

**The Florida Senate**  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

---

Prepared By: The Professional Staff of the Appropriations Subcommittee on Agriculture, Environment, and General Government

---

BILL: PCS/CS/SB 1556 (773696)

INTRODUCER: Appropriations Subcommittee on Agriculture, Environment, and General Government; Environment and Natural Resources Committee; and Senator Gruters

SUBJECT: Golf Course Best Management Practices Certification

DATE: February 24, 2022      REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Carroll</u>	<u>Rogers</u>	<u>EN</u>	<u>Fav/CS</u>
2.	<u>Reagan</u>	<u>Betta</u>	<u>AEG</u>	<u>Recommend: Fav/CS</u>
3.	_____	_____	<u>AP</u>	_____

---

**Please see Section IX. for Additional Information:**

COMMITTEE SUBSTITUTE - Substantial Changes

---

**I. Summary:**

PCS/CS/SB 1556 provides for golf course best management practices (BMPs) certification. The bill directs the turfgrass science program at the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) in coordination with the Department of Environmental Protection (DEP) to administer a golf course BMPs certification to ensure compliance with fertilizer BMPs.

The bill requires the UF/IFAS, in cooperation with the DEP, to provide training and testing certification programs. The bill requires an applicant for certification to submit a copy of the training certificate. Recertification is available when the certificate expires, for which the bill requires eight classroom hours of continuing education.

The bill exempts a person certified in golf course BMPs from additional local testing and local ordinances relating to water and fertilizer use restrictions, unless a state of emergency is declared.

The UF/IFAS may incur costs in administering training and testing certification programs and continuing education in golf course best management practices.

## II. Present Situation:

### Water Quality and Nutrients

Phosphorus and nitrogen are naturally present in water and are essential nutrients for the healthy growth of plant and animal life.<sup>1</sup> The correct balance of both nutrients is necessary for a healthy ecosystem; however, excessive nitrogen and phosphorus can cause significant water quality problems.<sup>2</sup>

Phosphorus and nitrogen are derived from natural and human-made sources.<sup>3</sup> Human-made sources include sewage disposal systems (wastewater treatment facilities and septic systems), overflows of storm and sanitary sewers (untreated sewage), agricultural production and irrigation practices, and stormwater runoff.<sup>4</sup>

Excessive nutrient loads may result in harmful algal blooms, nuisance aquatic weeds, and the alteration of the natural community of plants and animals.<sup>5</sup> Dense, harmful algal blooms can also cause human health problems, fish kills, problems for water treatment plants, and impairment of the aesthetics and taste of waters. Growth of nuisance aquatic weeds tends to increase in nutrient-enriched waters, which can impact recreational activities.<sup>6</sup>

### Best Management Practices

BMPs are designed to protect water resources from nonpoint source pollution,<sup>7</sup> occurring from operations like agriculture, golf courses, forestry, and stormwater management.<sup>8</sup> BMPs are practical measures that can reduce the effects of fertilizer, nutrients, and water use on the environment and otherwise manage the landscape to further protect water resources.<sup>9</sup>

Producers of nonpoint source pollution included in a basin management action plan (BMAP)<sup>10</sup> must comply with the established pollutant reductions by either implementing the appropriate BMPs or by conducting water quality monitoring.<sup>11</sup> A nonpoint source discharger may be subject

---

<sup>1</sup> U.S. Environmental Protection Agency (EPA), *The Issue*, <https://www.epa.gov/nutrientpollution/issue> (last visited Jan. 19, 2022).

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> EPA, *Sources and Solutions*, <https://www.epa.gov/nutrientpollution/sources-and-solutions> (last visited Jan. 19, 2022).

<sup>5</sup> EPA, *The Issue*, <https://www.epa.gov/nutrientpollution/issue> (last visited Jan. 19, 2022).

<sup>6</sup> *Id.*

<sup>7</sup> Point sources are “any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.” Nonpoint sources are not point sources. Fla. Admin. Code R. 62-620.200(37).

<sup>8</sup> University of Florida Institute of Food and Agricultural Sciences (UF/IFAS), *Best Management Practices*, <https://hort.ifas.ufl.edu/yourfloridalawn/bmps.shtml> (last visited Jan. 20, 2022); Department of Environmental Protection (DEP), *NPDES Stormwater Program*, <https://floridadep.gov/Water/Stormwater> (last visited Jan. 19, 2022).

