

City Council

Water Treatment Plant Update

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DEPARTMENT OF
**PUBLIC
UTILITIES**

Purpose

- Recent Boil Water Advisory
 - Primary Cause
 - Corrective Actions
- Steps Already Taken To Improve DPU
- Road Ahead

Boil Water Advisory

The early investigation has determined that two primary factors contributed to the localized Boil Water Advisories:

- Maintenance not occurring in a timely fashion on plate settlers in the sedimentation basins.
- Poor raw water quality coming into the system.

Corrective Actions Taken

- Auditing of the maintenance work order system to ensure all on-demand items are placed on a routine, recurring schedule.
- Shifting the focus of maintenance from corrective to preventative.
- Reviewing potential optimization for filter and backwash systems, which could include changing standard runtime during normal operations and enhancing efficiency during emergency response with controls updated as appropriate based on that review and analysis.
- Continued enhancements to Standard Operating Procedures (SOPs) and staff training.

Staffing and Organizational Improvements

Changes already made in DPU:

- Engineering Services Division established.
- Dividing Water Operations into two sections (Plant Operations and System Operations).
- Additional staff for Water Treatment Plant.
- Expertise added to organization (five Professional Engineers in leadership positions).
- Safety Officer assigned on premise to WTP.
- Executive Leadership assigned on premise to WTP.

Improving Documentation and Knowledge Transfer

Submitted to VDH for Review/Comment

	SOP	Status
1	Communication	Final
2	Alum Dosing	In progress (Review by VDH)
3	Alum System Operation and Troubleshooting	
4	Chemical Feed Loss	
5	Chlorine Bench IDOC	
6	Fluoride Bench IDOC	
7	Hypo Doss LOGG Inactivation	
8	Hypo System Operation and Troubleshooting	
9	Solution Calculation	
10	Zinc Orthophosphate System Operation and Troubleshooting	

Improving Documentation and Knowledge Transfer

Submitted to VDH for Review/Comment

	SOP	Status
11	Emergency Response to Chemical Spill	In progress (Review by VDH)
12	Filter Backwash Procedure (Auto)	
13	Filter Backwash Procedure (Manual)	
14	Pump Loss	
15	Plant Shutdown and Startup	
16	Power loss, Interruption, and Transfer	
17	Storm Preparation	

Billing Improvements

- Reassessing billing practices and assigning an additional resource to manage the billing exceptions process.
- Reducing the timeframe for billing adjustments from a three month to a one-month billing cycle.
- Proactively performing leak checks and informing customers of results.

City of Richmond
Department of Public Utilities
High Water Consumption Inspection

This is a courtesy notice from the Department of Public Utilities to inform you we recently inspected your water meter due to higher-than-normal water usage.

☐ Leak found on the City side - Repaired Leak

☐ Leak found on the City side - Pending Repair

☐ No leak found on the City side

☐ Unable to access DPU meter


Next Steps:

- **Leak found and repaired on the City side:** No action is required on your part. DPU made the repair and will adjust the bill within xx days.
- **Leak found on the City side, pending repair:** No action is required on your part. The City will make the repair within 30 business days and adjust the bill within xx days afterwards.
- **No leak found on the City-side:** Future bills may remain high due to continued high consumption or a possible on-property leak. Please check for hidden leaks-especially running toilets-and perform a dye test if needed. If you find and fix a leak, send proof (invoice, receipt, or written repair note) to dpucustserv@rva.gov for review.
- **Unable to access DPU meter:** DPU will return within 3 business days. See details on meter access attached.

Scan the QR code for more details or to see this information in Spanish.

Thank you for being a valued customer.

