



Alachua County Board of County Commissioners

**Michele Lieberman
County Manager**

ENERGY PROGRAM GUIDELINES

(Energy Conservation and Building Management)

Responsibilities:

Every person is expected to become an “energy saver” as well as an “energy consumer.”

The staff member is responsible for implementing the guidelines during the time that he/she is present in the room or office.

The Energy Specialist provides regular (at least semi-annual) program update reports to the Board.

The Energy Specialist performs routine audits of all facilities and communicates the audit results to the appropriate personnel.

The Energy Specialist is responsible for either directly or indirectly making adjustments to the Organization’s Energy Management System (EMS), including temperature settings and run times for Heating, Ventilation and Air Conditioning (HVAC) and other controlled equipment.

Administration will regularly communicate the importance and impact of the energy conservation program to its internal and external constituents.

The Energy Specialist provides monthly energy savings reports to facility and area administrators detailing performance results.

The organization is committed to and responsible for a safe and healthy work environment.

To complement the organization’s behavioral-based energy conservation program, the organization shall develop and implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.

General:

Exterior doors shall remain closed when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times.

Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the organization’s facilities to ensure compliance with organization guidelines.

All exhaust fans should be turned off daily, when not required to operate continually.



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All office machines (copy machines, laminating equipment, etc.) shall be switched off each night and during unoccupied times. Fax machines should remain on.

All computers should be turned off each night. This includes the monitor, local printer, and speakers. Network equipment is excluded.

All capable PC's should be programmed for the "energy saver" mode using the power management feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10-minutes of inactivity.

Cooling Season Occupied Set Points¹: 74°F - 78°F

Unoccupied Set Back Point: 85°F

Heating Season Occupied Set Points¹: 68°F - 70°F

Unoccupied Set Back Point: 55°F

¹ Set points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"

Air Conditioning Equipment

Occupied temperature settings shall not be set below 74°F. If actual room temperatures and thermostat readings differ, the issue will be reviewed and a resolution will be implemented.

During unoccupied times, the air conditioning equipment shall be set back to the unoccupied set point. The unoccupied period begins at the employee scheduled end of workday. It is anticipated that the temperature of the rooms will be maintained long enough to afford comfort for the period the staff remains after normal work hours.

Air conditioning start times may be adjusted (depending on weather) to ensure room comfort when work begins.

Ensure outside air dampers are closed during unoccupied times.

Ceiling fans should be operated in all areas that have them.

Relative humidity levels shall not exceed 60% for any 24-hour period.

In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air-conditioned instruction rooms or dining areas should be kept closed as much as possible.



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Heating Equipment

Occupied temperature settings shall not be above 70°F.

The unoccupied temperature setting shall be 55°F. This may be adjusted to a 60°F setting during extreme weather (i.e. hard freeze warning nights where recovery time is needed).

The unoccupied time shall begin when the employee scheduled workday ends.

During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should return to unoccupied set back temperatures during unoccupied periods. Hot water heating systems should be set back using the appropriate loop pumps.

Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).

Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.

For heat pumps, ensure a 6 °F dead-band between heating and cooling modes.

Heating oil and propane (if applicable) levels should be either monitored electronically if capable, or physically measured and recorded by "sticking the tanks" at least on the following intervals: 1) recurring scheduled monthly date 2) immediately before new delivery, 3) immediately after delivery.

Lighting

All unnecessary lighting in unoccupied areas will be turned **off**. Staff should make certain that lights are turned **off** when leaving the area. Utilize natural lighting where appropriate.

All outside lighting shall be **off** during daylight hours.

All lights will be turned **off**, unless required by OSHA or safety, when staff leave for the day. Custodians will turn on lights only in the areas in which they are working.

Refrain from turning lights on unless definitely needed. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.

Water

Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported immediately and repaired as soon as practical.

Install water sub-meters on irrigation and cooling tower supply lines to eliminate sewer charges when practical.

The Alachua County Water Conservation Policy (18-01) shall be followed, as outlined below.

All newly constructed County facilities shall receive Florida Water Star Certification.



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Language referencing the County's water conservation policies should be included in bid and contract language with outside contractors performing new construction tasks.

All newly installed indoor water fixtures (new construction and retrofits) will meet current Florida Water Star prerequisite standards, which can be found at www.FloridaWaterStar.com. The standards, as of 2018, are:

- i) Showerheads will have a flow rate of 2 gallons/minute or less, preferably with an on/off valve at the showerhead.
- ii) Toilets shall be high efficiency (maximum of 1.28 gallons/flush with a UNAR MAP rating above 350 grams/flush). When dual flush toilets are installed, signage clearly explaining the flushing options shall be prominently placed and maintained.
- iii) Lavatory sink faucets shall have flow rates of 1.5 gallon/minute or less
- iv) Dishwashers and clothes washers must meet current ENERGY STAR performance criteria.
- v) Leaking fixtures (including outdoor spigots) shall be fixed immediately. Employees should report leaks to Facilities Management or Parks and Conservation Lands (in County Parks) upon discovery.
- vi) Language referencing these water conservation policies should be included in bid and contract language with outside contractors performing plumbing tasks.

Landscapes shall incorporate the Florida Friendly Landscaping principles.

Permanent landscape irrigation shall not be installed, except for athletic fields or edible landscapes. Temporary above ground irrigation may be used for the establishment of new landscapes.

The use of native vegetation shall be maximized in new landscaping.

The use of fertilizers shall be minimized. Fertilizers shall only be applied by GIBMP trained employees/contractors on an as needed basis to address deficiencies and must comply with Article IV of the Alachua County Water Quality Code.

The use of herbicides and pesticides shall be minimized and shall only be applied by licensed applicators to spot treat issues as a last resort. Integrated Pest Management shall be routinely practiced.

Landscaping wastes (including grass clippings) shall not be discharged to streets, storm water systems, or surface waters.

All irrigation systems that are routinely operated (sports fields) must be inspected for leaks and misaligned heads at least twice a year, with a preference for quarterly inspections.

Language referencing these landscaping policies should be included in bid and contract language with outside contractors performing landscaping tasks.