

Item 4



Water Forward Implementation Status

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10/28/2020

Water Forward

Austin's Integrated Water Resource Plan

- ◆ Developed over three years with input from the community and a Citizen Task Force
- ◆ Approved by Council in 2018
- ◆ Water supply and demand management strategies were evaluated under future climate scenarios and growth projections
- ◆ Conservation and reuse ordinances and incentives are some of the first strategies to be implemented from the plan



Water Forward Strategies

Reducing Demand

- Benchmarking
- Advanced Metering Infrastructure
- Water Loss Control
- Conservation Ordinances and Incentives

Moving Reuse Forward

- Onsite Reuse
- Centralized and Decentralized Reclaimed

Protecting our Core Colorado River Supplies

- Working with our Regional Partners

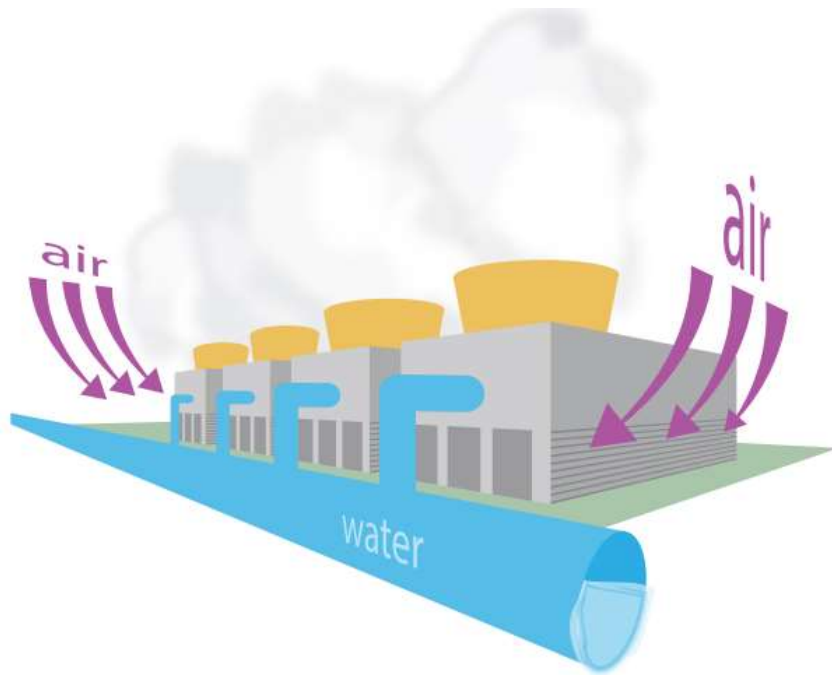
Building Resiliency

- Aquifer Storage and Recovery
- Indirect Potable Reuse

Continued Stakeholder Engagement

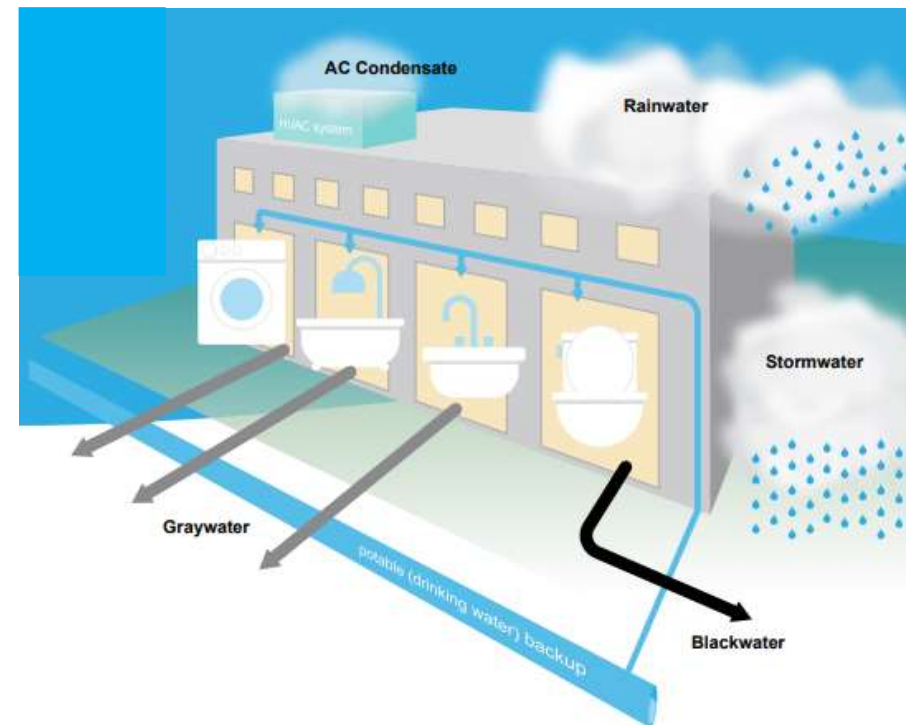


Commercial, Industrial and Institutional (CII) Ordinances



Cooling Tower Efficiency

Alternative Water Ordinances and Incentives



Onsite Water Reuse Systems in New Development

Topics for Discussion

💧 Water Forward Implementation Status:

