

*Note to readers: Underlined text represents new text (or, in some instances, existing text that was moved to a different section). **Red color identifies important changes to the standards.***

Chapter 77, Article VI, LANDSCAPE IRRIGATION AND MAINTENANCE STANDARDS

Sec. 77.54. Intent and purpose.

It is the intent and purpose of this article to promote increased water conservation and improve water quality throughout Alachua County by increasing irrigation efficiency and limiting harmful nutrient run-off.

Sec. 77.55. Territorial jurisdiction.

The Alachua County Environmental Protection Department (hereinafter "the department") shall administer the provisions of this article in unincorporated and incorporated Alachua County.

Sec. 77.56. Applicability.

The provisions of this article shall apply to all new residential and commercial irrigation systems, whether operated automatically or manually, and modification of existing irrigation systems that increase the irrigated area or render the system less efficient. Retrofits and repairs that result in greater efficiencies are considered regular maintenance and are not subject to review. This article applies to irrigation systems regardless of whether the irrigation systems were installed by property owners, irrigation professionals or any other person. This article applies to all irrigation systems using water sources, including, but not limited to: reclaimed water, municipal water, well water, surface water, stormwater, gray water, and rainwater. This article applies to irrigation systems installed on public or private properties, including common areas and open space within residential and commercial developments, as well as private residential. Compliance with this article shall not exempt an individual from any other local, state, or federal requirements.

Sec. 77.57. Exemptions

(a) The following are exempted from the provisions of this Article, but best management practices apply:

(1) Landscaping having no supplemental irrigation beyond the project's defined establishment period through a permanent in-ground system. Temporary irrigation may be provided to establish landscaping and must comply with Section 77.60(a). Temporary establishment irrigation, as defined in Sec. 77.03, means the temporary use of irrigation for establishment of new vegetation that shall be removed or disabled once the plants are established or within one year, whichever occurs first.

(2) Bona fide agricultural activities;

- (3) Vegetable gardens and fruit and nut trees;
- (4) Athletic fields;
- (5) Golf course play areas including greens, fairways, driving ranges and practice putting greens;
- (6) Cemeteries; and
- (7) Nurseries.

Sec. 77.58. Irrigation professional registration.

All irrigation professionals installing or maintaining landscape irrigation systems within Alachua County must complete the Alachua County Irrigation Professional Notification Form, as provided by the department, for their business prior to working on irrigation systems within Alachua County. This section requires registration of businesses but does not require irrigation professionals to obtain certifications or training. Property owners installing or maintaining irrigation systems on their own property do not have to register with the county but shall comply with the other provisions of this article.

Sec. 77.59. Florida Water StarSM Certification.

The Florida Water Star Certification program is a voluntary statewide water conservation certification program for new and existing homes and commercial developments. Residential and commercial properties obtaining Florida Water Star Gold Certification will provide equivalent water conservation benefits to the requirements of this article. During the pendency of a Florida Water Star application, applicants must submit the Alachua County Application Review Form as outlined in section 77.60. The irrigation system sketch, application review fee, inspection, and inspection fee required under this article are temporarily waived during the pendency of the Florida Water Star Certification application and permanently waived if Florida Water Star Gold Certification is granted. Applicants who do not receive Florida Water Star Gold Certification must comply with all provisions of this article within 90 calendar days of receiving notice that their application for Florida Water Star Certification was denied. Applicants who do not pursue or apply for Florida Water Star Gold Certification must comply with all provisions of this article, as set forth herein.

Sec. 77.60. Irrigation system approval process.

- (a) Applicants proposing temporary irrigation systems as defined in Section 77.03 must complete the temporary irrigation form and submit it to the department within fourteen (14) days of installation of the system to satisfy the requirements of this article. There is no fee for this process.
- (b) Prior to the installation of or modification (addition) to a permanent irrigation system, the proposed system must be approved by the department through the irrigation system approval process. As part of the approval process, an applicant proposing a new irrigation system or any additions to an existing system (additional

zones or heads, or replacement of components that would decrease the water efficiency of the system) must provide the department with the following:

