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#### ORDINANCE 2015-11

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF ALACHUA COUNTY, FLORIDA: AMENDING TITLE 7. HEALTH AND SAFETY, CHAPTER 79 OF THE ALACHUA COUNTY CODE OF ORDINANCES RELATING TO IRRIGATION STANDARDS AND CONTROLS BY CREATING CHAPTER 79, ARTICLE II: ESTABLISHING THE INTENT AND PURPOSE: PROVIDING FOR TERRITORIAL JURISDICTION: PROVIDING FOR APPLICABILITY: PROVIDING DEFINITIONS: CREATING A REGISTRATION PROCESS FOR IRRIGATION PROFESSIONALS; WAIVING SOME FOR FLORIDA REQUIREMENTS WATER STAR CERTIFIED PROPERTIES; ESTABLISHING IRRIGATION SYSTEM APPROVAL AND INSPECTION PROCESSES: ESTABLISHING IRRIGATION DESIGN STANDARDS; ESTABLISHING PROCESSES FOR COMPLETING THE OF OR MODIFICATION TO INSTALLATION IRRIGATION SYSTEM; PROVIDING STANDARDS FOR MAINTENANCE OF IRRIGATION **EXEMPTIONS:** PROVIDING PROVIDING FOR ALTERNATIVE COMPLIANCE; PROVIDING FOR ENFORCEMENT: AMENDING SECTION 24.16, EXHIBIT A OF THE ALACHUA COUNTY CODE TO ADD TO THE SCHEDULE OF ORDINANCES ENFORCED BY THE ENVIRONMENTAL PROTECTION DEPARTMENT AND ACCOMPANYING PENALTIES FOR UNCONTESTED VIOLATIONS; PROVIDING FOR FUTURE REVIEW OF THE ARTICLE: REPEALING ALL ORDINANCES, OR PORTIONS THEREOF, IN CONFLICT WITH THIS PROVIDING FOR SEVERABILITY; ORDINANCE: IN CODE; PROVIDING FOR INCLUSION THE ALLOWING FOR MODIFICATION OF THE LANGUAGE OF THE ORDINANCE DUE TO CONSIDERATIONS ARISING AT A PUBLIC HEARING; PROVIDING EFFECTIVE DATES.

1	WHEREAS, the Florida Department of Environmental Protection has verified numerous
2	water bodies in Alachua County as impaired by nutrients as outlined in The Florida Watershed
3	Restoration Act, section 403.067, Florida Statutes and the Impaired Surface Waters Rule, Rule
4	62-303, Florida Administrative Code; and
5	WHEREAS, the Basin Management Action Plans for the implementation of Total
6	Maximum Daily Loads adopted by Secretarial Order in the Orange Creek Basin and the Santa Fe
7	River Basin set goals for nutrient reductions; and
8	WHEREAS, Alachua County is partially within the Lower Santa Fe River Basin which
9	has been designated as a Water Supply Planning Region by the Suwannee River Water
10	Management District in the 2010 Water Supply Assessment, as required by section 373.036,
11	Florida Statutes, due to significant declines in the Upper Floridan aquifer potentiometric surface;
12	and
13	WHEREAS, Alachua County is partially within Region 1 of St Johns River Water
14	Management District's planning region, where groundwater alone cannot supply the projected
15	increase in water demand as stated in the current Draft District Water Supply Plan; and
16	WHEREAS, section 373.228, Florida Statutes, recognizes landscape irrigation as a
17	significant source of water use and directs local governments to improve landscape irrigation and
18	design standards; and
19	WHEREAS, the significant amount of water used by irrigation systems throughout
20	Alachua County causes nutrient run-off to flow from the irrigated land and its surroundings to
21	the County's water resources, where the increased nutrients in the water have an adverse effect
22	on the environment and water quality; and

