

Alachua County
Board of County Commissioners

ORDINANCE 2015-_____

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 APPLICABILITY; PROVIDING FOR COUNTY-WIDE IMPLEMENTATION AND ENFORCEMENT OF CHAPTER 79, ARTICLE II; PROVIDING DEFINITIONS REGARDING IRRIGATION DESIGN STANDARDS; CREATING A REGISTRATION PROCESS FOR IRRIGATION PROFESSIONALS; ESTABLISHING IRRIGATION DESIGN STANDARDS; ESTABLISHING IRRIGATION SYSTEM APPROVAL AND INSPECTION PROCESSES; ESTABLISHING PROCESSES FOR COMPLETING THE INSTALLATION OR MODIFICATION OF AN IRRIGATION SYSTEM; PROVIDING STANDARDS FOR MAINTENANCE OF IRRIGATION SYSTEMS; PROVIDING EXEMPTIONS TO CHAPTER 79, ARTICLE II; PROVIDING FOR ALTERNATIVE COMPLIANCE; PROVIDING FOR ENFORCEMENT AND PENALTIES; AMENDING SECTION 24.16, EXHIBIT A OF THE ALACHUA COUNTY CODE TO ADD TO THE SCHEDULE OF ORDINANCES ENFORCED BY THE ENVIRONMENTAL PROTECTION DEPARTMENT; PROVIDING FOR INCLUSION IN THE CODE; REPEALING ALL ORDINANCES, OR PORTIONS THEREOF, IN CONFLICT WITH THIS ORDINANCE; PROVIDING FOR SEVERABILITY; ALLOWING FOR MODIFICATION OF THE LANGUAGE OF THE ORDINANCE DUE TO CONSIDERATIONS ARISING AT A PUBLIC HEARING; PROVIDING EFFECTIVE DATES.

WHEREAS, the Florida Department of Environmental Protection has verified numerous water bodies in Alachua County as impaired by nutrients as outlined in The Florida Watershed

1 Restoration Act, section 403.067, Florida Statutes and the Impaired Surface Waters Rule, Rule
2 62-303 of the *Florida Administrative Code*; and

3 **WHEREAS**, the Basin Management Action Plans for the implementation of Total
4 Maximum Daily Loads adopted by Secretarial Order in the Orange Creek Basin and the Santa Fe
5 River Basin set goals for nutrient reductions; and

6 **WHEREAS**, Alachua County is partially within the Lower Santa Fe River Basin which
7 has been designated as a Water Supply Planning Region by the Suwannee River Water
8 Management District in the 2010 Water Supply Assessment, as required by section 373.036,
9 Florida Statutes, due to significant declines in the Upper Floridan aquifer potentiometric surface;
10 and

11 **WHEREAS**, Alachua County is partially within Region 1 of St Johns River Water
12 Management District's planning region, which groundwater alone cannot supply the projected
13 increase in water demand as stated in the current Draft District Water Supply Plan; and

14 **WHEREAS**, Section 373.228, Florida Statutes, recognizes landscape irrigation as a
15 significant source of water use and directs local governments to improve landscape irrigation and
16 design standards; and

17 **WHEREAS**, the significant amount of water used by irrigation systems throughout
18 Alachua County causes nutrient run-off to flow from the irrigated land and its surroundings to
19 the County's water resources, where the increased nutrients in the water have an adverse effect
20 on the environment and water quality; and

21 **WHEREAS**, Article 1. Section 1.4 of the Alachua County Charter authorizes the County
22 to establish countywide standards for the purpose of protecting the environment by prohibiting or
23 regulating water pollution; 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 chapter to promote increased water conservation and improve
16 water quality throughout Alachua County by increasing irrigation efficiency countywide and
17 limiting harmful nutrient run-off.

18
19 **Sec. 79.11. Territorial Jurisdiction.**

20 In accordance with Section 1.4 of the Alachua County Home Rule Charter, this Article shall be
21 applicable countywide throughout Alachua County, including within incorporated municipalities.
22 The Alachua County Environmental Protection Department (hereinafter “the Department”) shall
23 administer the provisions of this Article countywide unless a municipality has entered into an
24 interlocal agreement with the County transferring administration to the municipality. Nothing
25 herein prevents a municipality from enacting and enforcing additional regulations that are more
26 stringent than this Article.