- (1) The application review form, as provided by the department;
 - (2) Application Review Fee;
 - (3) Authorization to the County to access the property.
 - (4) Irrigation system sketch. An irrigation sketch is not required to be submitted for systems with 3 zones or less and under 1,500 sq feet of permanently irrigated area. The requirements in Section 77.62(d) still apply.
 - (5) Inspection fee. The inspection fee is waived for irrigation systems that are self-inspected by a licensed Florida Irrigation Specialty Contractor or a current Florida Water Star Accredited Irrigation and Landscape Professional, in good standing with the County, as described in Section 77.62.
- (b) When required, the irrigation system sketch shall:
- (1) Indicate existing and proposed buildings, driveways, and other impervious surfaces.
 - (2) Delineate existing and proposed vegetated groupings such as turf grass, shrubs, and trees.
 - (3) Identify the location of the soil moisture sensor or rainfall shut-off device/rain sensor, the irrigation controller, sprinkler zone valves, wells, backflow prevention devices, rotor heads, spray heads, bubblers, low volume irrigation areas, irrigation zones, temporary irrigation areas, and high volume irrigation areas.
 - (4) Indicate water source for the irrigation system.
 - (5) Include the estimated total site area, permeable area, and total permanently irrigated area.
- (c) The department shall take action on any complete application within 15 calendar days of submittal for residential private lots and 30 calendar days of submittal for commercial and common areas/open spaces for subdivisions. Installation approval is valid for a period of 12 months from the date of its issuance. The department may, at its discretion, extend this time limit for any reasonable period of time not to exceed an additional 12 months.

Sec. 77.61. Irrigation design standards.

- (a) As landscape irrigation comprises a significant portion of water use, permanent irrigation systems shall be designed and installed to minimize water waste, in accordance with the following standards:
- (1) Irrigation zones shall be divided according to vegetated groupings (e.g., turfgrass, shrubs, native plants, trees) and the water requirements of the plants. Turf grass and landscaped beds, such as trees, shrubs, and groundcover beds, shall not be irrigated in the same zone as each other, with

- the exception of bubblers used for tree establishment on residential lots as described in (b)3 below.
- (2) Sprinkler heads such as spray heads and rotors, shall not be mixed in the same zone.
 - (3) Narrow areas, four feet wide or less, shall not be irrigated unless correctly installed low volume irrigation is used. Permanent irrigation is not permitted in small islands (surrounded by impervious surface) less than 9 square feet in size, except for properly installed tree wells.
 - (4) Surface mounted and pop-up heads shall be installed on swing joints or flexible pipe.
 - (5) The pop-up height for sprays, rotators and rotors shall be adequate to prevent being obstructed by the grass blades: 6-inch height for St. Augustine, Zoysia and Bahia, 4-inch height for Bermuda, Centipede and Seashore Paspalum.
 - (6) Microirrigation tubing must be installed and properly capped or sealed per manufacturer's specifications.
 - (7) Distribution equipment in a given zone shall have matched precipitation rates.
 - (8) Rotors and spray sprinkler heads in turfgrass areas shall be spaced to provide head to head coverage, except in areas of turf that are between 4—8 feet wide, which shall have single row spacing unless otherwise approved by the County.
 - (9) A minimum separation of six inches shall be required between distribution equipment and pavement edges. Where drop-type or Miami curb and gutter are used, permanent irrigation other than tree bubblers shall not be permitted within 4 feet of the curb.
 - (10) A minimum separation of 24 inches shall be required between distribution equipment and buildings and other vertical structures, except fences. Structures that apply to this requirement are any conditioned space and enclosed structures such as garages. Porches and patios are exempt from this design standard.
 - (11) A functioning soil moisture sensor and soil moisture sensor-based controller or a weather-based controller accompanied by a rainfall shut-off device/rain sensor shall be required on all irrigation systems installed after October 1, 2019. Irrigation systems installed prior to October 1, 2019, must have technology that inhibits or interrupts operation of the system during periods of sufficient rainfall. Soil moisture sensors and ET sensors shall be installed and monitored per manufacturer's guidelines per Florida Statutes, Section 373.62 requirements. Rainfall shut-off devices must be properly installed and placed where they will receive unobstructed rainfall, with consideration to vegetation growth.
 - (12) For new installations, the automatic control system shall be located outside in an area readily accessible to County staff for inspection.

- (13) Check valves capable of holding a minimum of a five-foot head shall be used in low-lying areas to prevent head drainage.
- (14) Irrigation system equipment shall be installed in accordance with manufacturer's specifications.
- (15) Overspray shall not be allowed onto impervious surfaces such as walkways, buildings, roadways and drives.
- (16) Pipelines shall be designed to provide the system with the appropriate pressure required for maximum irrigation uniformity.
- (17) All sprinkler heads with spray nozzles shall be pressure-regulated at the head and/or valve. Adequate pressure, per the manufacturer's specifications, must be achieved throughout an entire zone.
- (18) All irrigation system underground piping shall have minimum soil cover of 18-30 inches for vehicle traffic areas and 6-24 inches for non-vehicle traffic areas based on pipe size and in accordance with Appendix F of the Florida Building Code.