- Proposed amendments to Austin City Code Titles 6 and 15 related to water conservation including increasing cooling tower efficiency and protect public health
- Proposed new chapter for the Austin City Code for on-site water reuse



Cooling Towers

- ◆ Add biocide to required water efficiency requirements
- ◆ Add efficiency standards for drift eliminators
- ◆ Add administrative penalties for violations of cooling tower efficiency standards, equipment, registration, and inspection requirements
- ◆ Penalties currently in effect for commercial irrigation systems and car washes
- ◆ Non-compliant cooling towers ineligible for evaporative loss wastewater billing credit



New Onsite Water Reuse System (OWRS) Program

Phase I to take effect late 2020/early 2021

Voluntary OWRS Program

- New OWRS regulations in Title 15 (Utility Regulations) for the design, permitting and operation and maintenance of multi-family & commercial systems
- Grant program implemented to encourage voluntary adoption of OWRS in new development to test out the new regulatory framework

Phase 2 targeted to take effect late 2023/early 2024

Mandatory OWRS Program

- Mandatory installation of OWRS for commercial and multi-family developments >250,000 sq. ft. in Title 25 (Land Development Code)
- Rules will be posted on the applicability for the mandate along with provisions for enforcing the mandate

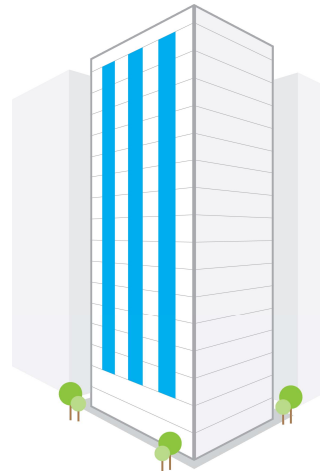


OWRS Ordinance Applicability



**Single Family
or Duplex**

- Small-scale residential systems are simple and have limited users
- The City of Austin regulates these systems via its plumbing code
- A stakeholder group recommended amendments to the plumbing code in 2013 to make permitting easier



