

AUSTIN WATER RESILIENCY IMPLEMENTATION

Status of Recommendations from the AW External Review

March 29, 2023



DEFINITIONS AND COLOR CODING

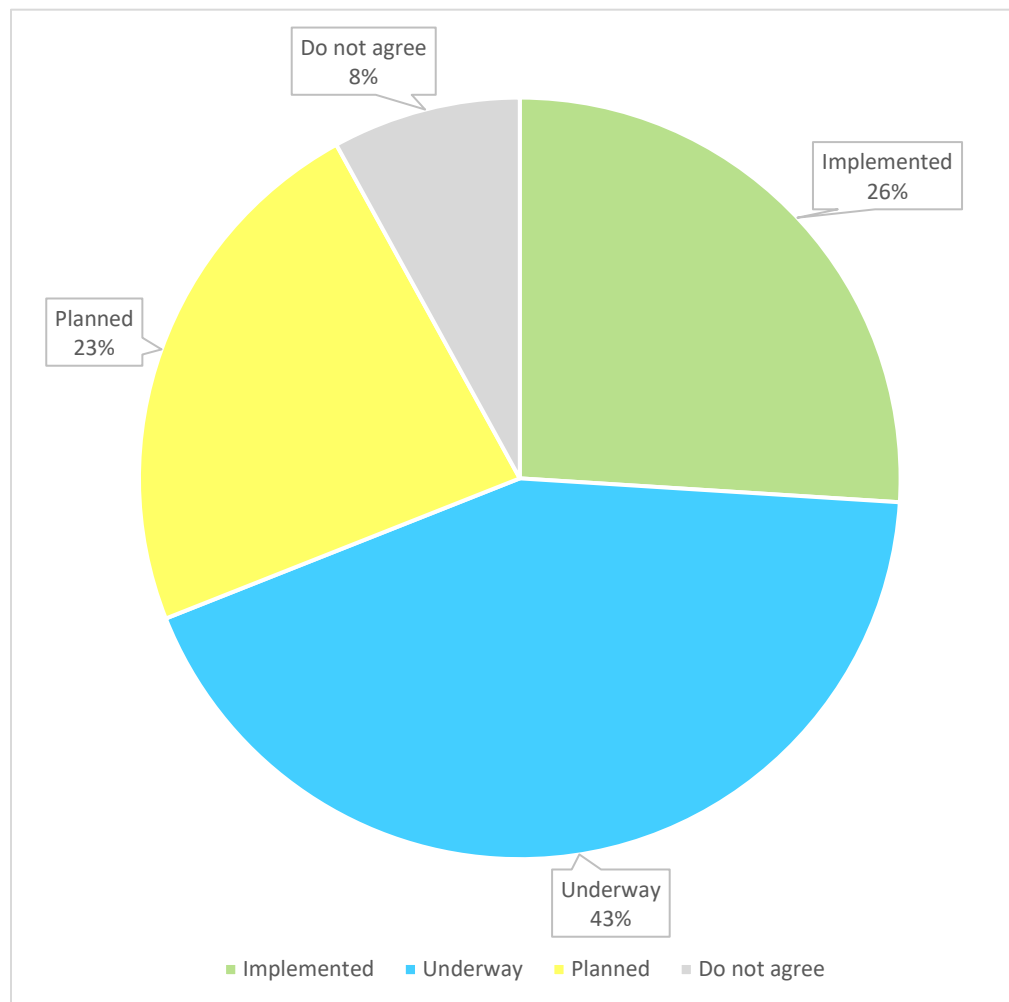
Implemented (Green): AW has finished our work on the recommendation on one of three paths:

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 – 14 Recommendations, 26%

Employee & Leadership Development

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|--|--|---------------------|
| 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 |

Emergency Management

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|---|---|---------------------|
| 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 |

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. | AW will include surface water quality considerations in the planned 2024 Water Forward Plan update. | 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 five-year 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 is using IDIQ contracts to supplement the efforts of AW staff to address the preventative maintenance backlog. | Complete |

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|---|---|---------------------|
| 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 |
| 2.8-1 | 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. | AW is updating our Water Distribution Long-Range Plan and will explore opportunities to enhance water supply to South pressure zones. | Complete |

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. | 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 |
| 2.8-4 | 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 |

SOPs & Training

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|---|---|---------------------|
| 2.2-4 | Teach all Operations & Maintenance staff how to access Standard Operating Procedures. | Standard Operating Procedures training by dedicated Water Treatment Plant training instructors has begun. | 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. An initial training program has been developed and launched in February 2023. | Complete |

■ Underway – 23 Recommendations, 43%

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 for Water Treatment Operators has been created to advance skills around conflict resolution, leadership excellence, emotional intelligence, and building trust. A series of seven sessions will begin April. | 12/31/2023 |
| 2.2-6 | Communicate significant HR decisions to operations staff. | Pay increases for AW Electricians were approved and implemented in February and communicated to those employees by Director Roalson. Additional compensation reviews are underway, and outcomes will be shared with staff. | 9/30/2023 |
| 2.2-7 | Continue to advocate for increased operator salaries. | AW has implemented a retention bonus for current staff that meet eligibility criteria. AW has also implemented a retention stipend for new staff that is paid out over two years. Additional compensation and recruitment/retention strategies are in development. | 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 and other industry organizations to develop new talent resources. | 12/31/2023 |