<sup>9</sup> UF/IFAS, *Agricultural Best Management Practices*, <https://bmp.ifas.ufl.edu/about-bmps/> (last visited Jan. 20, 2022).

<sup>10</sup> Basin Management Action Plans (BMAPs) are one of the primary mechanisms the DEP uses to address the entire pollution load for a watershed, including point and nonpoint discharges. Section 403.067(7), F.S.

<sup>11</sup> Section 403.067(7)(b)2.g., F.S. For example, BMPs for agriculture include activities such as managing irrigation water to minimize losses, limiting the use of fertilizers, and waste management.

to enforcement action by the DEP or a water management district based on a failure to implement these requirements.<sup>12</sup>

### ***Golf Course BMPs for Fertilizer Application***

The Florida golf course industry is the largest of any state.<sup>13</sup> As of 2019, there were 1,306 golf courses and 986 golf facilities in Florida.<sup>14</sup> Site placement and management of golf courses can create environmental harms, but BMPs can help mitigate harms or provide environmental benefits.<sup>15</sup>

Golf course BMPs attempt to curb excessive and unnecessary fertilization to prevent water pollution due to nutrient runoff or leaching from saturated or compacted soils.<sup>16</sup> BMPs for nutrient applications focus on maximizing plant uptake and include suggestions to:

- Follow UF/IFAS nitrogen (N) application rates;
- Apply nutrients when turfgrass is actively growing;
- Apply slow-release N fertilizers at the appropriate time of year, taking into consideration the release rate of the chosen material;
- Take into account that putting greens, tees, and landing areas require more nutrition than other areas like fairways and roughs;
- Exercise caution when applying nutrients during turfgrass establishment, because they are more susceptible to leaching and runoff at that time;
- During establishment, use appropriate rates and products to minimize N loss due to increased water applications, increased nutrients rates, and reduced root mass;
- Be aware of the pros and cons of different nutrient spreaders;
- Calibrate the chosen nutrient spreader properly;
- Properly store, load, and clean up fertilizer to reduce environmental risk;
- Avoid applying fertilizer to soils that are at or near saturation, or when the National Weather Service has issued a flood, tropical storm, or hurricane warning, or if heavy rains are forecast in the next 24 hours; and
- When using fertigation,<sup>17</sup> ensure that irrigation heads are properly aligned and adjusted to ensure no nutrient-loaded irrigation water is being applied to lakes and wetlands.<sup>18</sup>

Golf course BMPs also focus on other areas of landscape management to protect environmental resources, including:

- Planning, design, and construction;
- Irrigation;
- Cultural practices;
- Lake and aquatic management;
- Turf pest and pesticide management;

---

<sup>12</sup> Section 403.067(7)(b)2.h., F.S.

<sup>13</sup> *BMPs for the Enhancement of Env. Quality on FL Golf Courses*, 14 (Sept. 2021), available at <http://flgolfbmp.com/view-the-bmp-guide> (last visited Jan. 19, 2022).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 15.

<sup>16</sup> *Id.* at 144.

<sup>17</sup> Fertigation is fertilizer application through an irrigation system. *Id.* at 152.

<sup>18</sup> *Id.* at 153.

- Maintenance operations;
- Pollinator protection; and
- Energy conservation.<sup>19</sup>

### **Green Industries BMP Certification**

The UF/IFAS currently offers the Green Industries BMPs program, which teaches environmentally safe landscaping practices that protect water quality and natural resources.<sup>20</sup> The program was created for people working in lawn-care and landscape maintenance. The program includes golf course employees among those who benefit from green industries BMPs training.<sup>21</sup>

### **Local Government Ordinances Relating to Golf Courses BMPs**

Local governments often require fertilizer on golf courses to be used in accordance with the *Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses*; or they may provide fertilizer restrictions exemptions for golf courses that follow golf course BMPs.<sup>22</sup> Local governments may also regulate fertilizer use in addition to requiring or encouraging golf course BMPs.<sup>23</sup>

In addition to fertilizer, local government may also require or encourage golf course irrigation practices to align with golf course BMPs.<sup>24</sup> Local governments may also regulate water use separately from golf course BMPs.<sup>25</sup>

## **III. Effect of Proposed Changes:**

**Section 1** creates s. 403.9339, F.S., relating to golf course BMPs certification. The bill requires the UF/IFAS in coordination with the DEP to administer a certification for golf course BMPs as a means of documenting and ensuring compliance with BMPs for fertilizer application to golf courses.

