RESOLUTION NO. 2024-01
OF
THE CITY OF SNELLVILLE, GEORGIA
FINDINGS ON PROPOSED LOCAL AMENDMENT TO PLUMBING CODE FOR WATER EFFICIENCY
SUBMISSION OF PROPOSED AMENDMENT TO DCA

WHEREAS, the current minimum water efficiency requirements for buildings in the City of Snellville, Georgia jurisdiction is the Georgia State Minimum Standard Plumbing Code ("Georgia Plumbing Code") as approved and adopted by the Georgia Department of Community Affairs ("DCA") from time to time;

WHEREAS, the City of Snellville, Georgia, like all local governments in the State of Georgia, is authorized under O.C.G.A. § 8-2-25(c) to adopt local requirements when needed that are more stringent than the Georgia Plumbing Code based on local climatic, geologic, topographic, or public safety factors;

WHEREAS, the long-term availability, reliability, and resiliency of water supplies is a critical need of the City of Snellville, Georgia and water efficiency is essential to meeting this need;

WHEREAS, the "Local Amendments to Plumbing Code" shown in the redline in Attachment A are more stringent than the Georgia Plumbing Code on water efficacy because the amendments require even more efficient uses of water and provide clarifications on existing allowable practices;

WHEREAS, based on its local climatic, geologic, topographic factors included in the regional water resources plan prepared by the Metropolitan North Georgia Water Planning District ("Metro Water District"), of which the City of Snellville, Georgia is a part, water conservation is especially important to the City of Snellville and the Metro Water District;

WHEREAS, the City of Snellville, Georgia has become aware that more water efficient technologies have become widely available at comparable prices and performance to the water efficient technologies currently required as the minimum in the Georgia Plumbing Code;

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The governing body of the City of Snellville, Georgia finds that, based on local climatic, geographic, topographic, and public safety factors included in the Metro Water District's plans, it is justified in adopting local water efficiency requirements more stringent that the Georgia Plumbing Code;

2. The City of Snellville, Georgia is considering codifying these water efficiency requirements in local code as an amendment to Georgia Plumbing Code in the form of the Local Amendments to Plumbing Code shown in the redline in Attachment A; and

3. The City of Snellville, Georgia is directing its staff to submit this resolution and the Local Amendments to Plumbing Code to DCA for review and comment within 60 days as required by O.C.G.A. § 8-2-25(c)(1).

RESOLVED this 8th day of January, 2024.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

Barbara Bender, Mayor

Tod Warner, Mayor Pro Tem

ATTEST:

Melisa Arnold, City Clerk

Norman A. Carter, Jr., Council Member

Kerry Hetherington, Council Member

APPROVED AS TO FORM:

W. Charles Ross, City Attorney
Powell & Edwards, Attorneys At Law, P.C.

Cristy Lenski, Council Member

Gretchen Schulz, Council Member

Attachment A

LOCAL AMENDMENT TO PLUMBING CODE FOR WATER EFFICIENCY

Metro Water District – Water Efficiency Code Requirements
Local Amendment to Plumbing Code

[NOTE: The redlines in this local amendment show the changes included in the Metro Water District – Water Efficiency Code Requirements compared to the current Georgia State Minimum Standard Plumbing Code. To adopt this local ordinance, the tracked changes should all be accepted.]

Amendment to local code of ordinances Chapter 300, Article 3 Unified Development Ordinance. Effective January 1, 2024, the Georgia State Minimum Standard Plumbing Code has been amended by the City of Snellville, Georgia as follows:

Chapter 2, Section 202 General Definitions. Add in alphabetical order and revise, as applicable, the following definitions:

KITCHEN FAUCET OR KITCHEN FAUCET REPLACEMENT AERATOR. A kitchen faucet or kitchen faucet replacement aerator that allows a flow of no more than 1.8~~2.0~~ gallons of water per minute at a pressure of 60 pounds per square inch and conforms to the applicable requirements in ASME A112.18.1/CSA B125.1.

LAVATORY FAUCET OR LAVATORY FAUCET REPLACEMENT AERATOR. A lavatory faucet or lavatory faucet replacement aerator that allows a flow of no more than 1.2~~5~~ gallons per minute at a pressure of 60 pounds per square inch and is listed to the WaterSense High Efficiency Lavatory Faucet Specification.

LANDSCAPE IRRIGATION.

Flow sensor. An inline device in a landscape irrigation system that produces a repeatable signal proportional to flow rate.

Lawn or Landscape Irrigation system. An assembly of component parts that is permanently installed for the controlled distribution of water to irrigate landscapes such as ground cover, trees, shrubs, and other plants. Lawn and Landscape Irrigation System refer to the same system.

