

AUSTIN WATER RESILIENCY IMPLEMENTATION

Status of Recommendations from the AW External Review

August 23, 2023



DEFINITIONS AND COLOR CODING

Implemented (Green): AW has finished our work on the recommendation on one of three paths:

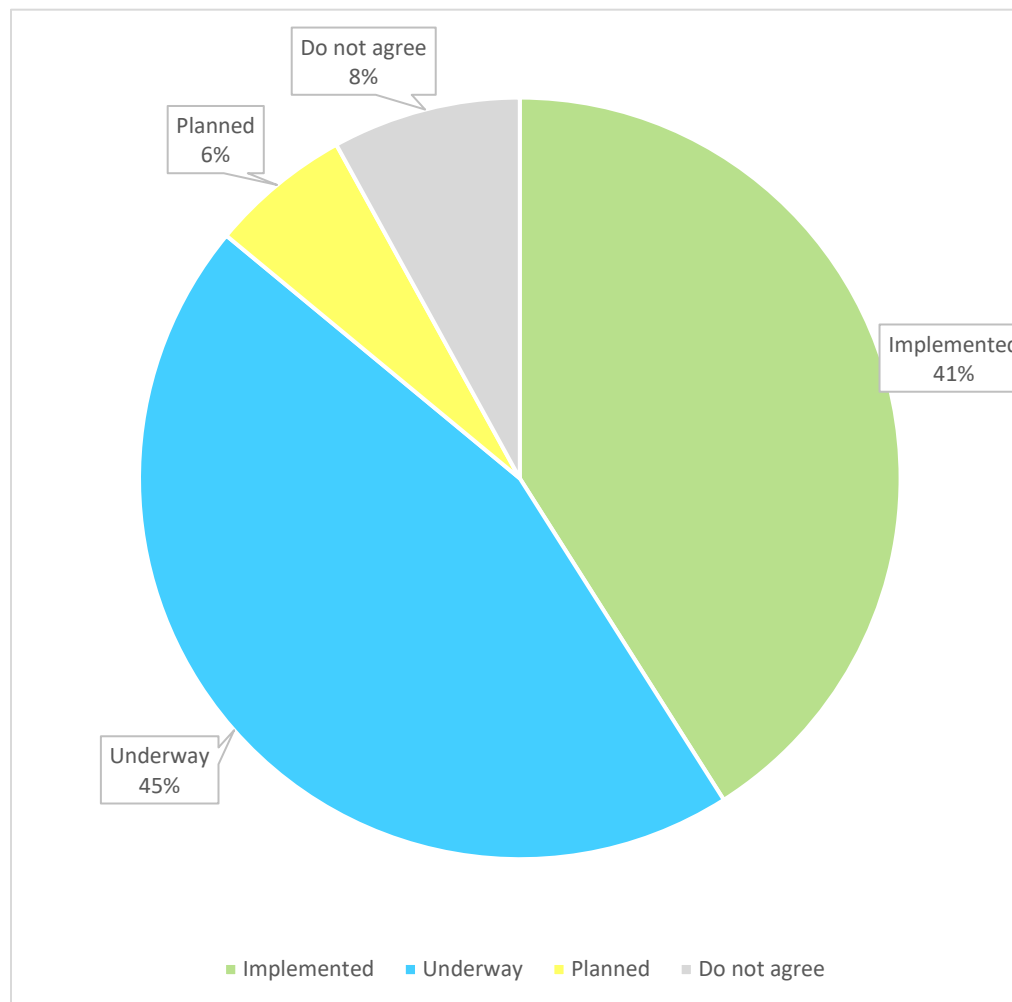
1. AW has completed the specific actions in its implementation plan.
2. AW has launched specific steps for a process with the appropriate staff and other resources assigned. The activities associated with the process have become part of daily operations. The recommendation has been operationalized.
3. AW has programmed a long-term capital project or planning project such as Water Forward to address the recommendation.

Underway (Blue): AW has developed a plan to address the recommendation and has begun implementation.

Our work to fully implement the recommendation is in progress.

Planned (Yellow): AW has developed a plan to implement the recommendation that includes actionable steps but has not yet begun implementation.

Do Not Agree (Gray): AW does not agree to implement the recommendation and will not be reporting a status on it going forward.