1	WHEREAS, it is the desire of the Alachua County Board of County Commissioners to
2	reduce nutrient pollution resulting from water use within Alachua County to protect and preserve
3	water resources; and
4	WHEREAS, the Alachua County Board of County Commissioners hereby finds and
5	declares that adoption of this ordinance is necessary, appropriate, and in the public interest of
6	citizens of this community.
7	BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF
8	ALACHUA COUNTY, FLORIDA:
9	SECTION 1. The Board of County Commissioners finds and declares that all statements
10	in the preamble of the ordinance are true and correct.
11	SECTION 2. Chapter 79, Article II, of the Alachua County Code is hereby created to
12	read:
13	Article II - Landscape Irrigation Design and Maintenance Standards
14	Sec. 79.10. Intent and Purpose.
15	It is the intent and purpose of this Article to promote increased water conservation and improve
16	water quality throughout Alachua County by increasing irrigation efficiency and limiting
17	harmful nutrient run-off.
18	
19	Sec. 79.11. Territorial Jurisdiction.
20	The Alachua County Environmental Protection Department (hereinafter "the Department") shall
21	administer the provisions of this Article in unincorporated Alachua County.
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23	Sec. 79.12. Applicability.
24	The provisions of this Article shall apply to all new residential and commercial automatic
25	irrigation systems, whether operated automatically or manually, and to substantial modification of existing irrigation systems. This Article applies to irrigation systems regardless of whether the
26	irrigation systems were installed by property owners, irrigation professionals or any other person.
27 28	This Article applies to all irrigation systems using water sources, including, but not limited to:
29 30	reclaimed water, municipal water, well water, surface water, stormwater, gray water, and rainwater. This Article applies to irrigation systems installed in common areas and open space
31	within residential and commercial developments, as well as individual landscaped areas. The
32	standards in this Article do not apply to temporary establishment irrigation used for new
33	vegetation.
34	regenation.

For the purposes of this Article, the following words and terms shall have the meaning given herein:
(a) Automatic irrigation system. An irrigation system designed to operate following a preset program entered into an automatic controller.
(b) Department. The Alachua County Environmental Protection Department
(c) Distribution equipment. The water emitters on irrigation systems, including but not limited to
sprinklers, rotors, spray heads and micro-irrigation devices.
(d) Florida Water Star. A program for new residential and commercial construction that is intended to provide indoor and outdoor water efficient options and help prevent leaks.
(e) Florida Water Star Certifier. A person who verifies Florida Water Star program criteria in accordance with program documents. Certifiers demonstrate sufficient knowledge to verify appropriate subcategories, such as; irrigation, landscape, and plumbing, and have passed the certifier exam and are current with their CEUs per the requirements of the Florida Water Star program. Certifiers are independent third parties who may inspect irrigation systems modified or installed by irrigation professionals.
(f) Florida Water Star Irrigation and Landscape Accredited Professional. A landscape or irrigation professional who has successfully passed the Florida Water Star <sup>SM</sup> Accredited Professional exams for landscaping and irrigation and is currently in good standing with the program.
(g) Head to head coverage. The spacing of sprinkler heads so that each sprinkler throws water to the adjacent sprinkler.
(h) High volume irrigation. An irrigation system with a minimum flow rate per emitter of more than 30 gallons per hour ("GPH") or higher than 0.5 gallons per minute ("GPM"). High volume emitter flow rates are usually measured in GPM.
<ul> <li>(i) Irrigation professional. Any person installing or maintaining an irrigation system in Alachua County for payment.</li> </ul>
(j) Irrigation system. A set of components that may include the water source, water distribution
network, control components, and other general irrigation equipment which has been installed to provide irrigation.
(k) Landscaped area. The entire parcel less the building footprint, driveways, hardscapes such as
decks and patios, and other non-planted areas. Water features are included in the calculation
of the landscaped area. Landscaped area includes Florida-Friendly landscaped areas.

- (1) Licensed Irrigation Professional. An irrigation specialty contractor who obtains the Irrigation
   Specialty License from The Florida Construction Industry Licensing Board and maintains
   continuing education requirements.
- 4 (m) Low volume irrigation. Any emitter or sprinkler that applies less than 30 GPH or 0.5 GPM.
- (n) Matched precipitation. Irrigation in which all of the sprinklers in a particular zone apply
   similar amounts of water to a given area.
- (o) Micro-irrigation. The frequent application of small quantities of water directly on or below the soil surface or plant root zone, usually as discrete drops, tiny streams, or miniature sprays through emitters placed along the water delivery pipes. Micro-irrigation encompasses a number of methods or concepts, including drip, subsurface, bubbler and micro-spray irrigation, previously known as trickle irrigation. Micro-irrigation is typically a form of low volume irrigation.
  - (p) Rotors. Sprinkler heads in lawn areas that provide water as they rotate through a set arc of operation.
  - (q) Spray heads. Irrigation heads that pop up with water pressure and provide a continuous spray pattern throughout a given arc of operation.
  - (r) Substantial modification. Any modification to existing irrigation systems such that 50% or more of the irrigation system (by area) is replaced or altered.
  - (s) Temporary establishment irrigation. The temporary use of irrigation for the establishment of new vegetation that shall be removed once the plants are established or within two years, whichever occurs first.