27
28 **Sec. 79.12. Applicability.**

29 The provisions of this Article shall apply to all new residential and commercial automatic
30 irrigation systems, whether operated automatically or manually, and substantial modification of
31 existing irrigation systems. The provisions apply to all irrigation systems using water sources,
32 including, but not limited to: reclaimed water, municipal water, well water, surface water,
33 stormwater, gray water, and rainwater. New spray heads added to existing irrigation systems and
34 substantial modifications made to existing irrigation systems shall be subject to the standards

1 established by this Article. The applicability of this Article includes common areas and open
2 space within residential and commercial developments, as well as individual landscaped areas.
3 The standards in this Article do not apply to temporary establishment irrigation used for new
4 vegetation. The standards in this Article do not apply to dwellings, landscapes, and irrigation
5 systems that have received Florida Water Star CertificationSM and currently still meet Florida
6 Water Star program requirements. Proof of certification shall be required.
7

8 **Sec. 79.13. Definitions.**
9

10 (a) Automatic irrigation system. An irrigation system designed to operate following a preset
11 program entered into an automatic controller.
12

13 (b) Distribution equipment. The water emitters on irrigation systems, including but not limited to
14 sprinklers, rotors, spray heads and micro-irrigation devices.
15

16 (c) Establishment irrigation. The temporary use of irrigation for the establishment of new
17 vegetation that is intended to be removed once the plants are established.
18

19 (d) Florida Water Star. A program for new residential and commercial construction that is
20 intended to provide indoor and outdoor water efficient options and help prevent leaks.
21

22 (e) Florida Water Star Certifier. Person who verifies Florida Water Star program criteria in
23 accordance with program documents. Certifiers demonstrate sufficient knowledge to verify
24 appropriate subcategories, such as; irrigation, landscape, and plumbing, and have passed the
25 certifier exam, have successfully completed an apprenticeship, and are current with their
26 CEUs per the requirements of the Florida Water Star program. Certifiers are independent
27 third parties who may inspect irrigation systems modified or installed by irrigation
28 professionals.
29

30 (f) Florida Water Star Irrigation and Landscape Accredited Professional. A landscape or
31 irrigation professional who has successfully passed the Florida Water StarSM Accredited
32 Professional exams for Landscaping and Irrigation and is in good standing with the program.
33

34 (g) Head to head coverage. Spacing of sprinkler heads so that each sprinkler throws water to the
35 adjacent sprinkler.
36

37 (h) High volume irrigation. An irrigation system with a minimum flow rate per emitter of more
38 than 30 gallons per hour (“GPH”) or higher than 0.5 gallons per minute (“GPM”). High
39 volume emitter flow rates are usually measured in GPM.

40 (i) Irrigation professional. Any person installing or maintaining an irrigation system in Alachua
41 County for payment.
42

1 (j) Irrigation system. A device or combination of devices having a hose, pipe, or other conduit
2 connected directly to any source of water, or a mixture of water and chemicals, where water
3 is drawn and applied for residential, commercial or agricultural purposes.

4 (k) Landscaped area. The entire parcel less the building footprint, driveways, hardscapes such as
5 decks and patios, and other non-planted areas. Water features are included in the calculation
6 of the landscaped area. Landscaped area includes Florida-Friendly landscaped areas.

7 (l) Licensed Irrigation Professional. Irrigation specialty contractors who obtain the Irrigation
8 Specialty License from The Florida Construction Industry Licensing Board and maintain
9 continuing education requirements.

10 (m) Low volume irrigation. Any emitter or sprinkler that applies less than 30 GPH or 0.5 GPM.

11 (n) Matched precipitation. Irrigation in which all of the sprinklers in a particular zone apply
12 similar amounts of water to a given area.

13
14 (o) Micro-irrigation. The frequent application of small quantities of water directly on or below
15 the soil surface or plant root zone, usually as discrete drops, tiny streams, or miniature sprays
16 through emitters placed along the water delivery pipes. Micro-irrigation encompasses a
17 number of methods or concepts, including drip, subsurface, bubbler and micro-spray
18 irrigation, previously known as trickle irrigation. Micro-irrigation is typically a form of low
19 volume irrigation.

20
21 (p) Rotors. Sprinkler heads in lawn areas that provide water as they rotate through a set arc of
22 operation.

23
24 (q) Spray heads. Irrigation heads that pop up with water pressure and provide a continuous spray
25 pattern throughout a given arc of operation.

26
27 (r) Substantial modification. Any modification to existing irrigation systems such that 50% or
28 more of the irrigation system is replaced or altered.

29
30 **Sec. 79.14. Irrigation Professional Registration.**

31 (a) All irrigation professionals installing or maintaining landscape irrigation systems within
32 Alachua County must complete the Alachua County Irrigation Professional Notification Form, as
33 provided by the Department, for their business prior to working on irrigation systems within
34 Alachua County. The Department will use the provided information to contact irrigation
35 professionals with educational opportunities and program updates.