Date: _____ Time: _____

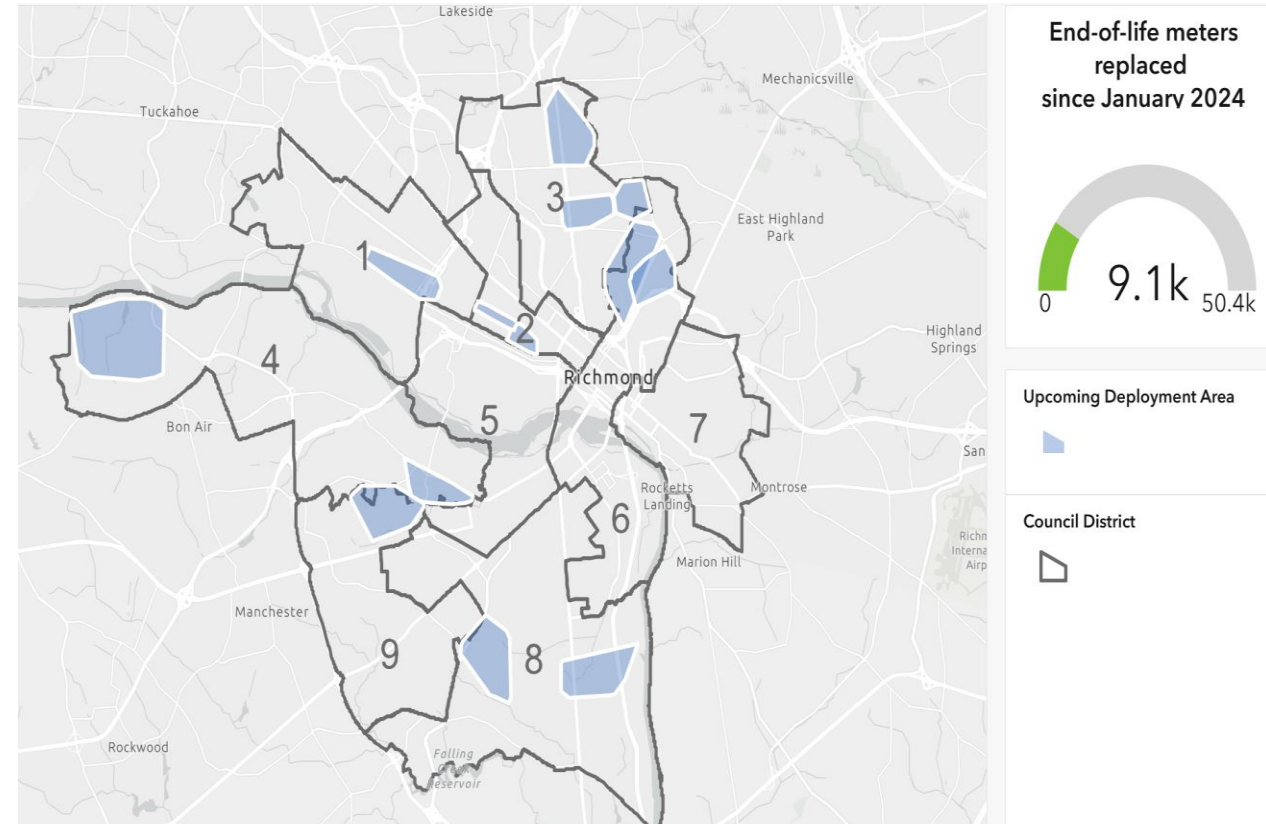


Billing Technology Improvements

- Secured and implemented handheld meter readers in May 2025.
- These handhelds will:
 - Augment the electronic meter reading process by reading meters missed during the normal process due to obstructions.
 - Remove the physical manual meter reading process, thereby reducing the potential for human input error and time spent on manual reads.
 - Provide historical data for review and assessment (over time).
- Plans to replace mobile read receivers and enhancing vehicles.

Meter Replacement Program

- Replacing ~ 50,000 end of life water meters.
- Pilot launched in March 2024.
- 9,000 + replaced to date.
- Workforce partnership with Office of Community Wealth Building.
- Improve accuracy and efficiency of water services.