The bill requires the UF/IFAS, in cooperation with the DEP, to:

- Provide training and testing programs in golf course BMPs and may issue certificates demonstrating satisfactory completion of the training; and

<sup>19</sup> *Id.* at 3-4.

<sup>20</sup> UF/IFAS, *Green Industries BMPs*, <https://gibmp.ifas.ufl.edu/> (last visited Jan. 20, 2022); UF/IFAS, *FL Friendly Landscaping Program*, <https://ffl.ifas.ufl.edu/ffl-and-you/gi-bmp-program/> (last visited Jan. 20, 2022).

<sup>21</sup> *Id.*

<sup>22</sup> *See, e.g.*, Boca Raton Ord. No. 17-265 (fertilizer content and application rates), Alachua County Ord. No. 77-12 (groundwater protection), Collier County Ord. No. 54-33 (exemptions), and Jacksonville Ord. No. 366-610 (exemptions).

<sup>23</sup> *See, e.g.*, Miami-Dade Ord. No. 18C-8 (requirements related to golf courses, athletic fields, specialized turf, and parks); and Palm Beach County Ord. Nos. 11-407 (fertilizer free zones), 11-408 (fertilizer content and application rates), and 11-409 (fertilizer application practices).

<sup>24</sup> *See, e.g.*, Miami-Dade Ord. No. 18C-8 (requirements related to golf courses, athletic fields, specialized turf, and parks) and Alachua County Ord. No. 77-64 (exemptions),

<sup>25</sup> *See, e.g.*, Palm Beach County Ord. No. 27-180 (approved uses of reclaimed water) and Boca Raton Ord. No. 17-57 (landscape irrigation restrictions)

- Approve training and testing programs in golf course BMPs in the future that are equivalent to or more comprehensive than the original training and testing programs. The programs must be reviewed and reapproved by the UF/IFAS if significant changes are made.

The bill requires an applicant to submit a copy of the training certificate to the UF/IFAS to obtain a golf course BMPs certification.

The bill provides that a golf course BMPs certification expires four years after the date of issuance. Upon expiration or after a grace period of not more than 30 days after the expiration date, a recertification may be reissued. The bill specifies that before applying for recertification, an applicant must complete eight classroom hours of acceptable continuing education, including at least two hours addressing fertilizer BMPs. The bill requires an applicant to submit proof of completion of the eight classroom hours of continuing education to the UF/IFAS to obtain golf course BMPs recertification.

The bill provides that a person certified in golf course BMPs is exempt from:

- Additional local training; and
- Local ordinances relating to water and fertilizer use blackout periods or restrictions, unless a state of emergency is declared.

The bill provides that these provisions do not exempt a certified person from complying with the rules and requirements for basin management action plans (BMAP) if the golf course is located within a BMAP.

The bill provides that the UF/IFAS may provide the certification status of persons certified in golf course BMPs to local and state governmental entities. The bill encourages the UF/IFAS to create a registry of persons certified in golf course BMPs on its website.

**Section 2** provides an effective date of July 1, 2022.

#### **IV. Constitutional Issues:**

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. **Fiscal Impact Statement:**

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The UF/IFAS may incur costs in administering training and testing certification programs and continuing education in golf course best management practices.

VI. **Technical Deficiencies:**

None.

VII. **Related Issues:**

None.

VIII. **Statutes Affected:**

This bill creates section 403.9339 of the Florida Statutes.

IX. **Additional Information:**

A. Committee Substitute – Statement of Substantial Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

**Recommended CS by Appropriations Subcommittee on Agriculture, Environment, and General Government on February 22, 2022:**

The committee substitute:

- Directs the turfgrass science program at UF/IFAS to administer the certification for golf course best management practices (BMPs), instead of the DEP. The turfgrass science program will coordinate with the DEP.
- Provides a certified person may be exempt from additional local training and local ordinances relating to water and fertilizer use blackout periods or restrictions, unless a state of emergency is declared. The amendment adds that the certified person must continue to coordinate with the local government to ensure that they adhere to the comprehensive BMPs for that specific community.
- Clarifies that this section does not exempt a certified person from complying with the rules and requirements for basin management action plans when applicable.

- Deletes the rulemaking authorization.

**CS by Environment and Natural Resources on January 24, 2022:**

Removes the golf course best management practices certification and recertification fees.

B. Amendments:

None.