

**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.)

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Prepared By: The Professional Staff of the Committee on Rules

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BILL: CS/SB 1000

INTRODUCER: Environment and Natural Resources Committee and Senator Albritton

SUBJECT: Nutrient Application Rates

DATE: February 8, 2022

REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Collazo</u>	<u>Rogers</u>	<u>EN</u>	<b>Fav/CS</b>
2.	<u>Becker</u>	<u>Becker</u>	<u>AG</u>	<b>Favorable</b>
3.	<u>Collazo</u>	<u>Phelps</u>	<u>RC</u>	<b>Pre-meeting</b>

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

COMMITTEE SUBSTITUTE - Substantial Changes

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**I. Summary:**

CS/SB 1000 authorizes agricultural producers to use written recommendations from certified professionals to tailor their recommended nutrient application rates. The certified professional's determination that published nutrient application rates are not appropriate, and any recommendations for rate tailoring, must be documented and kept for 5 years.

The bill provides that producers using rate tailoring are required to enroll in and implement certain applicable best management practices (BMPs) adopted by the Department of Agriculture and Consumer Services (DACCS). When recommended nutrient application rates for crops are revised by state universities or college institutions having agricultural research programs, the revisions must provide an application range or authorize rate tailoring to crop and field conditions.

Producers implementing rate tailoring in compliance with the bill are:

- Provided a presumption of compliance with state water quality standards;
- May rely upon the waiver of liability provision in existing law; and
- Are deemed in compliance with the BMPs for pollution reduction, waiver of liability, and presumption of compliance provisions in existing law.

The bill contains definitions for the terms "certified professional" and "rate tailoring" and associated legislative findings and intent provisions. The bill also extends the expiration dates of the "findings and intent," "fees," "use of funds," "waiver of liability," and "rulemaking"

provisions of s. 576.045, F.S., from December 31, 2022 to December 31, 2032, and the “compliance” and “other provisions” subsections of s. 576.045, F.S., from December 31, 2027 to December 31, 2037. The bill also provides an expiration date of December 31, 2037 for the new “rate tailoring” provision.

## II. Present Situation:

### Agricultural Best Management Practices

Agricultural best management practices (BMPs) are practical measures that agricultural producers can take to reduce the amount of fertilizers, pesticides, animal waste, and other pollutants entering the state’s water resources.<sup>1</sup> BMPs are designed to improve water quality while maintaining agricultural production.<sup>2</sup> Categories of BMPs include:<sup>3</sup>

- Nutrient management to determine nutrient needs and sources and manage nutrient applications (including manure) to minimize impacts to water resources.
- Irrigation management to address the method and scheduling of irrigation to reduce water and nutrient losses to the environment.
- Water resource protection using buffers, setbacks and swales to reduce or prevent the transport of sediments and nutrients from production areas to waterbodies.<sup>4</sup>

The Department of Agriculture and Consumer Services (DACCS) develops and adopts BMPs by rule for different types of agricultural commodities.<sup>5</sup> Existing law provides for agricultural producers to reduce their impacts to water quality through the implementation of applicable BMPs adopted by DACCS.<sup>6</sup>

The Department of Environmental Protection (DEP) develops total maximum daily loads (TMDLs) for waterbodies that have been found to be impaired.<sup>7</sup> The TMDL is a determination of the maximum amount of a pollutant (such as a nutrient) that a waterbody can receive and still meet the water quality standards that protect human health and aquatic life.<sup>8</sup>

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<sup>1</sup> University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS), *Agricultural Best Management Practices – About BMPs*, <https://bmp.ifas.ufl.edu/about-bmps/> (last visited Dec. 21, 2021); *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>2</sup> *Id.*

<sup>3</sup> UF/IFAS, *Agricultural Best Management Practices – About BMPs*, <https://bmp.ifas.ufl.edu/about-bmps/> (last visited Dec. 21, 2021); Florida Department of Agriculture and Consumer Services (DACCS), *Agricultural Best Management Practices*, <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices> (last visited Dec. 21, 2021).

<sup>4</sup> *Id.*

<sup>5</sup> DACCS, *Agricultural Best Management Practices*, <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices> (last visited Dec. 21, 2021); *see also* Fla. Admin. Code Rules 5M-16 (citrus), 5M-11 (cow/calf), 5M-17 (dairy), 5M-14 (equine), 5M-6 (nurseries), 5M-19 (poultry), 5M-9 (sod), 5M-13 (specialty fruit and nut crops), 5M-8 (vegetable and agronomic crops), and 5M-18 (wildlife/state imperiled species).

<sup>6</sup> *Id.*; *see also* s. 576.045, F.S.

<sup>7</sup> DACCS, *Agricultural Best Management Practices*, <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices> (last visited Dec. 21, 2021).