36
37
38 **Sec. 79.15. Irrigation System Approval Process.**

39 (a) Prior to the installation or substantial modification of an irrigation system, the proposed
40 system must be approved by the Department through the Department approval process. As part
41 of the approval process, an applicant proposing a new irrigation system or a substantial
42 modification of an existing system must provide the Department with the following:

- 1 1. The Application Review Form, as provided by the Department;
- 2 2. Irrigation system sketch;
- 3 3. Application review fee; and
- 4 4. Inspection fee. The inspection fee is waived for irrigation systems that are self-
- 5 inspected by an authorized irrigation professional or Florida Water Star Certifier as
- 6 described below. A fee schedule shall be adopted to augment this program.

7
8 (b) The irrigation system sketch shall:

- 9 1. Indicate existing and proposed driveways and other impervious surfaces.
- 10 2. Delineate existing and proposed vegetated groupings such as turf grass, shrubs, and trees.
- 11 3. Identify the location of technology that inhibits or interrupts operation of the system
- 12 during periods of sufficient moisture, sprinkler zone valves, wells, backflow prevention
- 13 devices, rotor heads, spray heads, low volume irrigation areas, irrigation zones, and high
- 14 volume irrigation areas.

15
16 (c) The Department shall take action on any complete application within 30 days of submittal.

17 Installation approval is valid for a period of twelve months from date of its issuance. The

18 Department may, at its discretion, extend this time limit for any reasonable period of time not to

19 exceed an additional six months.

20
21 (d) A valid installation approval from the Department must be properly displayed at the job site

22 by the irrigation professional or property owner prior to commencement of work and until the

23 final inspection is completed.

24
25 **Sec. 79.16. Irrigation System Inspection.**

26 (a) New or substantially modified irrigation systems shall be inspected within thirty days of

27 installation of the irrigation system.

- 28 1. Irrigation professionals who submit proof of a current Florida Irrigation Specialty
- 29 Contractor license or proof of current Florida Water Star Accredited Irrigation and
- 30 Landscape Professional accreditation may obtain authorization from the Department to
- 31 conduct self-inspections of irrigation systems they install. The Department may revoke an
- 32 irrigation professional's authorization for self-inspection for failure to comply with this
- 33 Article, material misstatement or misrepresentation, or failure to pay required approval
- 34 fees. A licensed irrigation professional or Florida Water Star Accredited Irrigation and
- 35 Landscape Professional may complete the self-inspection process by submitting a
- 36 completed and endorsed self-inspection checklist, as provided by the Department.
- 37
- 38 2. Florida Water Star Certifiers who submit proof of certification from the Florida Water
- 39 Star program may obtain authorization from the Department to conduct self-inspections
- 40 of irrigation systems. The Department may revoke a certifier's authorization for
- 41 inspection for failure to comply with this Article, material misstatement or
- 42 misrepresentation, or failure to pay required approval fees. A certifier may complete the
- 43 inspection process by submitting a completed and endorsed self-inspection checklist, as
- 44 provided by the Department. Certifiers will typically be independent third parties hired to
- 45 certify compliance.
- 46

47 **Sec. 79.17. Irrigation Design Standards.**

1 (a) Irrigation systems shall be designed as follows:
2

- 3 1. The maximum total irrigated area on residential lots, regardless of lot size, shall not
4 exceed 0.5 acres.
5
- 6 2. High volume irrigation area shall not exceed 60% of the landscaped area. This standard
7 is applicable on residential and commercial lots over 1/8 acre. This requirement applies
8 to common areas and open space in developments. This requirement excludes vegetable
9 gardens and fruit or nut trees on individual lots or community gardens.
10
- 11 3. Narrow areas, four feet wide or less, shall not be irrigated unless correctly installed low
12 volume irrigation is used.
13
- 14 4. High volume irrigation shall not be used for trees, shrubs, and/or groundcover beds.
15 Permanent low volume irrigation may be used in these areas, but the County encourages
16 the use of temporary establishment irrigation which may be removed after the vegetation
17 is established.
18
- 19 5. Irrigation zones shall be divided according to vegetated groupings (e.g., turfgrass,
20 shrubs, native plants, trees, etc.) and the water requirements of the plants. Turf grass and
21 landscaped beds, such as trees, shrubs, and groundcover beds, shall not be irrigated on
22 the same zone.
23
- 24 6. Sprinkler head types, such as spray heads and rotors, shall not be mixed in the same
25 zone.
26
- 27 7. Distribution equipment in a given zone shall have matched precipitation rates.
28
- 29 8. Rotors and spray sprinkler heads in turfgrass areas shall be spaced to provide head to
30 head coverage. Rotors and spray sprinkler heads cannot be on the same zone.
31
- 32 9. A minimum separation of four inches is required between distribution equipment and
33 pavement.
34
- 35 10. A minimum separation of 24 inches is required between distribution equipment and
36 buildings and other vertical structures.
37
- 38 11. Technology that inhibits or interrupts operation of the system during periods of
39 sufficient moisture shall be required on all irrigation systems to avoid irrigation during
40 periods of sufficient rainfall. Examples of such devices include soil moisture sensors,
41 weather stations, and rainfall shut off devices. The device shall consist of an automatic
42 sensing device or switch, which will override the irrigation cycle when adequate rainfall
43 has occurred. It shall be placed where it is exposed to unobstructed natural rainfall and
44 in compliance with section 373.62, Fla. Stat., as amended.