Master shut-off valve. An automatic valve such as a gate valve, ball valve, or butterfly valve) installed as part of the landscape irrigation system capable of being automatically closed by the WaterSense controller. When this valve is closed water will not be supplied to the landscape irrigation system.

Pressure regulating device. A device designed to maintain pressure within the landscape irrigation system at the manufacturer's recommended operating pressure and that protects against sudden spikes or drops from the water source.

Rain sensor shut-off. An electric device that detects and measures rainfall amounts and overrides the cycle of a landscape irrigation system so as to turn off such system when a predetermined amount of rain has fallen.

WaterSense irrigation controller. Is a weather-based or soil moisture-based irrigation controller~~s~~ labeled under the U.S. Environmental Protection Agency's WaterSense program, which includes standalone controllers, add-on devices, and plug-in devices that use current weather data as a basis for scheduling irrigation.

WaterSense spray sprinkler bodies. A sprinkler body with integral pressure regulation, generating optimal water spray and coverage labeled under the U.S. Environmental Protection Agency's WaterSense program.

SHOWER HEAD. A shower head that allows a flow of no more than the average of 2.05 gallons of water per minute at 860 pounds per square inch of pressure ~~and~~ is listed in the WaterSense Specification for Showerheads, and meets the US Department Definition of Energy definition of showerhead.

Chapter 6, Section 604.4 Maximum Flow and Water Consumption. Revise Section 604.4 to read as follows:

Consistent with the general approach taken in Georgia, these Maximum Flow and Water Consumption requirements and related definitions in Section 604.4 of the plumbing code shall apply to all plumbing systems, including those in one- and two-family dwellings. The maximum water consumption flow rates and quantities for all plumbing fixtures and fixture fittings shall be in accordance with Table 604.4.

Exceptions:

1. Blowout design water closets having a water consumption not greater than $3^1/_2$ gallons (13 L) per flushing cycle.
2. Vegetable sprays.
3. Clinical sinks having a water consumption not greater than $4^1/_2$ gallons (17 L) per flushing cycle.
4. Laundry tray sinks and ~~,~~ ~~S~~service sinks.
5. Emergency showers and eye wash stations.

TABLE 604.4
MAXIMUM FLOW RATES AND CONSUMPTION FOR
PLUMBING FIXTURES AND FIXTURE FITTINGS

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY[b]
Lavatory faucet and replacement aerators, private	WaterSense Labeled & 1.25 gpm at 60 psi[f]
Lavatory faucet, public (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Showerhead[a]	WaterSense Labeled & ~~2.5~~2.0 gpm at 80~~60~~ psi[f]
Kitchen ~~Sink~~ faucet and replacement aerators	~~2.0~~1.8 gpm at 60 psi[f,g]
Urinal	0.5 gallon per flushing cycle[f]

Water closet	1.28 gallons per flushing cycle[c, d, e, f]

For SI: 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m,
1 pound per square inch = 6.895 kPa.

a. A hand-held shower spray is a shower head. As point of clarification, multiple shower heads may be installed in a single shower enclosure so long as each shower head individually meets the maximum flow rate, the WaterSense requirements, and the US Department of Energy definition of showerhead. However, multiple shower heads are not recommended for water efficiency purposes.

b. Consumption tolerances shall be determined from referenced standards.

c. For flushometer valves and flushometer tanks, the average flush volume shall not exceed 1.28 gallons.

d. For single flush water closets, including gravity, pressure assisted and electro-hydraulic tank types, the average flush volume shall not exceed 1.28 gallons.

e. For dual flush water closets, the average flush volume of two reduced flushes and one full flush shall not exceed 1.28 gallons.

f. See 2014 GA Amendment to Section 301.1.2 'Waiver from requirements of high efficiency plumbing fixtures'.

g. Kitchen faucets are permitted to temporarily increase the flow above the maximum rate, but not to exceed 2.2 gpm (8.3 L/m) at 60 psi (414 kPa) and must revert to a maximum flow rate of 1.8 gpm (6.8 L/m) at 60 psi (414 kPa) upon valve closure.

604.4.1 Clothes Washers. Residential clothes washers shall be in accordance with the Energy Star program requirements.

604.4.2 Cooling Tower Water Efficiency.

604.4.2.1 Once-Through Cooling. Once-through cooling using potable water is prohibited.

604.4.2.2 Cooling Towers and Evaporative Coolers. Cooling towers and evaporative coolers shall be equipped with makeup water and blow down meters, conductivity controllers and overflow alarms. Cooling towers shall be equipped with efficiency drift eliminators that achieve drift reduction to 0.002 percent of the circulated water volume for counterflow towers and 0.005 percent for crossflow towers.

