#### HOUSE OF REPRESENTATIVES STAFF FINAL BILL ANALYSIS

BILL #:CS/CS/CS/HB 967Golf Course Best Management Practices CertificationSPONSOR(S):State Affairs Committee; Agriculture & Natural Resources Appropriations Subcommittee;Environment, Agriculture & Flooding Subcommittee; Truenow and othersTIED BILLS:IDEN./SIM. BILLS:CS/CS/SB 1556

FINAL HOUSE FLOOR ACTION: 112 Y's 1 N's GOVERNOR'S ACTION: Approved

# SUMMARY ANALYSIS

CS/CS/CS/HB 967 passed the House on March 2, 2022, and subsequently passed the Senate on March 4, 2022.

The Florida golf course industry is the largest of any state. As of 2019, there were 1,306 golf courses and 986 golf facilities in Florida. Site placement and management of golf courses can create environmental harms, but best management practices (BMPs) can help mitigate such impacts. 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.

The bill requires 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 certification program for golf course BMPs to ensure compliance with fertilizer BMPs.

The bill requires UF/IFAS to provide training and testing certification programs and to issue certificates demonstrating satisfactory completion of such programs. The bill provides that certification expires four years after the date of issuance, and recertification is available if an applicant completes eight classroom hours of continuing education.

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

The bill encourages UF/IFAS to create a registry of persons certified on its website.

The bill may have an indeterminate fiscal impact on the state, but does not appear to have a fiscal impact on local governments.

The bill was approved by the Governor on June 20, 2022, ch. 2022-202, L.O.F., and will become effective on July 1, 2022.

# I. SUBSTANTIVE INFORMATION

### A. EFFECT OF CHANGES:

### Background

#### Water Quality and Nutrients

Phosphorous 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 phosphorous can cause significant water quality problems.<sup>2</sup>

Phosphorous and nitrogen are derived from natural and human-made resources.<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, 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>

#### Implementation of State's Model Ordinance

The implementation of Model Ordinances for Florida-Friendly Fertilizer Use in Urban Landscapes (2008), which was developed by the Department of Environmental Protection (DEP) in conjunction with the Consumer Fertilizer Task Force, the Department of Agriculture and Consumer Services, and the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS), assists in protecting the quality of Florida's surface water and groundwater resources. Local conditions, including variations in the types and quality of water bodies, site-specific-spoils and geology, and urban or rural densities and characteristics, may necessitate the implementation of additional or more stringent fertilizer management practices at the local government level.<sup>7</sup>

All county and municipal governments are encouraged to adopt and enforce the State's model or an equivalent requirement as a mechanism for protecting local surface and groundwater quality. Each county and municipal government located within the watershed of a waterbody listed as impaired by nutrients in s. 403.067, F.S., are required to, at minimum, adopt the state's model ordinance. Local governments may adopt more stringent standards so long as certain criteria are met.<sup>8</sup>

### **Best Management Practices**

Best management practices (BMPs) are designed to protect water resources from nonpoint source pollution occurring from operations like agriculture, golf courses, forestry, and stormwater management.<sup>9</sup> BMPs are practical measures that can be implemented to reduce the amount of

<sup>6</sup> Id.

<sup>&</sup>lt;sup>1</sup> U.S. Environmental Protection Agency (EPA), *The Issue*, https://www.epa.gov/nutrientpollution/issue (last visited Jan. 21, 2022).

<sup>&</sup>lt;sup>2</sup> Id.

<sup>&</sup>lt;sup>3</sup> *Id.* 

<sup>&</sup>lt;sup>4</sup> EPA, Sources and Solutions, https://epa.gov/nutirentpollution/sources-and-solutoins (last visited Jan. 21, 2022).

<sup>&</sup>lt;sup>5</sup> EPA, *The Issue*, https://www.epa.gov/nutirentpollution/issue (last visited Jan. 21, 2022)

<sup>&</sup>lt;sup>7</sup> Section 403.9336, F.S.

<sup>&</sup>lt;sup>8</sup> Section 403.9337, F.S.

<sup>&</sup>lt;sup>9</sup> UF/IFAS, Best Management Practices, https://hort.ifas.edu/yourfloridalawn/bmps.shtml (last visited Jan. 27, 2022).

fertilizers, pesticides, animal waste, and other pollutants entering the state's water resources.<sup>10</sup> Nonpoint source pollution<sup>11</sup> causes 60 percent of water quality impairments.<sup>12</sup> Nonpoint source contributors are responsible for implementing rule-adopted BMPs to help achieve water quality standards.<sup>13</sup>

Producers of nonpoint source pollution included in a basin management action plan (BMAP)<sup>14</sup> must comply with the established pollutant reductions by either implementing the appropriate BMPs or by conducting water quality monitoring.<sup>15</sup> A nonpoint source discharger may be subject to enforcement action by DEP or a water management district based on a failure to implement these requirements.<sup>16</sup>

### Golf Course BMPs for Fertilizer Application

The Florida golf course industry is the largest of any state.<sup>17</sup> As of 2019, there were 1,306 golf courses and 986 golf facilities in Florida.<sup>18</sup> Site placement and management of golf courses can create environmental harms, but BMPs can help mitigate harms or provide environmental benefits.<sup>19</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>20</sup> BMPs for nutrient applications focus on maximizing plant uptake and include suggestions to:

- Follow UF/IFAS nitrogen application rates;
- Apply nutrients when turfgrass is actively growing;
- Apply slow-release nitrogen fertilizers at the appropriate time of the 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 nitrogen loss due to increased water applications, increased nutrient 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;

<sup>15</sup> Section 403.067(7)(b)2.g., F.S.