- 1 12. Permanent irrigation systems shall be equipped with an automatic control system to,
2 provide the following minimum capabilities:
3 a. Ability to be programmed in minutes, by day of week, season, and time of
4 day;
5 b. Ability to accommodate multiple start times and programs;
6 c. Automatic shut off after adequate rainfall;
7 d. Ability to maintain time during power outages; and
8 e. Operational flexibility to meet applicable year round water conservation
9 requirements.
- 10
- 11 13. Check valves which are capable of holding a minimum of a five foot head shall be used
12 in low-lying areas to prevent head drainage.
- 13
- 14 14. Irrigation system equipment shall be installed in accordance with manufacturer's
15 specifications.
- 16
- 17 15. No direct spray onto walkways, buildings, roadways, and drives.
- 18
- 19 16. Pipelines shall be designed to provide the system with the appropriate pressure required
20 for maximum irrigation uniformity.
- 21
- 22 17. All sprinkler heads with spray nozzles (non-rotary) shall be pressure-regulated at the
23 head.
- 24
- 25 18. All irrigation system underground piping shall have minimum soil cover of six inches.

26

27 (b) Compliance with this Article shall not exempt an individual from any other local, state, or
28 federal requirements.

29

30 **Sec. 79.18. Completion of Installation or Substantial Modification.**

31 (a) The irrigation professional who installs an irrigation system shall conduct final testing and
32 adjustments to achieve design specifications prior to completion of the system and acceptance by
33 the owner or owner's representative. An irrigation professional who installs or performs work on
34 an automatic irrigation system shall test for the correct operation of each technology that inhibits
35 or interrupts operation of the system during periods of sufficient moisture. If such devices or
36 switches are not installed in the system or are not in proper operating condition, the irrigation
37 professional shall install new ones or repair the existing ones and confirm that each device or
38 switch is in proper operating condition before completing other work on the system.

39

40 (b) Upon completion of the irrigation system, the irrigation professional shall provide the
41 property owner with a copy of the site irrigation sketch, as installed, and self-inspection
42 checklist, if applicable, the date installed, the number of zones, the installer's names, and the
43 manual for the irrigation controller.

44

45 **Sec. 79.19. Maintenance of Irrigation Systems.**

1 (a) The irrigation professional responsible for installing or substantially modifying an irrigation
2 system shall provide the property owner with a maintenance checklist affixed to or near the
3 controller and accompanied by a recommended maintenance schedule, proper irrigation system
4 settings according to season, recommendations for checking rain sensor device(s), filter cleaning
5 recommendations, if applicable, and information on the current water restrictions.

6
7 (b) Irrigation systems must be inspected for leaks, overspray, maladjusted heads, and heads that
8 may be capped due to changes in the landscape, such as maturity or changes in plants, at least
9 once a year by the property owner or hired professional. Rainfall shut off devices may need to be
10 replaced every few years and shall be correctly functioning to be in compliance with this Chapter
11 of the Alachua County Code of Ordinances. Irrigation systems with known leaks shall not be
12 operated until the leaks are repaired, except for testing purposes.

13 (c) Within 60 days after installation, the irrigation professional or property owner shall adjust the
14 irrigation controller to operate according to normal, established landscape conditions or irrigation
15 restrictions, if the system is installed as part of newly established landscaping.

16 **Sec. 79.20. Exemptions.**

17 (a) The following are exempted from the provisions of this Article, but should follow applicable
18 Florida Friendly Best Management Practices for Protection of Water Resources by the Green
19 Industries:

- 20 1. Bona fide agricultural activities;
21 2. Vegetable gardens and fruit and nut trees;
22 3. Athletic fields;
23 4. Golf course play areas; and
24 5. Cemeteries.