604.4.2.3 Cooling Tower Makeup Water. Water used for air conditioning, cooling towers shall not be discharged where the hardness of the basin water is less than 1500 mg/L. **Exception:** Where any of the following conditions of the basin water are present: total suspended solids exceed 25 ppm, $CaCO_3$ exceeds 600 ppm, chlorides exceed 250 ppm, sulfates exceed 250 ppm, or silica exceeds 150 ppm.

604.4.3 Landscape Irrigation System Efficiency Requirements. The requirements in Section 604.4.3 apply to all new landscape irrigation systems connected to the public water system except those (a) used for agricultural operations as defined in the Official Code of Georgia Section 1-3-3, (b) used for golf courses, and (c) dependent

upon a nonpublic water source. Nothing in this Code or this Section 604.4.3 is intended to require that landscape irrigation systems must be installed at all premises. The landscape irrigation efficiency requirements in this Section 604.4.3 apply only when someone voluntarily chooses, or is otherwise required by some requirement beyond this Code, to install a landscape irrigation system on premises.

604.4.3.1 Avoiding Water Waste Through Design. All new landscape irrigation systems shall adhere to the following design standards:

1. Pop-up type sprinkler heads shall pop-up to a height above vegetation level of not less than four (4) inches above the soil level when emitting water.
2. Pop-up spray heads or rotary sprinkler heads must direct flow away from any adjacent surfaces and must not be installed closer than four inches from impervious surfaces.
3. Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or by other means that produces no overspray or runoff.
4. Narrow or irregular shaped landscaped areas, less than four (4) feet in any direction across opposing boundaries shall not be irrigated by any irrigation emission device except sub-surface or low flow emitters with flow rates not to exceed 6.3 gallons per hour.

604.4.3.2 Landscape Irrigation System Required Components. All new landscape irrigation systems shall include the following components:

1. A rain sensor shut-off installed in an area that is unobstructed by trees, roof over hangs, or anything else that might block rain from triggering the rain sensor shutoff.
2. A master shut-off valve for each controller installed as close as possible to the point of connection of the water but downstream of the backflow prevention assembly.
3. Pressure-regulating devices such as valve pressure regulators, sprinkler head pressure regulators, inline pressure regulators, WaterSense spray sprinkler bodies, or other devices shall be installed as needed to achieve the manufacturer's recommended pressure range at the emission devices for optimal performance.
4. Except for landscape irrigation systems serving a single-family home, all other systems must also include:
   (a) a WaterSense irrigation controller; and
   (b) at least one flow sensor, which must be installed at or near the supply point of the landscape irrigation system and shall interface with the control system, that when connected to the WaterSense controller will detect and report high flow conditions to such controller and automatically shut master valves. The flow sensor serves to aid in detecting leaks or abnormal flow conditions by suspending irrigation. High flow conditions should be consistent with manufacturers' recommendations and specifications.

Chapter 13 NONPOTABLE WATER SYSTEMS, Section 1304 Reclaimed Water Systems. Revise Section 1304.3.2 to read as follows:

1304.3.2 Connections to water supply. Reclaimed water provided from a reclaimed wastewater treatment systemfacility permitted by the Environmental Protection Division may be used to supply water closets, urinals, trap primers for floor drains and floor sinks, water features and other uses approved by the Authority Having Jurisdiction, in motels, hotels, apartment and condominium buildings, and commercial, industrial, and institutional buildings, where the individual guest or occupant does not have access to plumbing. Also, other systems that may use a lesser quality of water than potable water such as water chillers, carwashes or an industrial process may be supplied with reclaimed water provided from a reclaimed wastewater treatment

facility permitted by the Environmental Protection Division. The use of reclaimed water sourced from any new private reclaimed wastewater treatment system for outdoor irrigation shall be limited to golf courses and agriculture operations as defined in the Official Code of Georgia Section 1-3-3, and such reclaimed water shall not be approved for use for irrigating any other outdoor landscape such as ground cover, tree, shrubs, or other plants. These limitations do not apply to reclaimed water sourced from existing private reclaimed water systems or from existing or new, governmentally-owned reclaimed wastewater treatment systems.

Appendix E, Section E101.1.2. Revise Section E.101.1.2 to read as follows:

Because of the variable conditions encountered in hydraulic design, it is impractical to specify definite and detailed rules for sizing of the water piping system. Accordingly, other sizing or design methods conforming to good engineering practice standards are acceptable alternatives to those presented herein. Without limiting the foregoing, such acceptable design methods may include for multi-family buildings the Peak Water Demand Calculator from the IAPMO/ANSI 2020 Water Efficiency and Sanitation Standard for the Built Environment, which accounts for the demands of water-conserving plumbing fixtures, fixture fittings, and appliances. If future versions of the Peak Water Demand Calculator including other building types, such as commercial, such updated version shall be an acceptable design method.