## AUXILIARY WATER CODES COORDINATION PROJECT SUMMARY OF CODE CHANGES

## **BACKGROUND**

While the City is interested in promoting the use of auxiliary waters such as rainwater, gray water, and reclaimed water, especially in this time of drought, City staff noticed that there were impediments to the use of these auxiliary waters built into several City Codes and Ordinances. Austin Water hired a consultant to review these codes and recommend changes that will promote the use of these auxiliary waters while at the same time assuring adequate protection of the drinking water system. The following summarizes the code changes.

- **15-1-13 SPECIAL HAZARDS** Removes the blanket requirement for backflow prevention on reclaimed water service connections. (A double-check backflow preventer will still be required if chemicals are being injected into the reclaimed water, say for fertigation or with cooling towers.)
- **103.1.7 Special Inspections Program** Deletes this section since inspection of water heaters, which is one of the two types of plumbing components addressed in this section, is already governed by regulations in the International Residential Code. Additionally, this section speaks to inspections of backflow prevention devices by the Planning and Development Review Department but those devices are inspected through Austin Water's Special Services Division, so deletion of this section would bring City Code into conformance with current practice.
- **203.1 Definition of "alternate water source."** Revises the definition of auxiliary water to be consistent with national codes. It also removes the term "pressurized," which has been problematic because it is vague.
- **214.1 Definition of "Laundry to Landscape System"** Properly locates this definition in the definitions section of the Plumbing Code, rather than in Section 1602.16 where it is currently located.
- **218.3 Definition of "potable rainwater systems"** Adds this definition since potable rainwater use is allowed by the state for structures connected to public water supply systems and the City would like to work the definition into its codes.
- **601.2.2 Color and information** Allows existing irrigation systems with white pipe that convert to reclaimed water to continue to use the pipe as long as above ground fittings are appropriately marked and identified. Also allows the use of reclaimed water in existing buildings as long as the pipe is properly marked and identified.
- **Table 603.2** Clerical change: updates applicable manufacturing standards for backflow prevention devices, assemblies and methods to allow more continuity between the Plumbing Code and Cross-Connection Ordinance and reflect what is done in practice today.
- **603.5.22 Site Containment Backflow Prevention Requirements** Removes the requirement for a reduced-pressure zone backflow prevention assembly (RPZ) at the potable water meter on nonpotable

rainwater and condensate collection systems of 500 gallons or less that have a pump. Also removes the word pressurized to be consistent with the new definition of auxiliary water.

- **Table 603.5** —Clarifies that no backflow protection is required at the potable water connection for nonpotable rainwater and condensate collection systems without a pump even if over 500 gallons, or for gravity gray water systems. For both gravity gray water systems and gravity rainwater systems, specifies that a double-check backflow prevention assembly (double-check valve assembly) is required at the irrigation water meter. Reduces the protection required on fire lines for all auxiliary waters from a reduced-pressure assembly to a double-check valve assembly. Clarifies that a double-check valve on reclaimed water service lines is required only if chemical addition is being used with the reclaimed water. Clarifies that the chart is meant to apply to backflow prevention on drinking water service lines. Reduces restrictions on air conditioning condensate to comparable restrictions on rainwater harvesting.
- **1601.2 System Design** Amends the City's requirements to mimic the 'natural' language of the Uniform Plumbing Code (UPC) to clarify when professional design is—or is not—required for auxiliary water systems. Additionally, relaxes UPC requirements by relieving rainwater and condensate collection systems used for irrigation with a maximum storage capacity of 500 gallons from the requirement that alternate water source systems be designed by a person registered or licensed to perform plumbing design work. (Note: the natural language of the UPC limits this relief to rainwater systems used for irrigation with a maximum capacity of 360 gallons.)
- **1601.3 Permit** Relaxes requirements by allowing nonpotable rainwater and condensate collection systems of 500 gallons or less to be installed without permits. (A permit will still be required for any alterations to the potable system for use as make-up water.)
- **1601.3 Registration Required** Requires auxiliary water systems other than nonpotable rainwater and AC condensate collection systems of 500 gallons or less to be registered with the City by providing the address, storage capacity of the auxiliary water system, type of auxiliary water and intended use of the auxiliary water. This is proposed in conjunction with the proposal to relax backflow protection and permitting requirements for these systems as proposed in Section 603.5.22, Table 603.5 and Section 1601.3
- **Table 1601.5** Removes the requirement of Authority Having Jurisdiction to be present during the cross-connection test. This reflects current practice.
- **1602.1 General [Gray Water]** Clerical change: revises text to be consistent with the natural language of the UPC and removes conflict between the definition and the name used in the current amendment.
- **Table 1602.4** Relocates horizontal separation requirements for gray water systems by moving these restrictions from the section governing Laundry-to-Landscape (L2L) gray water systems to this existing section about separation requirements, which applies to all gray water systems. These horizontal separations are those that were identified when the Plumbing Code was last amended in 2013 and included (only) in the section governing L2L systems though they were intended to apply to all gray water systems in general.
- **1602.6 Prohibited Location** Amends gray water regulations by moving the restrictions on the location of Laundry-to-Landscape gray water systems from that section to the section describing restrictions on all gray water systems. While the natural language of the UPC already prohibits gray water systems in geologically sensitive areas and on properties where there is insufficient lot area or

inappropriate soil conditions for adequate absorption to prevent the ponding, surfacing, or runoff of the gray water, this proposed change would also prohibit gray water systems in other environmentally sensitive areas. These prohibited areas are those that were identified when the Plumbing Code was last amended in 2013 and included in the restrictions governing L2L systems though they were intended to apply to all gray water systems in general.

**1602.16** Laundry to Landscape System – Clerical change: revises entirety of section to mimic the writing style of the natural language of the UPC. Does not change any current requirements or allowances.

**1603.1.2** Use of reclaimed water inside a building is limited to new construction only. – Removes section to allow reclaimed water inside of existing buildings and to allow existing white-piped irrigation systems to convert to auxiliary water source (specifically reclaimed water) without replacing system.

**Appendix K: K 101.7 Minimum Water Quality Requirements** – Replaces water quality standard for potable rainwater catchment systems so that they are consistent with the proposed definition of potable rainwater systems, and with requirements of the Texas Department of Health and Human Services and the Texas Commission on Environmental Quality.