■ Implemented – 22 Recommendations, 41%

Emergency Management

Rec. #	Recommendation	Implementation Status	Expected Completion
2.3-9	Communicate roles and responsibilities prior to events and immediately upon activation for incidents.	Revisions to the Standard Operating Procedure for Incident Command roles and responsibilities is complete and includes protocols for communication to AW staff upon activation and through regular internal communication channels.	Complete
2.3-12	Increase purchasing authority at the operations level to expedite rapid purchasing.	AW has authority to declare emergency purchasing conditions and has utilized this capability in response to emergency conditions.	Complete

Employee & Leadership Development

Rec. #	Recommendation	Implementation Status	Expected Completion
2.2-6	Communicate significant HR decisions to operations staff.	All compensation changes to base pay have been implemented and communicated to employees. Compensation evaluation and update processes have been operationalized.	Complete
2.2-9	Support hiring above the starting level when a candidate is qualified.	AW is currently posting openings at multiple levels to allow hiring above the entry level.	Complete
2.3-1	Continue to recruit and retain a skilled workforce, prioritizing vacant positions.	AW has been attending career fairs and hosted recruitment Open Houses for applicants. Tracking vacancy rates, hard to fill positions, and separations has been operationalized.	Complete

■ Implemented ■ Underway ■ Planned ■ Do not agree



Operations & Engineering

Rec. #	Recommendation	Implementation Status	Expected Completion
2.5-2	Examine the risks of more frequent and intense storms to evaluate water treatment management.	Surface water quality considerations are included in the 2024 Water Forward Plan update, which is underway.	Complete
2.6-4	Prioritize the Ullrich Water Treatment Plant centrifuge replacement project.	Design of the Ullrich centrifuge project is included in the 5-Year CIP. A centrifuge repair and maintenance contract was approved by City Council in March 2023.	Complete
2.6-6	Implement measures to remedy the preventative maintenance backlog.	AW used IDIQ contracts to supplement the efforts of AW staff to address the preventative maintenance backlog.	Complete
2.6-9	Review prior lime feed and delivery system condition assessments with plant staff and determine response actions.	The Ullrich Water Treatment Plant Lime Feed Loop is substantially complete.	Complete
2.6-10	Continue Ullrich Water Treatment Plant Conversion project as currently scheduled.	This project is included in the 5-Year CIP. Design is underway.	Complete
2.7-1	Establish a consistent backwash procedure and develop readily accessible Standard Operating Procedures.	Filtration Standard Operating Guidelines have been updated and made available on the O&M website. Instructions for accessing Standard Operating Procedures and Guidelines have also been completed.	Complete
2.8-1	Confirm all level monitors and controls in distribution storage tanks are working properly.	AW provides station checks throughout the distribution system on a routine basis to monitor storage levels.	Complete
2.8-3	Develop additional pathways for water supply to reach South pressure zones.	Two new elevated storage tanks and associated transmission mains are included in the 5-Year CIP. Engineering contracts were approved by Council on May 18. AW is updating our Water Distribution Long-Range Plan and will explore additional opportunities to enhance water supply to South pressure zones.	Complete

■ Implemented ■ Underway ■ Planned ■ Do not agree



Public Information

Rec. #	Recommendation	Implementation Status	Expected Completion
2.4-1	Provide media training for all staff who may participate in press conferences during emergency events.	AW hired consultants to provide media skills training workshops for leadership positions across the organization. Several sessions have been completed and regular training is planned going forward.	Complete
2.4-2	Standard practices should be established for publishing information in languages other than English.	Required regulatory language and standard guidance for customers for boil water notices have been translated to multiple languages.	Complete
2.4-3	Notify and brief the City Manager of crises and move forward with decisions related to public communications.	Communications protocols for emergencies, which include a Crisis Communications Checklist, were completed in collaboration with CPIO, HSEM, AE, WPD, and AFD.	Complete
2.4-6	Issue initial generic language notifications to the public, followed by detailed information updates in all languages.	Short messages that meet all regulatory requirements have been created and translated for various notification platforms.	Complete
2.8-4	Continue communications to manage water loss in premise plumbing during freeze events.	AW provides seasonal communications and outreach about protecting pipes during freezing weather. The My ATX Water customer portal also sends custom notifications if water use suddenly increases indicating water loss at a home or business.	Complete

Situational Awareness

Rec. #	Recommendation	Implementation Status	Expected Completion
2.8-2	Improve communication between Pumping and Plant Operations regarding flow changes.	Standard Operating Guidelines for pumping and treatment communications have been completed that include VEOCI as a platform to document pumping changes. [see recommendation 2.6-1]	Complete