<sup>8</sup> *Id.*

To implement a TMDL, DEP establishes basin management action plans (BMAPs), which identify all known contributors of the pollutant within a BMAP and assign load reductions for the pollutant.<sup>9</sup> A BMAP also identifies strategies to address the pollutant reductions required to achieve the TMDL.<sup>10</sup>

“Nonpoint source” contributors (sources where one cannot point at an actual discharge point), like agriculture, are responsible for implementing rule-adopted BMPs to help achieve water quality standards within BMAPs.<sup>11</sup> Therefore, any agricultural producers within a BMAP area must either enroll in DACS’ BMP program and properly implement applicable BMPs, or conduct water quality monitoring prescribed by DEP or the water management district to show that they are meeting state water quality standards; however, this type of water quality monitoring can be very expensive.<sup>12</sup>

According to the annual report on BMPs prepared by DACS, approximately 62 percent of agricultural acreage is enrolled in DACS’ BMP program statewide.<sup>13</sup> To enroll in the BMP program, agriculture producers must meet with the Office of Agricultural Water Policy (OAWP) and submit a notice of intent to implement the BMPs.<sup>14</sup> These producers are subject to inspection and recordkeeping requirements.<sup>15</sup> After verification by DEP, producers implementing BMPs receive a presumption of compliance with state water quality standards for the pollutants addressed by the BMPs<sup>16</sup> and those who enroll in the BMP program become eligible for technical assistance and cost-share funding for BMP implementation. Within a BMAP, management strategies, including BMPs and water quality monitoring, are enforceable.<sup>17</sup>

The University of Florida’s Institute of Food and Agricultural Sciences (UF/IFAS) is heavily involved in the adoption and implementation of BMPs. UF/IFAS provides expertise to both DACS and agriculture producers, and has extension offices throughout Florida. UF/IFAS holds summits and workshops on BMPs,<sup>18</sup> conducts research to issue recommendations for improving BMPs,<sup>19</sup> and issues training certificates for BMPs that require licenses such as Green Industry BMPs.<sup>20</sup>

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<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> UF/IFAS, *Agricultural Best Management Practices – About BMPs*, <https://bmp.ifas.ufl.edu/about-bmps/> (last visited Dec. 21, 2021).

<sup>13</sup> DACS Office of Agricultural Water Policy (OAWP), *Status of Implementation of Agricultural Nonpoint Source Best Management Practices*, 2 (July 1, 2021), available at <https://www.fdacs.gov/ezs3download/download/98382/2665697/Media/Files/Agricultural-Water-Policy-Files/BMP-Implementation/2021-status-of-bmp-implementation-report.pdf> (last visited Jan. 4, 2022).

<sup>14</sup> Section 403.067(7)(c)2., F.S.; see Fla. Admin. Code R. 5M-8.002, 5M-8.004, 5M-8.006.

<sup>15</sup> Section 403.067(7)(c)2., F.S.; see Fla. Admin. Code R. 5M-8.006.

<sup>16</sup> Section 403.067(7)(c)3., F.S.

<sup>17</sup> Section 403.067(7)(d), F.S.

<sup>18</sup> UF/IFAS, *Agricultural Best Management Practices – Home*, <https://bmp.ifas.ufl.edu/> (last visited Jan. 5, 2022).

<sup>19</sup> UF/IFAS Everglades Research & Education Center, *Best Management Practices & Water Resources*, <https://erec.ifas.ufl.edu/research-programs/best-management-practices-and-water-management/> (last visited Jan. 5, 2022).

<sup>20</sup> UF/IFAS Florida-Friendly Landscaping Program, *Green Industries Best Management Practices*, <https://ffl.ifas.ufl.edu/ffl-and-you/gi-bmp-program/> (last visited Jan. 5, 2022).

DACS is required to perform onsite inspection of agricultural producers enrolled in BMPs, at least every 2 years, to ensure that the BMPs are being properly implemented.<sup>21</sup> DACS is also required to collect and retain nutrient application records<sup>22</sup> and to provide these records to DEP.<sup>23</sup> DACS recently began updating its BMP rules; in 2021, it completed rulemaking to standardize record retention and recordkeeping processes across the various BMP manuals.<sup>24</sup>

## Nutrient Management

Since the BMP program was implemented in 1999,<sup>25</sup> DACS has adopted and incorporated by reference ten BMP manuals that cover nearly all major agricultural commodities in Florida:

- Citrus<sup>26</sup>
- Cow/Calf<sup>27</sup>
- Dairy<sup>28</sup>
- Equine<sup>29</sup>
- Nurseries<sup>30</sup>
- Poultry<sup>31</sup>
- Sod<sup>32</sup>
- Specialty Fruit and Nut Crops<sup>33</sup>

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<sup>21</sup> Section 403.067(7)(d)3., F.S.