(b) Residential Lots.

In addition to the standards in (a) above, the following standards apply to irrigation systems on private residential lots:

- (1) The maximum total irrigated area on residential lots, regardless of size, shall not exceed fifty (50) percent of the permeable area or 0.25 acres, whichever is less.
- (2) If any areas outside of the private lot are proposed to be irrigated by the lot irrigation system, those areas shall be quantified separately and counted towards the maximum irrigated area for the irrigation system.
- (3) Bubblers used for the establishment of trees may be on a zone with sprays or rotors if they are adjustable and will be turned off once the tree is established.
- (4) The lot owner shall be responsible for clearly marking the property boundaries (corners) in the field prior to the installation of the irrigation system. This requirement does not apply to projects where irrigation pipes are more than 20 ft away from any property boundary.

(c) Commercial projects (including common areas in residential development).

In addition to the standards in (a) above, irrigation systems in residential and commercial developments shall comply with the following standards:

- (1) No more than fifty (50) percent of the permeable area within residential or commercial developments (including right-of-ways or easements) may be permanently irrigated.
- (2) Trees shall be separate from other zones to ensure adequate watering for establishment.
- (3) When permanently irrigated, turf areas within commercial developments shall utilize high efficiency spray sprinkler nozzles.

Sec. 77.62. Completion of installation and irrigation system inspection.

- (a) Applicants shall conduct final testing and adjustments to achieve design specifications prior to completion of the system, including testing for the correct operation of each technology that inhibits or interrupts operation of the system during periods of sufficient moisture and ensuring the rainfall shut-off device is set to active at the controller.
- (b) Applicants shall notify the department within fourteen (14) days of system installation/modification so that an inspection can be scheduled.
- (c) Irrigation systems shall be inspected by the department within thirty (30) calendar days of receipt of notification of completion or through the self-inspection process as outlined below. The department may review a sub-set of self-inspection sites to evaluate compliance rates and to determine if licensed irrigation professionals and Florida Water Star Accredited Professionals will be authorized to continue to self-inspect systems.
 - (1) Irrigation professionals who submit proof of a current Florida Irrigation Specialty Contractor license or proof of current Florida Water Star Accredited Irrigation and Landscape Professional accreditation may obtain authorization from the department to conduct self-inspections of irrigation systems which they install. The department may revoke an irrigation professional's authorization for self-inspection for failure to comply with this article, material misstatement or misrepresentation, or failure to pay required approval fees.
 - (2) A licensed irrigation professional or Florida Water Star Accredited Irrigation and Landscape Professional shall complete the self-inspection process by completing a self-inspection checklist, as provided by the department, within fourteen (14) days of installation completion.
- (d) Upon completion of the irrigation system, the irrigation professional shall provide the property owner with the following, a copy of which may be requested by the department:
 - (1) Irrigation system checklist with date of system installation, number of zones, recommended run times post establishment, installer's name and contact information.
 - a. For residential lots, a Homeowner Irrigation Summary containing the above information shall be posted at the controller and a copy provided to the homeowner, if applicable.
 - (2) As-built site irrigation sketch, clearly identifying each irrigation zone.
 - (3) Irrigation maintenance information that includes a recommended schedule, proper irrigation system settings according to season, recommendations for checking rainfall shut-off devices and/or soil moisture sensors, filter cleaning recommendations, if applicable, and information on the current watering restrictions. Distribution of Alachua County's Irrigation System Maintenance brochure would satisfy this requirement.
 - (4) Manual for the irrigation controller.

(e) For new construction, if the system passes inspection, the builder/developer is responsible for ensuring the system remains in compliance with this Article, operational and free of leaks until it is purchased.

Sec. 77.63. Maintenance of irrigation systems.

- (a) Within sixty (60) calendar days after installation, the property owner shall ensure that the irrigation controller is adjusted to operate according to normal, established landscape conditions and may not exceed current irrigation restrictions.
- (b) The property owner shall be responsible for the continued operation and maintenance of the irrigation systems to ensure efficient water use and prevent wasteful practices. This includes but is not limited to:
 - (1) Resetting the automatic controller according to season and irrigation restrictions.
 - (2) Cleaning irrigation filters.
 - (3) Testing the rainfall shut-off device regularly, and replacing as needed, in accordance with State Law. If such devices or switches are not installed in the system or are not in proper operating condition, the property owner or irrigation professional shall install new ones or repair the existing ones and confirm that each device or switch is in proper operating condition before completing other work on the system.
 - (4) Ensuring the system is inspected annually, at a minimum, to monitor for leaks, overspray, maladjusted heads, and heads that may be capped due to changes in the landscape, such as maturity or changes in plants.
- (c) Irrigation systems with known leaks shall not be operated until the leaks are repaired, except for testing purposes.
- (d) Repairs to irrigation components shall be done with equivalent components or those with greater efficiency.
- (e) The property owner is responsible for ensuring that the irrigation system remains functional and free of leaks following improvements to the property that may damage the irrigation system, such as fence installation or gutter system installation.
- (f) Commercial systems (including common areas in residential development) shall register with the county and submit documentation of an annual irrigation system inspection/audit detailing water conservation activities such as:
 - (1) Repair of leaks (using equivalent or higher efficiency components).
 - (2) Tree and shrub irrigation schedule adjustments to ensure watering needs are met to support establishment.

