

## **STUDENT SENATE BILL 2024-1480**

### **TITLE: Resolution Recognizing the Impact and Need for Effective and Efficient Irrigation Practices**

**AUTHOR(S): Senator Hunter Monson**

#### **SPONSORS:**

**WHEREAS**, the University of Florida states that “water conservation methods are needed to ensure that this important and defining feature of our planet remains abundant,” which is an undoubtedly true statement, but the plans towards effective water conservation and following them are equally as important [1]; and,

**WHEREAS**, some tips stated by the University of Florida to more effectively conserve water are to “find and fix leaks, install low-flow toilets and shower heads, run the dishwasher or clothes washer only when you have full loads,” but also to “water your lawn only if it needs it” and “repair and calibrate your irrigation system” [1]; and,

**WHEREAS**, while the University of Florida may make these statements, water irrigation is a present issue that can be noticed around campus with many broken sprinkler heads, overflowing pipes, and seemingly illogical irrigation patterns; and,

**WHEREAS**, it was recorded in 2022 that scored 1.56/5.00 in regard to its water use as well as using 788,750,000 gallons during the 2018 cycle and 853,924,512.10 during the 2005 cycle, which is approximately 100-200 million gallons higher than the lower end average compared to other universities, such as Yale who recorded slightly over 600 million gallons per year [2][3][4][5]; and,

**WHEREAS**, the long-term quality of water resources for all sectors are impacted by effective water management and conservation, and the University of Florida “aims to build awareness of water quality issues and solutions on the University of Florida campus” through the UF Clean Water Campaign [6]; and,

**WHEREAS**, University of Florida Facilities Services has identified that “if reclaimed water is used as a source for irrigation water, a reduced pressure backflow preventer is not required to protect the reclaimed water system,” “wells serving irrigation systems also fed by reclaimed water shall be protected by a reduced pressure backflow preventer,” and “where potable water serves irrigation systems also fed by reclaimed water, the potable water system shall be protected by an air gap rather than a reduced pressure backflow preventer” [7]; and,

**WHEREAS**, it is recorded that UF's Water Reclamation Facility processes up to three million gallons of waste water a day, which can be used towards irrigation processes as well as various other water conservation practices [8]; and,

**WHEREAS**, according to the United States Environmental Protection Agency (EPA), “as much as 50 percent of the water we use outdoors is lost due to wind, evaporation, and runoff caused by inefficient irrigation methods and systems” [9]; and,

**WHEREAS**, inefficient irrigation methods often result in over-irrigation, leading to the depletion of local water supplies and lowering groundwater levels, which are essential for drinking water and other critical uses [10]; and

**WHEREAS**, the misuse of irrigation can cause soil erosion, nutrient runoff, and the contamination of water bodies with pesticides and fertilizers, negatively impacting both terrestrial and aquatic ecosystems [10]; and

**WHEREAS**, over-irrigation and improper water management practices can result in waterlogging and soil salinization, reducing soil fertility and agricultural productivity, thereby threatening food security [10]; and

**WHEREAS**, sustainable irrigation practices, including drip irrigation, rainwater harvesting, and soil moisture monitoring, can greatly reduce water usage and enhance the resilience of agricultural systems [10][11]; and

**WHEREAS**, the protection and restoration of wetlands, rivers, and other freshwater ecosystems are critical for maintaining the ecological balance and supporting water-related ecosystem services [12]; and,

**WHEREAS**, the agricultural sector, which consumes the majority of the world’s freshwater, can benefit from innovative irrigation practices and crop selection to enhance water efficiency [13]; and,

**WHEREAS**, as described by the University of Florida Water Conservation page, “water is one of the most vital resources on the planet;,” “humans, plants, and animals all need it to survive,” and when “human activity increases through population, agriculture, and industry growth, so does our water use,” thus, it is integral that the University takes measures to use our irrigated water more effectively [1]; then,

**THEREFORE LET IT BE RESOLVED**, that the University of Florida Student Senate recognizes the critical importance of improving irrigation practices to conserve water resources and protect the environment.

**THEREFORE LET IT FURTHER BE RESOLVED**, that the University of Florida Student Senate urges the implementation of policies and programs that promote sustainable irrigation techniques.

**THEREFORE LET IT FURTHER BE RESOLVED**, that the University of Florida Student Senate understands the need to support policies and initiatives that promote efficient water use and proper irrigation planning.

**THEREFORE LET IT FURTHER BE RESOLVED**, that the University of Florida Student Senate advocates for the implementation of increasingly effective irrigation use at the University of Florida.

**THEREFORE LET IT FINALLY BE RESOLVED**, that the University of Florida Student Senate calls for a review of existing irrigation policies and practices to identify areas for improvement in order to best ensure that water resources are managed in a way that is both economically viable and environmentally sustainable.

*Proviso: A copy of this resolution shall be sent to Assistant Vice President of Facilities Services Mark Helms, University of Florida Waste Water Treatment Superintendent Jared Howard, Sustainability Coordinator for the Office of Sustainability Corey Farmer, Climate Action Plan Implementation Coordinator for the Office of Sustainability John Lawson, Director of UF's Office of Sustainability Matthew Williams.*

[1] [Water Conservation - UF/IFAS Extension: Solutions for Your Life \(ufl.edu\)](https://www.ufl.edu/extension/programs/water-conservation/)

[2] <https://reports.aashe.org/institutions/university-of-florida-fl/report/2020-12-04/OP/water/OP-22/>

[3] [https://sustainability.yale.edu/sites/default/files/files/research-publications/AnalysisPotableWaterUse\\_YaleUniversity.pdf](https://sustainability.yale.edu/sites/default/files/files/research-publications/AnalysisPotableWaterUse_YaleUniversity.pdf)

[4] <https://www.epa.gov/sites/default/files/2017-01/documents/ws-commercial-factsheet-educational-facilities.pdf>

[5] <https://epiccleantec.com/industries/higher-education#:~:text=Universities%20require%20huge%20amounts%20of,gallons%20of%20water%20per%20year.>

[6] <https://soils.ifas.ufl.edu/campuswaterquality/index.shtml>

[7] <https://facilities.ufl.edu/wp-content/uploads/2022/10/331000-rev-092322-final.pdf>

[8] <https://sustainable.ufl.edu/campus-initiatives/water/#:~:text=UF's%20Water%20Reclamation%20Facility%20processes,of%20waste%20water%20a%20day.>

[9] <https://www.epa.gov/watersense/statistics-and-facts#:~:text=As%20much%20as%2050%20percent,25%2C000%20gallons%20of%20water%20annually.>

[10]

<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=8321f0dbb29814bd74e6bc85>

[8210809ca847a227#:~:text=The%20environmental%20impact%20of%20irrigation,types%20of%20ground%2Dwater%20pollution.](#)

[11] [What is Regenerative Agriculture?](#)

[12] <https://www.epa.gov/wetlands/why-are-wetlands-important>

[13] <https://www.ers.usda.gov/topics/farm-practices-management/irrigation-water-use/>