<sup>22</sup> *Id.*

<sup>23</sup> Section 403.067(7)(c)5., F.S.

<sup>24</sup> See Fla. Admin. Code R. 5M-1.001, 5M-1.008, and 5M-1.009 (amended September 12, 2021).

<sup>25</sup> The program was voluntary from 1999-2005. In 2005 the Florida Legislature modified the law requiring agricultural producers to adopt BMPs or conduct water quality monitoring.

<sup>26</sup> Fla. Admin. Code R. 5M-16.001; DACS, *Water Quality/Quantity Best Management Practices for Citrus (2012 Edition)*, DACS-P-01756, available at [https://www.fdacs.gov/ezs3download/download/25410/516289/Bmp\\_FloridaCitrus2012.pdf](https://www.fdacs.gov/ezs3download/download/25410/516289/Bmp_FloridaCitrus2012.pdf) (last visited Jan. 4, 2022).

<sup>27</sup> Fla. Admin. Code R. 5M-11.002; DACS, *Water Quality Best Management Practices for Florida Cow/Calf Operations (2008 Edition)*, DACS P-01280, available at [https://www.fdacs.gov/ezs3download/download/25408/516287/Bmp\\_FloridaCowCalf2008.pdf](https://www.fdacs.gov/ezs3download/download/25408/516287/Bmp_FloridaCowCalf2008.pdf) (last visited Jan. 4, 2022).

<sup>28</sup> Fla. Admin. Code R. 5M-17.001; DACS, *Water Quality/Quantity Best Management Practices for Florida Dairy Operations (2015 Edition)*, FDACS-P-02008, available at <https://www.fdacs.gov/ezs3download/download/64582/1525731/Media/Files/Agricultural-Water-Policy-Files/Best-Management-Practices/dairyBMPFinal.pdf> (last visited Jan. 4, 2022).

<sup>29</sup> Fla. Admin. Code R. 5M-14.002; DACS, *Water Quality/Quantity Best Management Practices for Florida Equine Operations (2011 Edition)*, DACS P-01531, available at <https://www.fdacs.gov/content/download/30687/file/equineBMP-lores.pdf> (last visited Jan. 4, 2022).

<sup>30</sup> Fla. Admin. Code R. 5M-6.002; DACS, *Water Quality/Quantity Best Management Practices for Florida Nurseries (2014 Edition)*, DACS-P-01267, available at <https://www.fdacs.gov/content/download/37570/file/nurseryBMP-lores.pdf> (last visited Jan. 4, 2022).

<sup>31</sup> Fla. Admin. Code R. 5M-19.001; DACS, *Water Quality/Quantity Best Management Practices for Florida Poultry Operations (2016 Edition)*, FDACS-P-02052, available at <https://www.fdacs.gov/content/download/71304/file/Poultry%20BMP%20Manual.pdf> (last visited Jan. 4, 2022).

<sup>32</sup> Fla. Admin. Code R. 5M-9.002; DACS, *Water Quality/Quantity Best Management Practices for Florida Sod (2008 Edition)*, DACS-P 01330, available at [https://www.fdacs.gov/ezs3download/download/25407/516286/Bmp\\_FloridaSod2008.pdf](https://www.fdacs.gov/ezs3download/download/25407/516286/Bmp_FloridaSod2008.pdf) (last visited Jan. 4, 2022).

<sup>33</sup> Fla. Admin. Code R. 5M-13.002; DACS, *Water Quality/Quantity Best Management Practices for Florida Specialty Fruit and Nut Crops (2011 Edition)*, DACS P-01589, available at [https://www.fdacs.gov/ezs3download/download/25409/516288/Bmp\\_FloridaSpecialtyFruitNut2011.pdf](https://www.fdacs.gov/ezs3download/download/25409/516288/Bmp_FloridaSpecialtyFruitNut2011.pdf) (last visited Jan. 4, 2022).

- Vegetable and Agronomic Crops<sup>34</sup>
- Wildlife (State Imperiled Species)<sup>35</sup>

With only one exception (Wildlife/State Imperiled Species), all of these BMP manuals address nutrient management in ways specific to each commodity. For example, the BMP manual for citrus entitled *Water Quality/Quantity Best Management Practices for Citrus* (Citrus BMPs Manual) contains BMPs on nutrient management, which it defines as the control of the source, rate, placement, and timing of nutrient applications and soil amendments to ensure sufficient soil fertility for citrus tree production and to minimize impacts to water quality.<sup>36</sup>