■ Implemented
 ■ Underway
 ■ Planned
 ■ Do not agree



SOPs & Training

Rec. #	Recommendation	Implementation Status	Expected Completion
2.2-4	Teach all Operations & Maintenance staff how to access Standard Operating Procedures.	Supervisors and certification trainers at each Water Treatment Plant have incorporated access to electronic Standard Operating Procedures as part of their training plans and ongoing training activities. All current staff at the three water treatment plants have been trained how to access Standard Operating Procedures.	Complete
2.2-11	Continue incorporation of new training positions; promote consistency of training for all operations and maintenance staff.	Trainer positions have been filled and training has been incorporated into daily operations at all three water treatment plants.	Complete
2.6-1	Improve communication between pumping and plant operations to balance load variations.	Standard Operating Guidelines for pumping and treatment communications have been completed that include VEOCI as a platform to document pumping changes. [see recommendation 2.8-2]	Complete

■ Underway – 24 Recommendations, 45%

Emergency Management

Rec. #	Recommendation	Implementation Status	Expected Completion
2.7-3	Identify possible future scenarios that could present water quality and treatment challenges; implement solutions.	AW has identified scenarios that could present water quality and treatment issues for emergency response planning. Updates to the Emergency Response Plan are under review.	10/31/2023

Employee & Leadership Development

Rec. #	Recommendation	Implementation Status	Expected Completion
2.2-5	Continue regular team-building exercises and require attendance by all staff.	A Leadership Roadmap of seven sessions for Water Treatment Operators has been created and is underway to advance skills around conflict resolution, leadership excellence, emotional intelligence, and building trust. Training has been continuous this year with final sessions scheduled through October.	12/31/2023
2.2-7	Continue to advocate for increased operator salaries.	AW has implemented a retention bonus for current staff that meet eligibility criteria and a retention stipend for new staff that is paid out over two years. These programs are being evaluated to determine if additional compensation and recruitment/retention strategies are needed.	9/30/2023
2.2-8	Develop training for young people to learn about water treatment and operations.	AW will continue to partner with TAWWA, WEAT, P-Tech, and other industry organizations to develop new talent.	12/31/2023
2.3-11	Provide training and consequences for noncompliance around bringing potential issues forward that impact safety.	Training sessions for AW supervisors began in March that include safety policies and procedures, as well as topics such as performance management, discipline and investigations.	12/31/2023

Operations & Engineering

Rec. #	Recommendation	Implementation Status	Expected Completion
2.6-2	Verify operational range of primary responses via stress testing, condition assessments, and staffing requirements.	Medium and high service pump stations at Ullrich have been stress tested. Testing Ullrich production capacities at higher levels will be conducted in August. Standard Operating Procedures will be updated based on test results.	9/30/2023
2.6-3	Conduct a seasonal backwash performance evaluation and implement a routine filter media monitoring program.	Development of filter assessment Standard Operating Procedures for all three treatment plants is underway. This will include data management, trouble-shooting, and root cause evaluation of performance criteria.	12/31/2023
2.6-5	Review and update staffing assignments and SOPs for system flow changes.	Staffing assignments and SOPs for normal system flow changes have been reviewed and documented. Planning is underway to stress test Ullrich Water Treatment Plant this August, which will inform finalizing staffing assignments and SOP for a substantial flow change.	9/30/2023
2.6-8	Remediate Upflow Clarifier No. 5 launder and verify elevation uniformity for all units.	Performance data from all Ullrich clarifiers has been compiled and evaluated. Findings have been drafted and are under review.	9/30/2023
2.7-2	Evaluate the cost of continual polymer feed and implement if found to be cost efficient.	AW has evaluated the cost and efficiency of operating polymer on an intermittent vs. continuous basis. Findings have been summarized and are under review.	9/30/2023

Public Information

Rec. #	Recommendation	Implementation Status	Expected Completion
2.4-4	Continue to hire staff to handle water and wastewater concerns using the My ATX Water customer portal.	The My ATX Water program has been transitioned from Operations to the Customer Experience program area and will be fully implemented by FY2025. This includes the addition of staff positions to support the program.	2/28/2025
2.6-7	Enhance understanding of the CIP process throughout the organization.	Communication materials about the CIP process have been drafted and will be delivered to operations staff this summer.	9/30/2023

Reporting Structure

Rec. #	Recommendation	Implementation Status	Expected Completion
2.2-1	Establish a position for a single person to be in charge of Ullrich Water Treatment Plant.	AW has dedicated a Division Manager to lead at Ullrich Water Treatment Plant as of January 2023. If a second Division Manager is needed, a new FTE will be included in the budget for FY25.	9/30/2024
2.2-2	Investigate ways to improve conflict management skills, team building efforts, and leadership development at the plants.	AW will provide additional training and consulting resources related to conflict management, team building, and leadership development.	12/31/2023
2.4-5	Develop appropriate position titles, pay, and job scope for a critical infrastructure institution.	The City’s Human Resources Department and Director Roalson have developed a tracking tool and meet regularly to review recruiting and retention strategies, new titles, reclassification requests, and pay exceptions.	10/31/2023