25
26 **Sec. 79.21 Alternative Compliance**

27
28 Requests for alternative compliance from any provision of this Article may be made as follows:

29
30 (a) An applicant may submit a proposal that varies from the strict application of the requirements
31 of the provisions of this Article in order to accommodate unique site features or characteristics,
32 utilize innovative design, prevent extraordinary hardship, or to promote the overriding public
33 interest or general public welfare. Diminished value or inconvenience is not considered
34 extraordinary hardship.

35
36 (b) The applicant shall have the burden of demonstrating the existence of the necessary
37 conditions or reasons for alternative compliance.

38
39 (c) Requests for alternative compliance shall be submitted as part of the Approval Process.

40
41 (d) An alternative compliance plan may be approved only upon a finding that it fulfills the
42 purpose and intent of this Article as well as, or more effectively than, would adherence to the
43 strict requirements.

1
2 **Sec. 79.22. Enforcement.**

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

5
6 **Sec. 79.23. Penalties**

7 (a) Violation of any provision of this Ordinance shall be subject to penalties as provided in
8 Chapter 24, Alachua County Code.

9
10 SECTION 3. Section 24.16 Exhibit A, Alachua County Code, is hereby amended to add
11 the following to the schedule of codes and ordinances administered by the County's
12 Environmental Protection Department:

13
14 Section 24.16 Exhibit A

15 Environmental Protection Department

<u>Code or Ordinance</u>	<u>Section</u>	<u>Section this Volume</u>	<u>Description</u>	<u>Class</u>	<u>Penalty</u>
<u>15-</u>	<u>2</u>	<u>79.14</u>	<u>Failure to comply with Registration Process</u>	<u>I</u>	<u>\$50</u>
	<u>2</u>	<u>79.15</u>	<u>Failure to comply with Irrigation System Approval Process</u>	<u>III</u>	<u>\$125</u>
	<u>2</u>	<u>79.17</u>	<u>Failure to comply with Design Standards</u>	<u>III</u>	<u>\$125</u>
	<u>2</u>	<u>79.18</u>	<u>Failure to comply with Completion of Installation or Substantial Modification</u>	<u>II</u>	<u>\$75</u>
	<u>2</u>	<u>79.19</u>	<u>Failure to comply with Maintenance requirements</u>	<u>II</u>	<u>\$75</u>

16

1 SECTION 4. Repealing Clause. All ordinances or portions thereof in conflict herewith
2 are, to the extent of such conflict, hereby repealed.
3

4 SECTION 5. Severability. It is the declared intent of the Board of County Commissioners
5 that, if any section, subsection, sentence, clause, phrase, word or provision of this ordinance, or
6 the application of this ordinance to any person or circumstance, is held invalid or
7 unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall
8 not be so construed as to render invalid or unconstitutional the remaining provisions of this
9 ordinance and, to this end, the provisions of this ordinance are declared severable.
10

11 SECTION 6. Inclusion in the Code. It is the intent of the Board of County
12 Commissioners of Alachua County, Florida, and it is hereby provided that the provisions of this
13 ordinance shall become and be made part of the Alachua County Code of Ordinances of Alachua
14 County, Florida; that the Code may be renumbered or relettered to accomplish this intent and that
15 the word "ordinance" may be changed to "section", "article", or other appropriate designation.
16

17 SECTION 7. Modification. It is the intent of the Board of County Commissioners that
18 the provisions of this ordinance may be modified as a result of considerations that may arise
19 during public hearings. Such modifications shall be incorporated into the final version of the
20 ordinance adopted by the Board and filed by the Clerk to the Board.
21

22 SECTION 8. Effective Date. A certified copy of this ordinance shall be filed with the
23 Department of State by the Clerk of the Board of County Commissioners within ten days after
24 enactment by the Board of County Commissioners, and shall take effect per the implementation
25 schedule below:
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27 Section 79.14 takes effect November 1, 2015
28

29 All other sections take effect March 1, 2016.
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1 DULY ADOPTED in regular session, this _____ day of _____, 2015.

2 BOARD OF COUNTY COMMISSIONERS OF
3 ALACHUA COUNTY, FLORIDA

4
5 ATTEST:

6 BY: _____
7 Charles S. Chestnut, IV, Chair

8 _____
9 J.K Irby, Clerk

10
11 APPROVED AS TO FORM

12
13 _____
14 County Attorney

15
16 (SEAL)

17
18
DRAFT