Sec. 79.14. Irrigation Professional Registration.

 (a) All irrigation professionals, licensed or not, 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. 79.15 Florida Water Star 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 Certification will exceed 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 Sec. 79.16. The irrigation system sketch, application review fee, inspection, and inspection fee are not required, unless Florida

Water Star Certification is not successfully obtained. Unsuccessful applicants must comply with 1 2 all provisions of this Article. 3 4 Sec. 79.16. Irrigation System Approval Process. (a) Prior to the installation of or substantial modification to an irrigation system, the proposed 5 system must be approved by the Department through the Irrigation System Approval Process. As 6 part of the approval process, an applicant proposing a new irrigation system or a substantial 7 modification to an existing system must provide the Department with the following: 8 1. The Application Review Form, as provided by the Department; 9 10 2. Irrigation system sketch; 3. Application review fee: and 11 4. Inspection fee. The inspection fee is waived for irrigation systems that are self-12 inspected by a licensed irrigation professional, Florida Water Star Accredited 13 Irrigation and Landscape Professional, or Florida Water Star Certifier as described in 14 15 section 79.17. A fee schedule shall be adopted to augment this program. 16 17 (b) The irrigation system sketch shall: Indicate existing and proposed buildings, driveways, and other impervious surfaces; 18 2. Delineate existing and proposed vegetated groupings such as turf grass, shrubs, and trees: 19 20 3. Identify the location of technology that inhibits or interrupts operation of the system 21 during periods of sufficient moisture, the irrigation controller, sprinkler zone valves, wells, backflow prevention devices, rotor heads, spray heads, low volume irrigation 22 23 areas, irrigation zones, temporary irrigation areas, and high volume irrigation areas; and 24 4. Include the estimated area of the total landscaped area and areas with high volume 25 irrigation. 26 27 (c) The Department shall take action on any complete application within 15 calendar days of 28 submittal. Installation approval is valid for a period of twenty-four months from the date of its 29 issuance. The Department may, at its discretion, extend this time limit for any reasonable period 30 of time not to exceed an additional twelve months. 31 (d) A valid installation approval from the Department must be properly displayed at the job site 32 33 by the irrigation professional or property owner prior to commencement of work and until the 34 final inspection is completed. 35 36 Sec. 79.17. Irrigation System Inspection. 37 (a) New or substantially modified irrigation systems shall be inspected by the Department within 38 thirty calendar days of installation of or modification to the irrigation system or through the self-39 inspection process as outlined below. The Department may review a sub-set of self-inspection 40 sites to evaluate compliance rates and to determine if licensed irrigation professionals and 41 Florida Water Star Certifiers will be permitted to continue to self- inspect systems. 42 1. Irrigation professionals who submit proof of a current Florida Irrigation Specialty 43 Contractor license or proof of current Florida Water Star Accredited Irrigation and 44 Landscape Professional accreditation may obtain authorization from the Department to 45 conduct self-inspections of irrigation systems which they install. The Department may 46 revoke an irrigation professional's authorization for self-inspection for failure to comply 47 with this Article, material misstatement or misrepresentation, or failure to pay required

- approval fees. A licensed irrigation professional or Florida Water Star Accredited Irrigation and Landscape Professional shall complete the self-inspection process by submitting a completed and endorsed self-inspection checklist, as provided by the Department.
- 2. Florida Water Star Certifiers who submit proof of certification from the Florida Water Star program may obtain authorization from the Department to conduct self-inspections of irrigation systems which they install or which are installed by other irrigation professionals. The Department may revoke a certifier's authorization for inspection for failure to comply with this Article, material misstatement or misrepresentation, or failure to pay required approval fees. A certifier shall complete the inspection process by submitting a completed and endorsed self-inspection checklist, as provided by the Department. Certifiers will typically be independent third parties hired to certify compliance.

