

New Home Irrigation System Operation and Maintenance Checklist

Volusia County Ordinance 2004-5, passed May 20, 2004, requires that buyers of new homes are provided the following Basic Information on the new irrigation system. If this Information was not provided at time of purchase, request this information. The Volusia County Health Department (386-274-0714) enforces the ordinance and should be notified if your builder is not in compliance.

Basic information on your system:

- A manufacturer's operating manual for the controller (timer). Manuals also can be downloaded from manufacturer website.
- Simple schematic ("as-built") of the system with:
 - Location of water source
 - Location of backflow preventer
 - Location of controller
 - Location of rain sensor
 - How irrigated area is zoned, through color-coding or a diagram of piping (optional)
 - Locations of all heads (optional)
- The contractor installing your irrigation system was:
Contractor name and company:

Phone:

Volusia County Contractor License # :

Contractor does service calls: yes no

System modifications:

A permit is required for modifications to your irrigation system if 50% is impacted, expanded or altered. The permit is required whether you do the modifications or hire a contractor. If you contract for hire, you must use a licensed contractor. Contact the Volusia County Health Department to verify if the contractor you wish to use is licensed or ask to see a competency card.

Operation: Optimal run times and irrigation frequency

One month for establishment

- For new landscaping, the irrigation system should have been set by the contractor for Monday, Wednesday and Friday between 2AM and 8AM, provided irrigation is limited to the amount necessary for plant establishment, per Volusia County Water Conservation Ordinance: Sec. 50-315 (1).b. These hours are permitted only for a 30-day period. For reclaimed water restrictions, check with your municipality.

Post-establishment watering restrictions

- After 30 days, you are required to reset your timer for the correct watering days, as specified in Ch.50-315. Irrigation frequency is to be no more than twice per week. Hours and days on which you can irrigate are specified. Call 386-736-5998 or 386-423-3359 or 386-239-7890 for a recording of the current water restrictions. For reclaimed water restrictions, check with your municipality.
- To reset your timer, consult the manual provided (modern timers are designed to be easy to operate). Information and possibly a copy of the manual should be available on the website of the manufacturer. If you need help, call a certified irrigation contractor.

Run times and irrigation frequency by type of zones:

High water use zones (those with grass or annuals):

- Two cycles per week are allowed and may be necessary to maintain grass and annuals during the months of March to November.
- University of Florida recommends no more than 1/2 inch water per cycle. To determine how long to run a zone to apply 1/2 inch, you can calibrate using tuna cans (see Tuna Can Calibration card) or set according to the following formula: Zones with rotors: 30-45 minutes, zones with sprays 15-20 minutes.
- To conserve water, reduce frequency to one cycle per week during December, January and February, when plants need less water.
- If you learn how to operate your timer easily, try reducing run times gradually as the plants become established. If you have reduced the run times too much and the plants show water stress, increase again to the formula above.

- In no case may timers be set to run beyond the days and times allowed in Ch. 50-315 (1).b of the Volusia Co.Code.

Medium water use zones

(those with trees, shrubs, or groundcovers)

- Two cycles per week in the warmer months using no more than 1/4 inch per application OR one cycle per week using 1/2 inch per application are allowed. Your mulched trees, shrubs, and groundcovers require little water after establishment. Irrigate trees, shrubs, and groundcovers as suggested above for only the first year and then reduce irrigation to an "as-needed" basis. U.F. suggests that in order to monitor your plants, check them in the morning. If they look wilted, turn on that zone or spot hand water.

Low water use zones *(those with drought-tolerant trees, shrubs, or groundcovers or native vegetation)*

- No more than 1/8-inch per cycle is to be applied two times per week OR 1/4 inch per cycle once per week in this zone. Microirrigation (drip irrigation) is considered a low volume zone. Since microirrigation uses gallons per hour rather than gallons per minute, this type of irrigation is exempt from watering restrictions, but keep tabs on how much water you are using!

Maintenance: What to check and when

Testing your irrigation system to make adjustments and repairs is allowed outside of the normal irrigation hours. If someone other than you the homeowner does the maintenance below, it is recommended it be a Volusia County Licensed Irrigation Contractor. Members of the Volusia County Chapter of the Florida Irrigation Society (FIS) are licensed and interested in maintaining high standards in their profession. To find FIS members, visit www.fisstate.org.

Monthly maintenance

Spray patterns

- Turn on each zone in succession and observe the spray patterns of each sprinkler to be sure none are broken. (Lawn mowers or other vehicles may damage heads or put them out of alignment).
- Adjust misdirected sprays to be sure driveways, pavement and other impervious surfaces are not being watered.
- Adjust sprays so that throw is more than a foot away from your house.
- Check for sprays whose throw may be blocked by shrubs. Remember that as plants grow, positioning of the sprays may have to be changed.
- Adjust sprays to make sure water patterns overlap and there are no dry areas.

- If you replace broken heads or add heads to improve coverage, be sure to use heads with the same output rate and throw diameter. If not, coverage will be uneven.

Rain sensor device

- Florida State Law (F.S.373.62) requires installation of rain sensor devices. Most rain sensor devices need to be set, although new models may be pre-set and turn off automatically when water falls on them. Optimal setting, corresponding to our watering restrictions and U.F. recommendations, is 1/2 inch.
- Check the functioning of the rain sensor device as follows: With sprinklers going, spray the top of the rain sensor device with a hose. The sprinklers should shut off, once the preset 1/2 inch of water is received. Do this test after checking all other aspects of your systems, since the system will not go back on again until the sensor dries out.

Semiannual maintenance

Spray patterns

- Twice a year spend more time examining your irrigation system's operation, to be sure no areas receive too much water or too little water. Dollarweed and plant diseases are signs of overwatering. Dry and brown spots are signs of too little water. If coverage is uneven, adjust sprinkler heads yourself or call a licensed irrigation contractor.

Filters and Batteries

- If your system is equipped with a filter, check and/or clean the filter.
- Your timer should have nonvolatile memory, which means the program will not be lost in case of a power failure, or have battery back-up. Be sure batteries are charged.

Fertilizer and Mulch

- Use slow release fertilizer to avoid flushes of growth that cause larger water demand. University of Florida suggests fertilizing in September and March.
- Add mulch around trees, shrubs and plants in landscape beds as needed to maintain 3 inches of depth. Mulch holds water.



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Volusia County Environmental Management • (386) 736-5579
Volusia County Health Department • (386) 274-0714
Water Authority of Volusia Water Conservation • (386) 322-5160
University of Florida Extension –
Daytona Beach area (386) 257-6012 • DeLand area (386) 822-5778
New Smyrna Beach area (386) 423-3368