■ Implemented
 ■ Underway
 ■ Planned
 ■ Do not agree



Situational Awareness

Rec. #	Recommendation	Implementation Status	Expected Completion
2.3-4	Enforce training on VEOCI ¹ for all personnel who work in the system.	Revised Emergency Management Standard Operating Procedure (SOP) includes training requirements for ICS, and draft SOP on situational awareness includes VEOCI training requirements. Quarterly training reports are generated to track compliance with training requirements. Additional accountability measures have been approved and will be implemented during year-end performance appraisals.	9/30/2023
2.3-5	Continually exercise VEOCI system on small, low-stakes or no consequence events.	AW is finalizing a new Standard Operating Procedure on situational awareness; VEOCI will be used for low-stakes events. Notification lists for concurrence events are being finalized.	9/30/2023
2.3-6	Evaluate current emergency planning and training at each plant.	Two Incident Management Team tabletop exercises were held in FY23 that included plant staff participation. Development of the FY24 exercise schedule is underway.	9/30/2023
2.3-7	Establish notification thresholds that are documented and understood by all staff.	AW has documented notification thresholds as part of our Risk Guidance Criteria. The new SOP on situational awareness incorporates Risk Guidance Criteria and VEOCI training requirements. Staff training is provided regularly and documented in TRAIN.	9/30/2023
2.3-8	Establish notification thresholds that are documented and understood by all staff.	AW has documented notification thresholds as part of our Risk Guidance Criteria. The new SOP on situational awareness incorporates Risk Guidance Criteria and VEOCI training requirements. Staff training is provided regularly and documented in TRAIN. [see recommendation 2.3-7]	9/30/2023

¹ VEOCI is Austin Water’s online software platform that serves as a virtual emergency operations center.

SOPs & Training

Rec. #	Recommendation	Implementation Status	Expected Completion
2.2-13	Develop a plan to manage cross-training between operations and maintenance staff.	AW has incorporated focused training on operations earlier for new staff. An onboarding guide that specifies operations and maintenance training has been developed. A new position is under review to allow appropriately licensed and experienced staff to be dedicated to operations or maintenance.	9/30/2023
2.2-14	Develop a regulatory and water quality training program, as well as regular CIP program updates, for plant staff.	AW is developing a training program for facility and process engineers, operations support staff, and the Regulatory and Water Quality Manager.	9/30/2023
2.3-3	Train personnel for plant-specific knowledge and employ at higher certification levels where necessary.	Plant-specific training programs have been developed and launched on 2/13/2023 and more than 300 hours of training has been completed. 90-day programmatic evaluations are in progress to validate overall effectiveness and any needed minor modifications.	9/30/2023
2.5-1	Review oil spill response plan and update where needed.	Consultants have been hired by Magellan to complete the required 5-year update to the spill response plan. AW will review and provide feedback later this year.	12/31/2023

■ Planned – 3 Recommendations, 6%

Operations & Engineering

Rec. #	Recommendation	Implementation Status	Expected Completion
2.7-4	Re-evaluate plant capital projects based on comprehensive conditions assessments and communicate with plant staff.	Capital Projects for 2023-2028 have been reviewed with Operations staff to prioritize. A communications plan about these priorities is in development.	9/30/2023

Reporting Structure

Rec. #	Recommendation	Implementation Status	Expected Completion
2.2-3	Engage a consultant to make recommendations regarding the best management structure to support plant operations and maintenance.	AW will conduct the Partnership for Safe Water Self-Assessment for Water Treatment Plant Operations at Ullrich to identify options to support plant operations and maintenance. The hiring process for a Consulting Engineer to lead this effort is underway.	12/31/2024
2.2-12	Engage a staffing expert to evaluate staffing at all three treatment plants.	AW will use the findings from the Partnership for Safe Water Self-Assessment to identify job descriptions, staffing levels, and training programs for implementation.	12/31/2024

■ Do Not Agree – 4 Recommendations, 8%

Reporting Structure

Rec. #	Recommendation	Implementation Status	Expected Completion
2.2-10	Establish greater autonomy for AW Human Resources to better define job requirements and qualifications.	AW does not agree with this recommendation.	N/A
2.2-15	AW should report directly to the City Manager due to its criticality for public health and safety.	AW does not agree with this recommendation.	N/A
2.3-2	Replace existing protocol and have AW report directly to the City Manager.	AW does not agree with this recommendation.	N/A
2.3-10	Reduce span of control to allow for more responsive organizational actions during emergencies.	AW does not agree with this recommendation.	N/A