# Sec. 79.18. Irrigation Design Standards.

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 (a) Irrigation systems shall be designed as follows:

- 1. The maximum total irrigated area on residential lots, regardless of lot size, shall not exceed 0.5 acres. This provision does not apply to temporary irrigation such as portable hoses and sprinklers.
- High volume irrigation area shall not exceed 60% of the landscaped area. This standard
  is applicable on residential lots over 1/8 acre and commercial lots over 1/8 acre. This
  standard applies to common areas and open space in developments. This standard
  excludes vegetable gardens and fruit or nut trees on individual lots or community
  gardens.
- Narrow areas, four feet wide or less, shall not be irrigated unless correctly installed low volume irrigation is used.
  - 4. <u>High volume irrigation shall not be used for trees, shrubs, or groundcover beds.</u> Permanent low volume irrigation may be used in these areas. The County encourages the use of temporary establishment irrigation.
  - 5. 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.
  - Sprinkler head types, such as spray heads and rotors, shall not be mixed in the same zone.
  - 7. Distribution equipment in a given zone shall have matched precipitation rates.

3 4 A minimum separation of four inches shall be required between distribution equipment 5 and pavement. 6 10. A minimum separation of 24 inches shall be required between distribution equipment 7 8 and buildings and other vertical structures, except fences. 9 11. Technology that inhibits or interrupts operation of the system during periods of 10 11 sufficient moisture shall be required on all irrigation systems to avoid irrigation during 12 periods of sufficient rainfall. Examples of such devices include soil moisture sensors, 13 weather stations, and rainfall shut off devices. The technology shall override the 14 irrigation cycle when adequate rainfall has occurred. Technology that depend on rainfall 15 for bypassing irrigation shall be placed where it is exposed to unobstructed natural rainfall and in compliance with section 373.62, Fla. Stat., as amended. 16 17 12. Permanent irrigation systems shall be equipped with an automatic control system to 18 provide the following minimum capabilities: 19 a. Ability to be programmed in minutes, by day of week, season, and time of 20 day: 21 b. Ability to accommodate multiple start times and programs; 22 c. Automatic shut off after adequate rainfall: 23 d. Ability to maintain time during power outages; and 24 e. Operational flexibility to meet applicable year round water conservation 25 requirements. 26 27 13. Check valves which are capable of holding a minimum of a five foot head shall be used 28 in low-lying areas to prevent head drainage. 29 30 14. Irrigation system equipment shall be installed in accordance with manufacturer's 31 specifications. 32 33 15. No direct spray shall be allowed onto walkways, buildings, roadways and drives. 34 35 16. Pipelines shall be designed to provide the system with the appropriate pressure required 36 for maximum irrigation uniformity. 37 17. All sprinkler heads with spray nozzles (non-rotary) shall be pressure-regulated at the 38 39 head. 40 41 18. All irrigation system underground piping shall have minimum soil cover of six inches. 42 43 (b) Compliance with this Article shall not exempt an individual from any other local, state, or 44 federal requirements. 45

8. Rotors and spray sprinkler heads in turfgrass areas shall be spaced to provide head to

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head coverage.

# Sec. 79.19. Completion of Installation or Substantial Modification.

2 (a) A property owner or irrigation professional who installs an irrigation system shall conduct 3 final testing and adjustments to achieve design specifications prior to completion of the system. 4 A property owner or irrigation professional who installs or performs work on an automatic 5 irrigation system shall test for the correct operation of each technology that inhibits or interrupts 6 operation of the system during periods of sufficient moisture. If such devices or switches are not 7 installed in the system or are not in proper operating condition, the property owner or irrigation 8 professional shall install new ones or repair the existing ones and confirm that each device or 9 switch is in proper operating condition before completing other work on the system.

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(b) Upon completion of the irrigation system, an irrigation professional shall provide the property owner with a copy of the site irrigation sketch, modified to illustrate how the system was actually installed, and self-inspection checklist, if applicable, the date installed, the number of zones, the installer's names, and the manual for the irrigation controller.

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#### Sec. 79.20. Maintenance of Irrigation Systems.

(a) An irrigation professional responsible for installing or substantially modifying an irrigation system shall provide the property owner with a maintenance checklist affixed to or near the controller and accompanied by a recommended maintenance schedule, proper irrigation system settings according to season, recommendations for checking technology that inhibits or interrupts operation of the system during periods of sufficient moisture, filter cleaning recommendations, if applicable, and information on the current water restrictions.