New Reporting Requirements

Oversight Reports:

- Critical Infrastructure Report (monthly report that reviews critical assets that are in a repair or out of service status). Report is reviewed by Senior Deputy Director or Director with staff.
- Billing Exception Report (weekly report regarding the status of billing exceptions that are pending review by staff. Report is reviewed by Senior Deputy Director or Director with staff.

Additional Reports:

- Summary review of all reports is in progress, additional reports will be added to aid in operational transparency and oversight.

New Performance Measurements

Measurements to Strengthen Accountability:

- Revise/update overarching strategic and action plans to reflect departmental goals and key performance indicators.
- Team and individual work tasks will be directly tied to metrics and communicated/reviewed on periodic basis.

Reporting:

- Quarterly and annual progress reports will be produced.
- Metrics will be integrated into performance check-ins and evaluations.

Regulatory Transparency

Chapter 28 of City Code

- Initial Review has determined a need for further updates to improve transparency to the public and to aid in consistency in application. Recommendations will be proposed in the coming months.

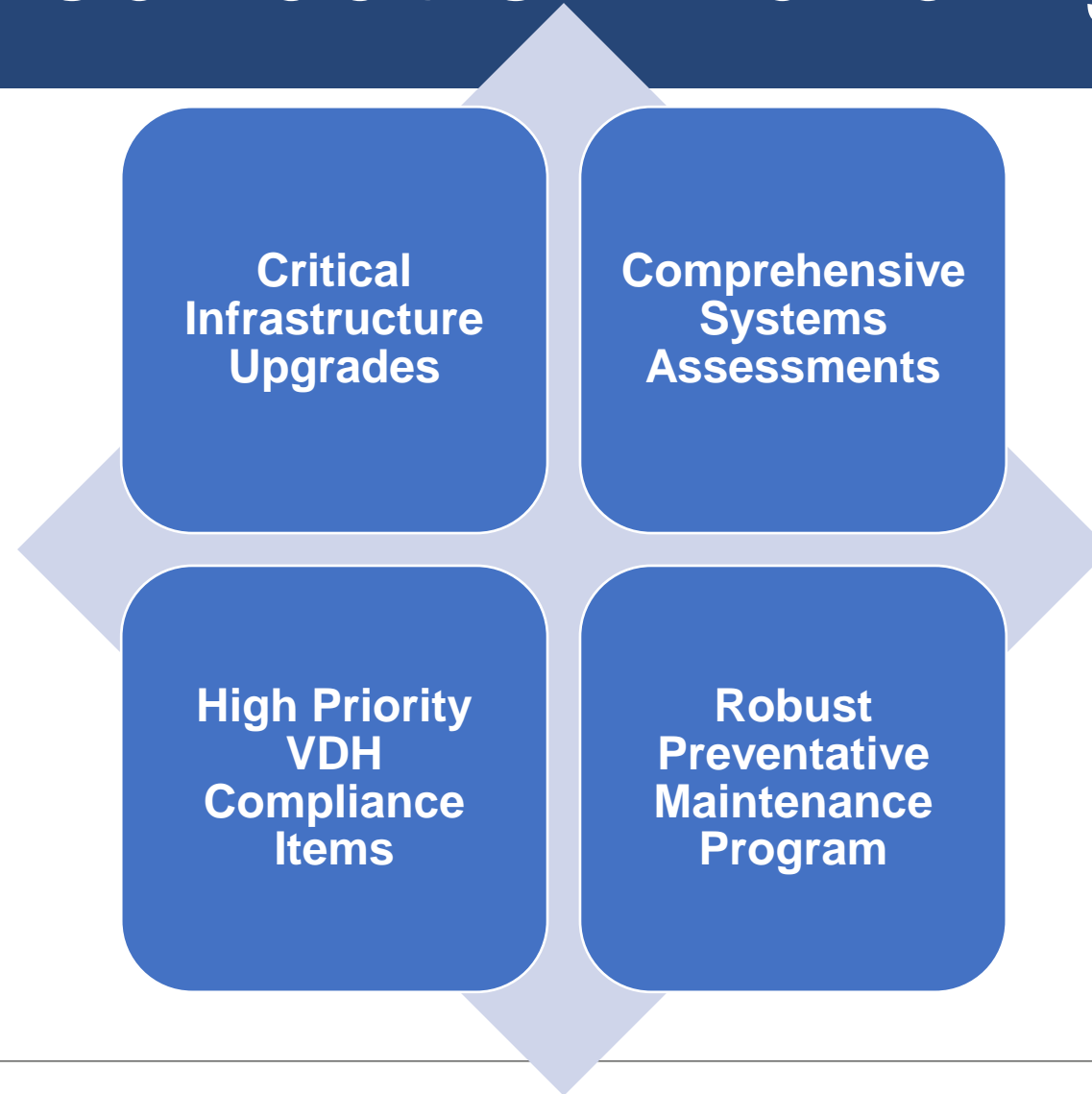
Section 28-26, Adoption of Rules and Regulations