**Multi-Family or
Commercial Lots**

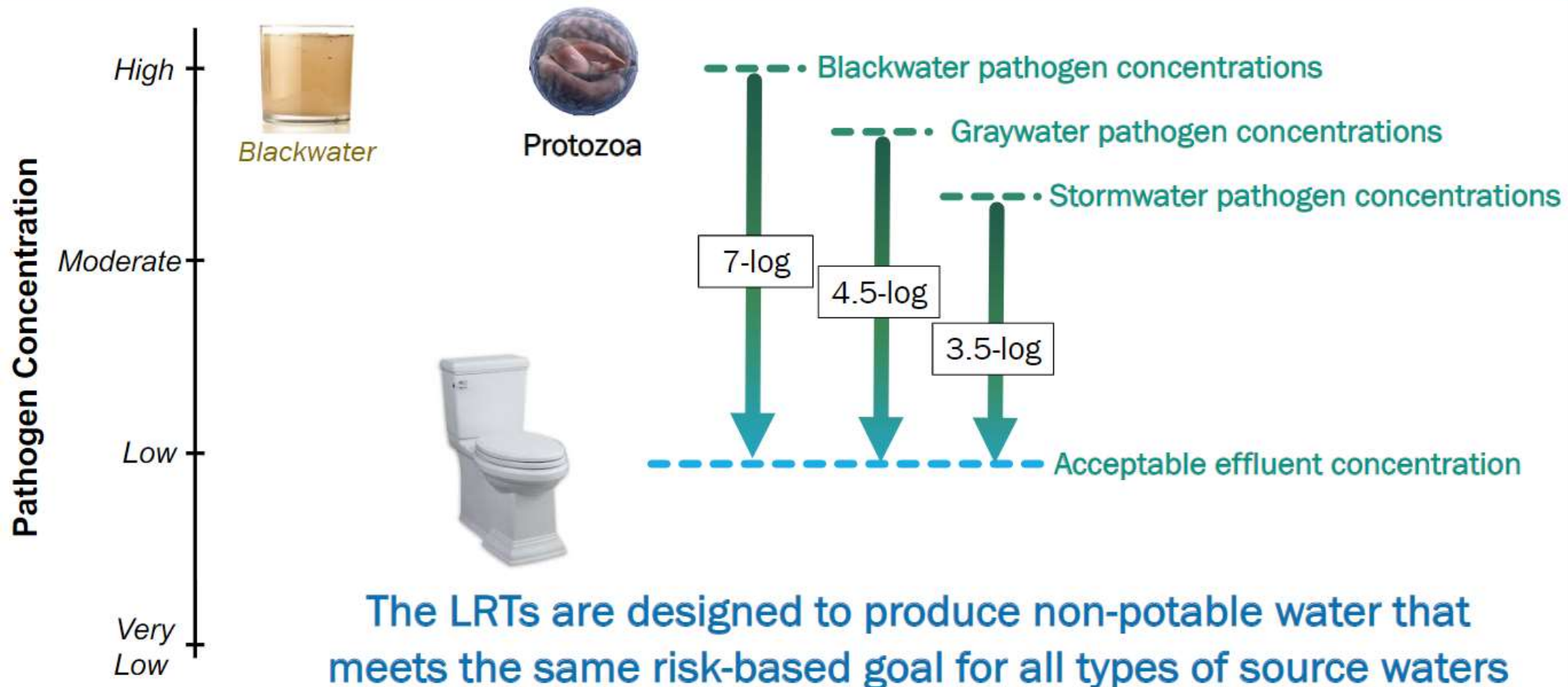


**Multi-Family or
Commercial Complexes**

Increasing level of users & system complexity and therefore increasing public health risk