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- (b) A property owner shall ensure that irrigation systems on their property are inspected at least
   annually for leaks, overspray, maladjusted heads, and heads that may be capped due to changes
   in the landscape, such as maturity or changes in plants. Technology that inhibits or interrupts
   operation of the system during periods of sufficient moisture may need to be replaced every few
   years and shall be correctly functioning to be in compliance with this Article. Irrigation systems
   with known leaks shall not be operated until the leaks are repaired, except for testing purposes.
- 30 (c) Within 60 calendar days after installation, the property owner shall ensure that the irrigation
- 31 controller is adjusted to operate according to normal, established landscape conditions or
- 32 irrigation restrictions, if the irrigation system is installed as part of newly established
- 33 landscaping.

34 Sec. 79.21. Exemptions.

- 35 (a) The following are exempted from the provisions of this Article, but should follow applicable
- 36 Florida Friendly Best Management Practices for Protection of Water Resources by the Green
- 37 Industries:
- Bona fide agricultural activities;
- 39 2. Vegetable gardens and fruit and nut trees:
- 40 3. Athletic fields;
- 41 4. Golf course play areas;
- 42 5. Cemeteries;
- 43 6. Nurseries; and

	Sec. 79.22 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 an 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 adheres to the requirements of this Article.
	(e) The Department may require a site inspection and corresponding site inspection fee for
г	systems which are installed according to a Department-approved alternative compliance plan.
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	Sec. 79.23. Enforcement.
	Violation of any provision of this Article shall be subject to penalties as provided in Chapter 24,
	Alachua County Code or any other remedy available at law or equity.
	SECTION 3. Section 24.16 Exhibit A, Alachua County Code, is hereby amended to add
	the following to the schedule of codes and ordinances administered by the County's
	Environmental Protection Department and accompanying penalties for uncontested violations:
	- Landing Line and All Landing Line and All Landing Line and All Landing Line and Li
	Section 24.16 Exhibit A
	Environmental Protection Department

Code or Ordinance	Section	Section this Volume	Description	Class	Penalty
15-	2	79.14	Failure to comply with Registration Process	I	\$50
	2	79.16	Failure to comply with Irrigation System	III	\$125

		Approval Process		
2	79.18	Failure to comply with Design Standards	III	\$125
2	79.19	Failure to comply with Completion of Installation or Substantial Modification	Ш	<u>\$75</u>
2	79.20	Failure to comply with Maintenance requirements	II	<u>\$75</u>

### Sec. 79.25. Code Review

The Board of County Commissioners will review the provisions of this Article on or before July 1, 2017 to determine if amendments are needed to meet the intent of the Article.

SECTION 4. Repealing Clause. All ordinances or portions thereof in conflict herewith are, to the extent of such conflict, herby repealed.

SECTION 5. Severability. It is the declared intent of the Board of County Commissioners that, if any section, subsection, sentence, clause, phrase, word or provision of this ordinance, or the application of this ordinance to any person or circumstance, is held invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not be so construed as to render invalid or unconstitutional the remaining provisions of this ordinance and, to this end, the provisions of this ordinance are declared severable.

SECTION 6. Inclusion in the Code. It is the intent of the Board of County Commissioners of Alachua County, Florida, and it is hereby provided that the provisions of this ordinance shall become and be made part of the Alachua County Code of Ordinances of Alachua County, Florida; that the Code may be renumbered or relettered to accomplish this intent and that the word "ordinance" may be changed to "section", "article", or other appropriate designation.

SECTION 7. Modification. It is the intent of the Board of County Commissioners that the provisions of this ordinance may be modified as a result of considerations that may arise during public hearings. Such modifications shall be incorporated into the final version of the ordinance adopted by the Board and filed by the Clerk to the Board.

SECTION 8. Effective Date. A certified copy of this ordinance shall be filed with the Department of State by the Clerk of the Board of County Commissioners within ten days after

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1 2	enactment by the Board of County Commissioners, and shall take effect per the implementation schedule below:
2 3 4 5	Section 79.14 takes effect December 1, 2015.
	All other sections take effect April 1, 2016.
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24 25	DULY ADOPTED in regular session, this 22 <sup>nd</sup> day of September, 2015.
26 27	BOARD OF COUNTY COMMISSIONERS OF ALACHUA COUNTY, FLORIDA
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30	ATTEST: BY:
31 32	Charles S. Chestnut, IV, Chair
33	J.K Irby, Clerk
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36	APPROVED AS TO FORM
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