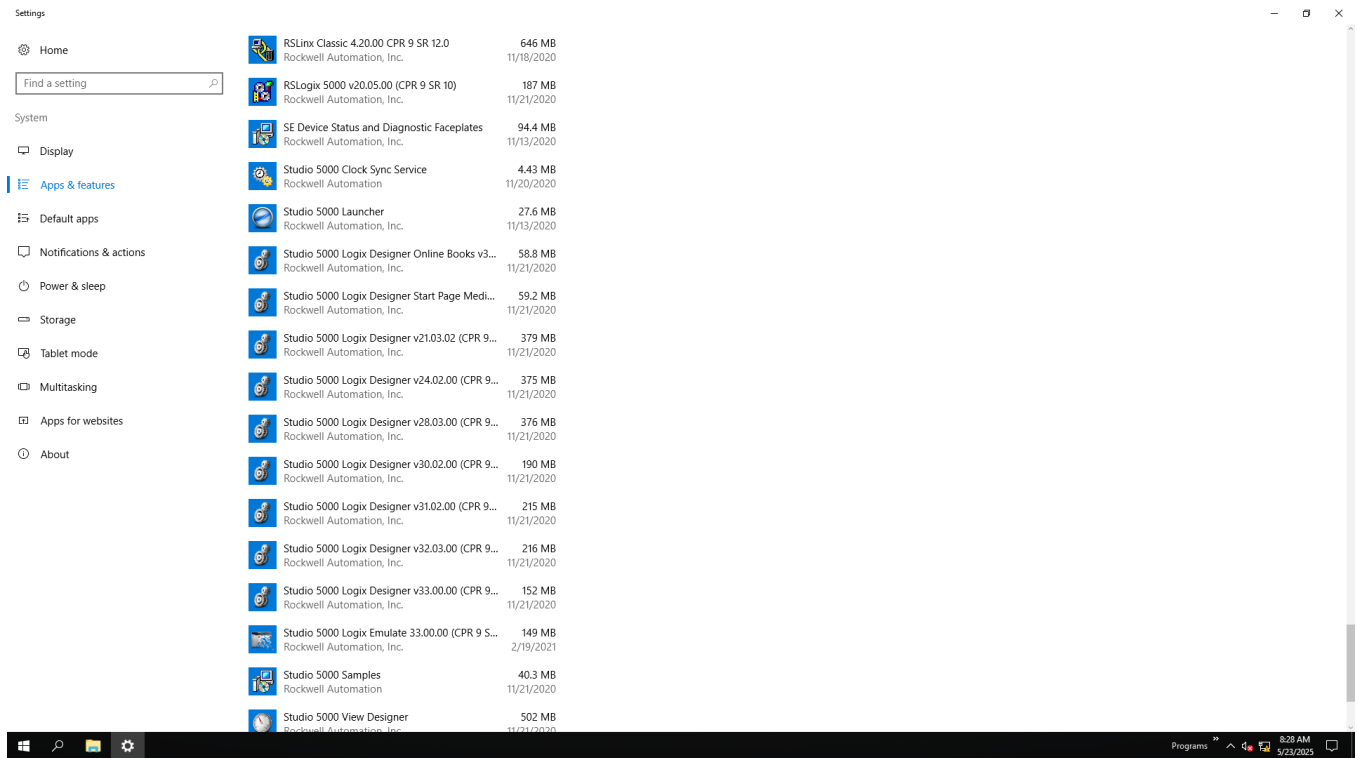
Disconnected from the Download Center. No internet connection.

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The following Control System Software is installed on the SCADA HMI Server machines:





In addition to this, a quick pass at JCWA's equipment inventory was created, and will be provided.