■ Implemented ■ Underway ■ Planned ■ Do not agree



| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|--|---|---------------------|
| 2.3-1 | Continue to recruit and retain a skilled workforce, prioritizing vacant positions. | AW has been attending career fairs, hosting Open Houses for applicants, and implementing recruitment campaigns and strategies to fill vacant positions. | 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 includes safety policies and procedures. | 12/31/2023 |

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 are being reviewed and finalized. | 7/31/2023 |
| 2.7-3 | Identify possible future scenarios that could present water quality and treatment challenges; implement solutions. | AW is identifying scenarios that could present water quality and treatment issues for emergency response planning. | 10/31/2023 |

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 to the Customer Experience program area, from Operations and will be fully implemented by FY2025, this includes the addition of staff positions to fully support the program. | 2/28/2025 |
| 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 for various notification platforms. Translations are underway. | 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. A new leadership position over the remaining water treatment plants will be identified. | 9/30/2023 |
| 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 been meeting regularly to review recruiting and retention strategies, new titles, reclassification requests, and pay exceptions. | 10/31/2023 |

Situational Awareness

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|--|---|---------------------|
| 2.3-4 | Enforce training on VEOCI ¹ for all personnel who work in the system. | Quarterly training reports are being generated to track compliance with training requirements. Additional accountability measures are in development. | 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 for utilization of VEOCI for situational awareness; this will be used for low-stakes events. | 9/30/2023 |
| 2.3-6 | Evaluate current emergency planning and training at each plant. | Two Incident Management Team tabletop exercises will be held in FY23 that include plant staff participation. | 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. AW will train staff to promote understanding of notification thresholds at all levels of the organization. | 9/30/2023 |

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

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|--|--|---------------------|
| 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. AW will train staff to promote understanding of notification thresholds at all levels of the organization. [see recommendation 2.3-7] | 9/30/2023 |
| 2.8-2 | Improve communication between Pumping and Plant Operations regarding flow changes. | Standard Operating Guidelines for pumping and treatment communications have been drafted. AW is evaluating VEOCI as a platform to document pumping changes. | 9/30/2023 |

SOPs & Training

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|---|--|---------------------|
| 2.2-13 | Develop a plan to manage cross-training between operations and maintenance staff. | AW is reviewing our current training program to determine if changes or updates are needed. | 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 for all three Water Treatment Plants. 90-day programmatic evaluations are in progress to validate overall effectiveness and any needed minor modifications. | 5/31/2023 |
| 2.6-1 | Improve communication between pumping and plant operations to balance load variations. | Standard Operating Guidelines for pumping and treatment communications have been drafted. AW is evaluating VEOCI as a platform to document pumping changes. [see recommendation 2.8-2] | 4/28/2023 |

■ Implemented
 ■ Underway
 ■ Planned
 ■ Do not agree



Operations & Engineering

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|---|--|---------------------|
| 2.7-1 | Establish a consistent backwash procedure and develop readily accessible Standard Operating Procedures. | Filtration Standard Operating Guidelines have been updated. Staff training will occur later this spring. | 4/28/2023 |

■ Planned – 12 Recommendations, 23%

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. | Testing Ullrich production capacities at higher levels will be conducted later this year. 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. | A review of the filter evaluation Standard Operating Procedures for all three treatment plants is underway. | 12/31/2023 |
| 2.6-5 | Review staffing needs for coordination of operations for system flow changes. | Planning is underway to stress test Ullrich Water Treatment Plant this summer. | 8/31/2023 |
| 2.6-8 | Remediate Upflow Clarifier No. 5 launder and verify elevation uniformity for all units. | Evaluation of the clarifier is underway; stress testing will be conducted this summer. | 9/30/2023 |
| 2.7-2 | Evaluate the cost of continual polymer feed and implement if found to be cost efficient. | AW is evaluating the cost and efficiency of operating polymer on an intermittent vs. continuous basis. | 9/30/2023 |
| 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 |

■ Implemented ■ Underway ■ Planned ■ Do not agree



Public Information

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|---|---|---------------------|
| 2.4-3 | Notify and brief the City Manager of crises and move forward with decisions related to public communications. | Emergency communications protocols are being reviewed and evaluated to establish an efficient process for leadership briefings and external communications. | 5/31/2023 |
| 2.6-7 | Enhance understanding of the CIP process throughout the organization. | AW will enhance communications about priority projects and the CIP process across the organization. | 9/30/2023 |

Reporting Structure

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|--|---|---------------------|
| 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. | 9/30/2023 |
| 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 Water Treatment Plant to identify options to support plant operations and maintenance. | 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 |

SOPs & Training

| Rec. # | Recommendation | Implementation Status | Expected Completion |
|--------|---|--|---------------------|
| 2.5-1 | Review oil spill response plan and update where needed. | AW will review and update plans for spill responses later this year. | 12/31/2023 |

■ Implemented
 ■ Underway
 ■ Planned
 ■ Do not agree



■ 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 |