Risk-Based Treatment Requirements

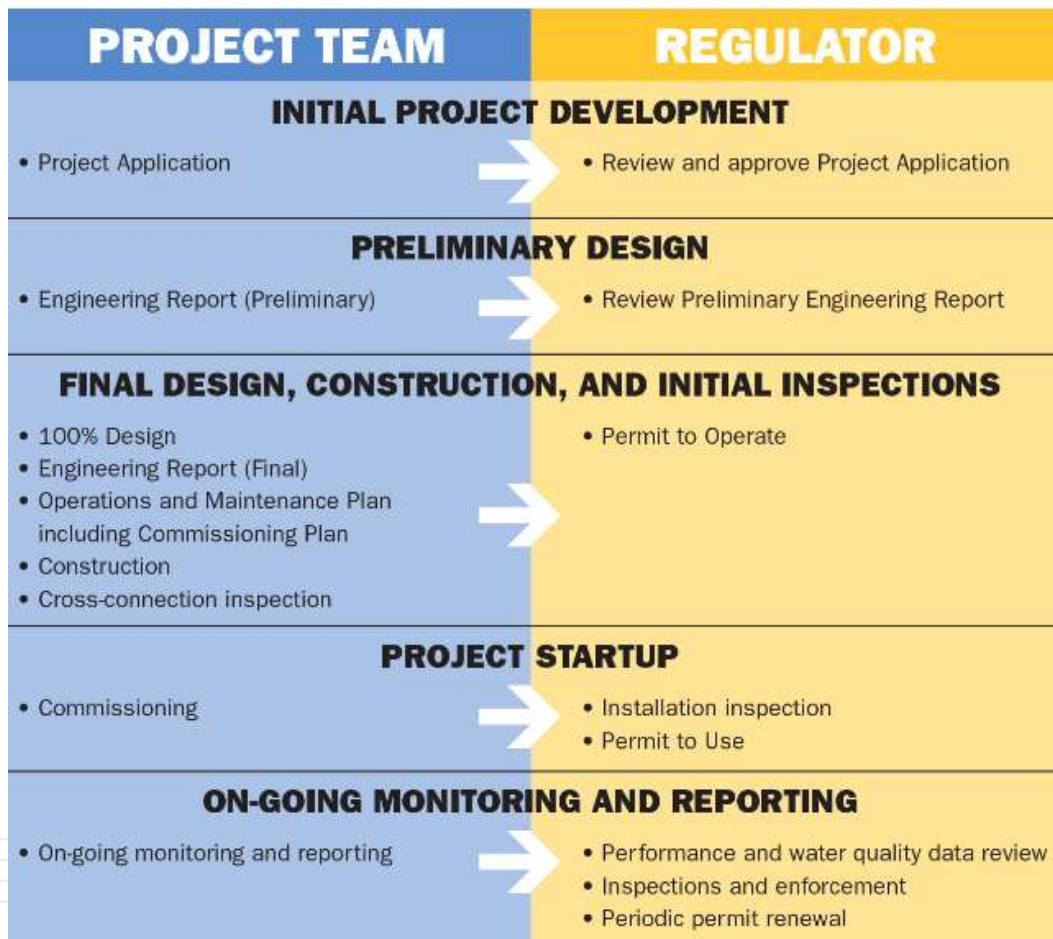


Risk-Based Public Health Framework

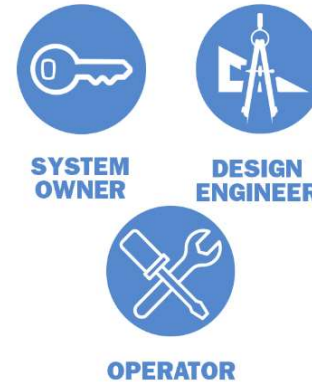
- ◆ Based on framework developed by the National Blue Ribbon Commission for Onsite Non-potable Water Systems
- ◆ Identifies pathogen log reduction targets (LRTs) required to make alternative water sources protective of public health
- ◆ Pathogens = viruses, bacteria, protozoa
- ◆ Pathogens are of concern due to three reasons
 - High likelihood of pathogens in OWRS source waters
 - Pathogens can cause infection from a single exposure
 - Even with low exposure, pathogens may be important sources of risk



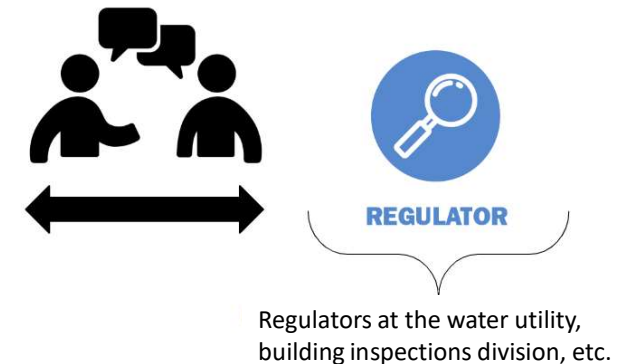
Permitting an OWRS



Project Team



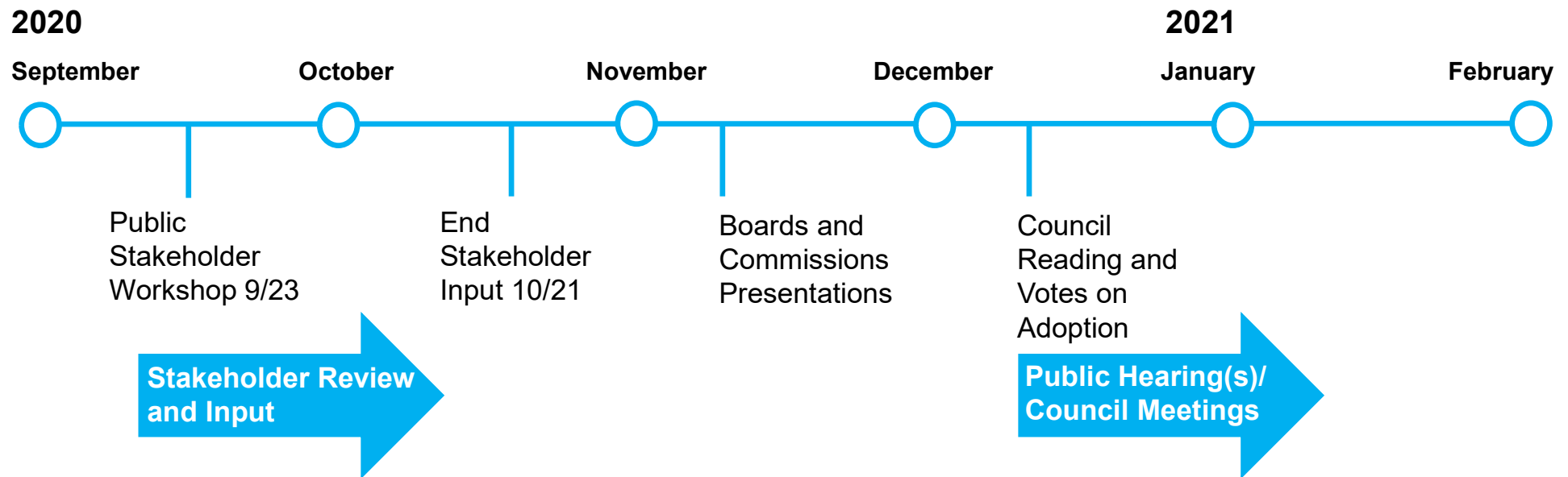
Regulators



Multiple opportunities to evaluate projects and ensure compliance



Proposed Timeline for Implementing Code Changes



Where to Read the Code Draft

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Questions

