

Ordinance

AN ORDINANCE TO AMEND THE CITY CODE OF THE CITY OF DACULA CHAPTER 18 INCLUDING FINDINGS ON PLUMBING CODE FOR WATER EFFICIENCY, SUBMISSION OF PROPOSED AMENDMENT TO DCA, AND RELATED PURPOSES

WHEREAS the current minimum water efficiency requirements for buildings in the City of Dacula 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 Dacula 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 Dacula and water efficiency is essential to meeting this need;

WHEREAS the “Local Amendments to Plumbing Code” shown 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, and 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 Dacula is a part, water conservation is especially important to the City of Dacula and the Metro Water District;

WHEREAS the City of Dacula 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, THE MAYOR AND COUNCIL OF THE CITY OF DACULA
HEREBY ORDAINS**

1. The governing body of the City of Dacula 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 than the Georgia Plumbing Code;
2. The City of Dacula is considering codifying these water efficiency requirements in the local code as an amendment to the Georgia Plumbing Code in the form of the Local Amendments to Plumbing Code shown in Attachment A; and
3. The City of Dacula is directing its staff to submit this ordinance 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).
4. After said comment period, if no objection, response or recommendation is filed, the amendments to the City’s Code of Ordinances shall be adopted, approved and included in the City Code effective January 1, 2024.
5. The City Administrator, Assistant City Administrator, and Director of Planning and Economic Development are further authorized to correct typographical errors in the text of the existing

City Code, to remove conflicting provisions, to update the City Code , and to produce and publish a final codified version of the City Code with the amendments and revisions outlined herein.

6. In the event any Court of competent jurisdiction determines that any portion of the foregoing amendment is invalid, unconstitutional or otherwise illegal, such rulings shall not impair the validity of the rest and remainder of this amendment.

7. All laws and parts of laws in conflict with this Ordinance are hereby repealed.

SO ORDAINED by the governing authority of the City of Dacula, this _____ day of August, 2023.

AYES: ____

NAYES: ____

ATTEST:

HUGH D. KING, III
MAYOR, CITY OF DACULA

BRITTNI NIX,
CITY ADMINISTRATOR

Attachment A

LOCAL AMENDMENT TO PLUMBING CODE FOR WATER EFFICIENCY

Amendment to local code of ordinances Chapter 18, Article 1, Section 18-20 & 18 - 200. Effective January 1, 2024, the Georgia State Minimum Standard Plumbing Code has been amended by the City of Dacula as follows:

Amend Chapter 18, Article II, Section 18-20 Definitions. Add in alphabetical order the following definitions:

Kitchen Faucet or Kitchen Faucet Replacement Aerator means it allows a flow of no more than 1.8 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. (add to Sec 18-20).

Lavatory Faucet or Lavatory Faucet Replacement Aerator means it allows a flow of no more than 1. gallons per minute at a pressure of 60 pounds per square inch and is listed to the WaterSense High Efficiency Lavatory Faucet Specification.(Add to Sec. 18 - 20).

Shower Head means a showerhead that allows a flow of no more than the average of 2.0 gallons of water per minute at 80 pounds per square inch of pressure, is listed in the WaterSense Specification for Showerheads and meets the US Department Definition of Energy definition of showerhead.

Amend Chapter 18, Article I, Section 18-21. Add the following language:

Consistent with the general approach taken in Georgia, these Maximum Flow and Water Consumption requirements and related definitions in 18-20 to 18-25 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 18-21 (1).

Amend Chapter 18, Article I, Section 18-21 (1) b 1.

1. The single flush water closet (including gravity, pressure-assisted, and electro-hydraulic tank types) and the average flush volume does not exceed 1.28 gallons.

Add Chapter 18, Article I, Section 18-21 (2) a.

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

Amend Chapter 18, Article I, Section 18-21 (5).

(5) 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.

Add Chapter 18, Article I, Section 18-21 (6).

(6) Consumption tolerances shall be determined from referenced standards.

Add Chapter 18, Article I, Section 18-21 (7).

(7) For The flushometer valves and flushometer tanks, the average flush volume does not exceed 1.28 gallons.

Add Chapter 18, Article I, Section 18-21 (8).

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

Add Chapter 18, Article I, Section 18-21 (9).

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

Add Chapter 18, Article IV, Section 18-21 (10).

Cooling Tower Water Efficiency.

- a. **Once-Through Cooling.** Once-through cooling using potable water is prohibited.
- b. **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.
- c. **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, CaCO₃ exceeds 600 ppm, chlorides exceed 250 ppm, sulfates exceed 250 ppm, or silica exceeds 150 ppm.

Add Chapter 18, Article I, Section 18-21 (11).

TABLE 18-21
 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 & 1.2 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 & 2.0 gpm at 80 psi ^f
Kitchen faucet and replacement aerators	1.8 gpm at 60 psi ^f
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.

Add Chapter 18, Article I, Section 18-21 (12).

Exceptions:

1. Blowout design water closets having a water consumption not greater than 3¹/₂ gallons (13 L) per flushing cycle.
2. Vegetable sprays.
3. Clinical sinks having a water consumption not greater than 4¹/₂ gallons (17 L) per flushing cycle.
4. Laundry tray sinks and service sinks.
5. Emergency showers and eye wash stations.

Add Chapter 18, Article IV, Section 18-202 (C).

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.

Add Chapter 18, Article IV, Section 18-202 (d).

(d) 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 overhangs, or anything else that might block rain from triggering the rain sensor shutdown.

(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.

Add Chapter 18, Article IV, Section 18-209. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

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

Lawn or Landscape Irrigation system means 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 means 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 means 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 means 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 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 means a sprinkler body with integral pressure regulation, generating optimal water spray and coverage labeled under the U.S. Environmental Protection Agency's WaterSense program.