- To improve management of DPU existing rules and regulations, staff has reviewed and determined that new rules and regulations may be warranted along with updating existing rules and regulations. This process will take approximately 12 to 18 months.

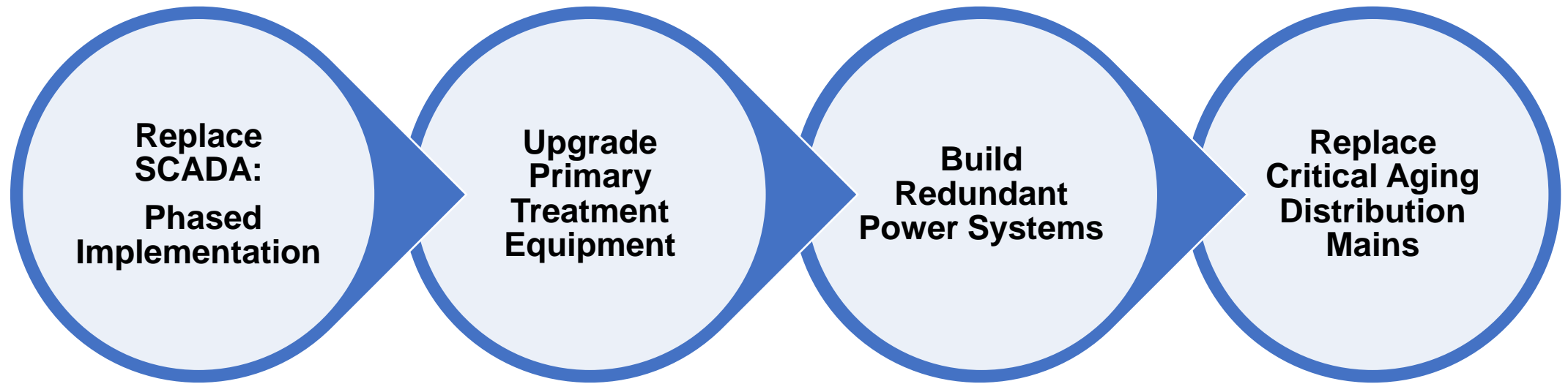
A photograph of a winding asphalt road with yellow double lines, set against a backdrop of a forested hillside. The road curves through the landscape, and the surrounding area is covered in dense, dark vegetation. The text "Road Ahead" is overlaid in a large, bold, black font.