<sup>16</sup> Section 403.067(7)(b)2.h., F.S.

<sup>20</sup> *Id*. at 144.

<sup>&</sup>lt;sup>10</sup> UF/IFAS, *Agricultural Best Management Practices – About BMPs*, https://bmp.ifas.ufl.edu/about-bmps/ (last visited Jan. 21, 2022); see also s. 576.011(2), F.S. (defining best management practices as practices or combinations of practices determined by research or field testing in representative sites to be the most effective and practicable methods of fertilization designed to meet nitrate groundwater quality standards, including economic and technological considerations).
<sup>11</sup> The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural storm water discharges and return flows from irrigated agriculture. 33 U.S.C Section 1362(14)(2019). The term "nonpoint source" is defined to mean any source of water pollution that does not meet the legal definition of "point source" in section 502(14) of the Clean Water Act. EPA, *Basic Information about Nonpoint Source (NPS)* Pollution,

https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution (last visited Feb. 1, 2022).

<sup>&</sup>lt;sup>12</sup> Susan L. Stephens and J. Daniel Roach, *Forestry Best Management Practices for Water and Wildlife in Florida: What's in it for me?*, American Bar Association, Natural Resources & Environment (Winter 2019).

<sup>&</sup>lt;sup>13</sup> Department of Agricultural and Consumer Services (DACS), Agricultural Best Management Practices,

https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices (last visited Jan. 24, 2022). <sup>14</sup> BMAPs are one of the primary mechanisms the Department of Environmental Protection (DEP) uses to address the entire pollution load for a watershed, including point and nonpoint discharges. Section 403.067(7), F.S.

<sup>&</sup>lt;sup>17</sup> BMPs for the Enhancement of Env. Quality on FL Golf Courses, 14 (Sept. 2021), available at https://flgolfbmp.com/view-the-bmp-guide (last visited Jan. 19, 2022).

<sup>&</sup>lt;sup>18</sup> Id.

<sup>&</sup>lt;sup>19</sup> *Id*. at 15.

- 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>21</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>22</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;
- Maintenance operations;
- Pollinator protection; and
- Energy conservation.<sup>23</sup>

### Green Industry BMP Certification

UF/IFAS currently offers the Green Industries BMPs program, which teaches environmentally safe landscaping practices that protect quality and natural resources.<sup>24</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 training.<sup>25</sup>

### Effect of Bill

The bill requires the turfgrass science program at UF/IFAS, in coordination with DEP, to administer a certification for golf course BMPs in order to provide a means of documenting and ensuring compliance with BMPs for fertilizer application to golf courses.

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

- Provide training and testing programs in golf course BMPs and authorizes UF/IFAS to issue certificates demonstrating satisfactory completion of the training.
- Approve training and testing programs in golf course BMPs that are equivalent to or more comprehensive than the programs described above. The programs must be reviewed and reapproved by UF/IFAS if significant changes are made.

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

The bill specifies that a golf course BMP 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 eight classroom hours of continuing education to UF/IFAS to obtain a golf course BMP recertification.

<sup>&</sup>lt;sup>21</sup> Fertigation is fertilizer application through an irrigation system. *Id.* at 152.

<sup>&</sup>lt;sup>22</sup> *Id.* at 153.

<sup>&</sup>lt;sup>23</sup> *Id.* at 3-4.

<sup>&</sup>lt;sup>24</sup> UF/IFAS, Green Industries BMPs, https://gibmp.ifas.ufl.eudu/ (last visited Jan. 27, 2022); UF/IFAS, FL Friendly Landscaping Program, https://ffl.ifas.ufl.edu/ffl-and-you/gi-bmp-program/ (last visited Jan 27, 2022).
<sup>25</sup> Id.

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. However, the bill specifies that the certified person must continue to coordinate with the local government to ensure that he or she adheres to the comprehensive BMPs for that specific community.

The bill specifies that it does not exempt persons certified in golf course BMPs from complying with the rules and requirements of basin management action plans if the golf course is located within a basin management action plan.

The bill authorizes UF/IFAS to provide the certification status of persons certified in golf course BMPs to local and state governmental entities. The bill also encourages UF/IFAS to create a registry of such certified persons.

# II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

- A. FISCAL IMPACT ON STATE GOVERNMENT:
  - 1. Revenues:

None.

2. Expenditures:

This bill may have an indeterminate negative fiscal impact on UF/IFAS that can be absorbed within existing resources related to administering the golf course BMP certification program.

- B. FISCAL IMPACT ON LOCAL GOVERNMENTS:
  - 1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

None.