(3) If bubblers are used for tree and shrub establishment, they shall be routinely adjusted and repositioned away from the base of the tree to supply water to the entire root ball.

Sec. 77.64. Alternative compliance.

- (a) An applicant may submit a proposal that varies from the strict application of the requirements of this article (also known as "alternative compliance") in order to accommodate unique site features or characteristics, utilize innovative design, prevent extraordinary hardship, or to promote the overriding public interest or general public welfare. Diminished value of property or inconvenience is not considered extraordinary hardship.
- (b) An applicant seeking authorization for alternative compliance shall have the burden of demonstrating to the Department the reasons why the strict application of the requirements of this Article should not apply.
- (c) Requests for alternative compliance shall be submitted as part of the irrigation system approval process.
- (d) The department may approve an alternative compliance plan upon finding that the alternative compliance plan fulfills the purpose and intent of this article at least as well as a plan that strictly adhered to the requirements of this article.
- (e) In evaluating proposed alternative compliance irrigation plans, considerations shall be given to proposals which maximize preservation of existing vegetation on the site and utilize Florida-Friendly Landscaping™ practices and other low water use landscape design and irrigation principles to minimize water use.
- (f) Alternative compliance may also be granted to projects that demonstrate superior water conservation practices through community scale water conservation plans.
- (g) The department may require a site inspection and corresponding site inspection fee for systems which are installed according to a department-approved alternative compliance plan.

Sec. 77.65. Enforcement.

Violation of any provision of this article shall be subject to penalties as provided in Chapter 24, Alachua County Code or any other penalty available at law or equity.

Sec. 77.66. Use of Awards.

- (a) Any money recovered by the county in an action against any person who was found in violation of this article shall be used for water conservation projects in Alachua County.
- (b) There is hereby created the Alachua County Water Conservation Fund, which is to be supervised and used by the county for water conservation and resilient landscaping projects and programs to the extent of money available in the fund. The fund shall consist of all money specified in subsection (a).

Updated definitions from Section 77.61:

Permeable area means the entire parcel less the building footprint, driveways, paved or impervious surfaces, hardscapes such as decks and patios (whether pervious or impervious), pools, waterbodies, stormwater basins, or any protected conservation resources or natural areas. Specifically, any permeable surface that is typically covered with planted vegetation, turfgrass, landscaping, gardens or mulch on a given lot or parcel.

Temporary establishment irrigation means the temporary use of irrigation for the establishment of new vegetation that shall be removed once the plants are established or within one year, whichever occurs first. The department may grant an extension if it is deemed necessary for tree establishment or in periods of severe drought. Temporary establishment irrigation must clearly be separate from a permanent irrigation system.

High-efficiency Spray (HES) sprinkler nozzles means a sprinkler that has an application rate (precipitation rate) of 0.5 inches per hour or less.

Updated Land Development Code (Chapter 406, ULDC) reflecting new irrigation standards.

Sec. 406.59.1. Additional protection standards.

The following additional standards apply to development activities within high aquifer recharge areas and Outstanding Florida Springs Priority Focus Areas.

- (a) Outdoor water conservation for new development.
 - (1) The following additional standards shall be incorporated into homeowner association codes, covenants and restrictions (CCR) documents and shall apply to development activities for new subdivisions within high aquifer recharge areas. Outdoor water conservation for new development shall be maximized. Permanent irrigation systems shall not be required and the use of temporary irrigation systems for establishment shall be encouraged. When provided, the use of permanent irrigation shall be minimized, and systems must comply with Chapter 77, Article VI, Landscape Irrigation Design and Maintenance Standards. All other provisions of the Water Quality Standards and Management Practices as set forth in Chapter 77 of the Alachua County Code of Ordinances shall also be followed, including limits on the use of fertilizer, operation and maintenance of the automatic irrigation system, and Florida-Friendly Landscaping provisions.