Road Ahead

Phase 1: Foundation Building 2025



Phases 2-3: Core System Modernization – 2026-2027



Phases 4-5: Resilience & Optimization 2028-2029

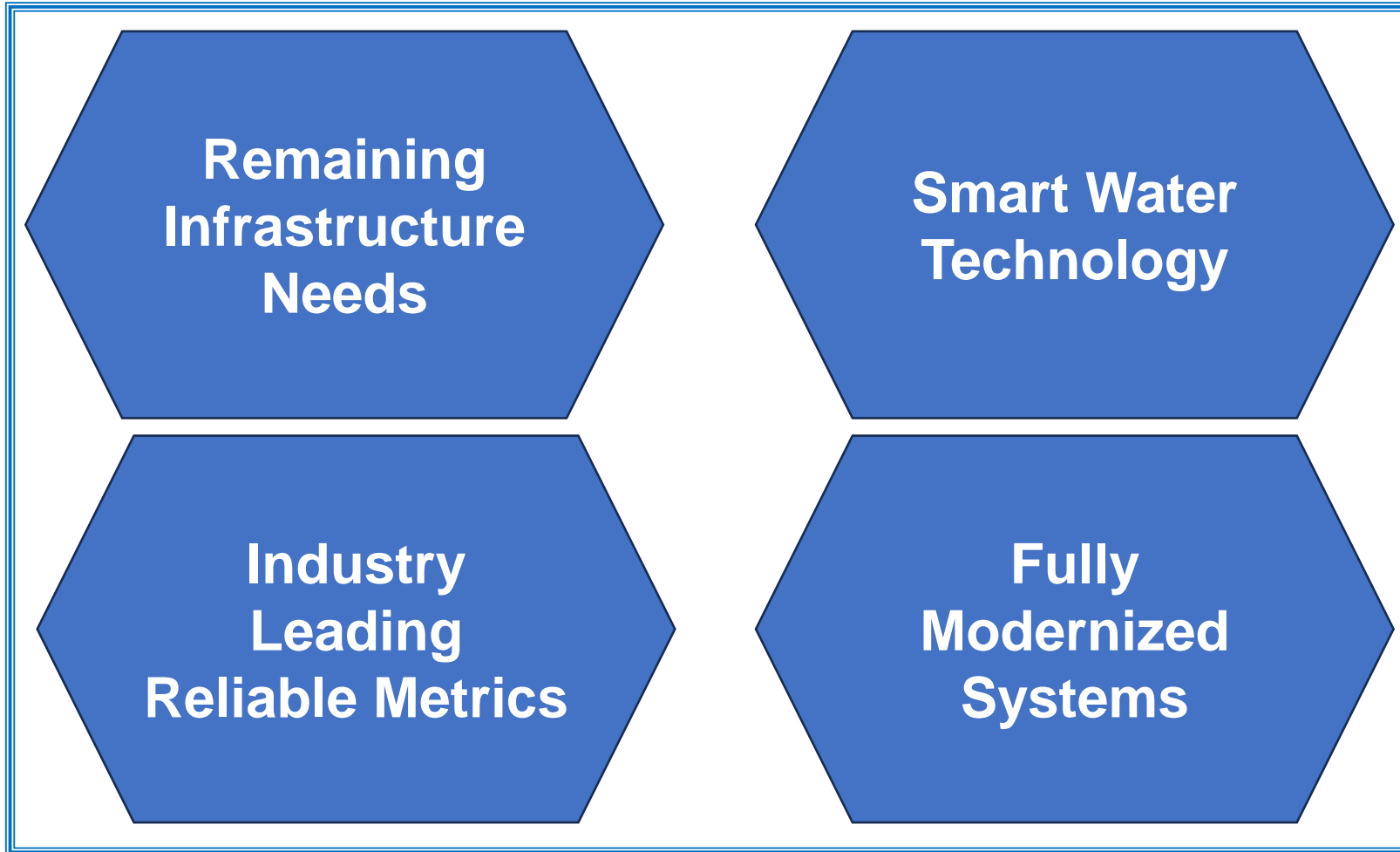
**Complete
Automation of
Backup
Systems**

**Full
Redundancy
for Critical
Components**

**Advance Water
Quality
Monitoring**

**Major
Distribution
System
Improvements**

Phase 6-10: Long-Term Sustainability 2030-2034



Going Forward

Challenges

- Time
- Years of neglect of infrastructure
- Inadequate Policies and Procedures
- Issues will occur

Needs

- Time
- Council Support
- Organizational Support (DIT, HR, Procurement)
- Change Management