Excess nitrogen and phosphorus are the most common causes of water quality impairments in the state because they enter surface waters through stormwater or irrigation runoff or leach through soils into groundwater.<sup>37</sup> Accordingly, the Citrus BMPs Manual includes recommended nutrient application rates for nitrogen and phosphorus.<sup>38</sup> The recommended rates are based on normal, healthy tree development for their age; however, where disease, salinity, or other factors inhibit normal tree development, fertilizer application(s) should be adjusted accordingly.<sup>39</sup>

### Statutory Incentives for BMP Implementation

Section 576.045, F.S., is focused on improving fertilization-management practices as soon as practicable in a way that protects the state's water resources and preserves a viable agricultural industry.<sup>40</sup> Goals include supporting BMP-related research<sup>41</sup> and incentivizing BMP implementation by the agricultural industry and other major users of fertilizer.<sup>42</sup> In addition to authorizing the imposition and collection of fees in support of various activities connected to achieving state water quality standards for nitrogen and phosphorus criteria,<sup>43</sup> the statute

<sup>34</sup> Fla. Admin. Code R. 5M-8.002(1); DACS, *Water Quality/Quantity Best Management Practices for Florida Vegetable and Agronomic Crops (2015 Edition)*, FDACS-P-01268, available at <https://www.fdacs.gov/content/download/77230/file/vegAgCropBMP-loRes.pdf> (last visited Jan. 4, 2022).

<sup>35</sup> Fla. Admin. Code R. 5M-18.001; DACS, *Florida Agriculture Wildlife Best Management Practices for State Imperiled Species (2015 Edition)*, DACS-P-02031, available at [https://www.fdacs.gov/content/download/61100/file/WildlifeBMP\\_final.pdf](https://www.fdacs.gov/content/download/61100/file/WildlifeBMP_final.pdf) (last visited Jan. 4, 2022).

<sup>36</sup> DACS, *Water Quality/Quantity Best Management Practices for Citrus (2012)*, DACS-P-01756, at 13-17, available at [https://www.fdacs.gov/ezs3download/download/25410/516289/Bmp\\_FloridaCitrus2012.pdf](https://www.fdacs.gov/ezs3download/download/25410/516289/Bmp_FloridaCitrus2012.pdf) (last visited Dec. 21, 2021).

<sup>37</sup> *Id.* at 4.

<sup>38</sup> *Id.* at 16-17 (providing that the phosphorus fertilization rate should be based upon soil and/or leaf tissue tests, and the nitrogen fertilization rate should be based upon recommended rates published by the Institute of Food and Agricultural Sciences at the University of Florida (UF/IFAS)).

<sup>39</sup> *Id.* at 16.

<sup>40</sup> Section 576.045(1)(b), F.S.

<sup>41</sup> A list of BMP research funding priorities and research projects by topic is available online. See DACS, BMP Research, <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices/BMP-Research> (last visited Dec. 12, 2021).

<sup>42</sup> See s. 576.045(1)(b), F.S.; see also ss. 576.045(4)-(5) and 403.076(7)(c)3., F.S. (incentivizing BMP implementation via waiver of liability and presumption of compliance provisions).

<sup>43</sup> Section 576.045(2)-(3), F.S. DACS collects \$100 from each licensee to distribute fertilizer; \$100 for each specialty fertilizer registration; and fifty cents per ton for all fertilizer that contains nitrogen or phosphorus and that is sold in the state. *Id.*

incentivizes BMP implementation in two ways: a waiver of liability provision<sup>44</sup> and a presumption of compliance provision.<sup>45</sup>

The waiver of liability provision prohibits DEP from instituting proceedings against any person or the Federal Government under existing law<sup>46</sup> to recover any costs or damages associated with nitrogen or phosphorus contamination of groundwater or surface water (or the evaluation, assessment, or remediation of contamination), due to the application of fertilizers or other soil-applied nutritional materials containing nitrogen or phosphorus.<sup>47</sup> To qualify for the waiver of liability, a property owner or leaseholder must:

- Provide DACS with a notice of intent to implement applicable interim measures, BMPs, or other measures adopted by DACS, which practices or measures have been verified by DEP to be effective, and implement them as soon as practicable according to rules adopted by DACS, or no longer apply fertilizers or other soil-applied nutritional materials containing nitrogen or phosphorus;<sup>48</sup> or
- No longer apply fertilizers or other soil-applied nutritional materials containing nitrogen or phosphorus.<sup>49</sup>

The presumption of compliance provision states that if a property owner or leaseholder implements interim measures, BMPs, or other measures adopted by DACS, which practices or measures have been verified by DEP to be effective, and complies with the following requirements, there is a presumption of compliance with state water quality standards. The presumption applies for the application of fertilizers or other soil-applied nutritional materials containing nitrogen or phosphorus. To achieve the presumption, the property owner or leaseholder must:<sup>50</sup>

- Provide DACS with a notice of intent to implement applicable interim measures, BMPs, or other measures adopted by DACS, and implements them as soon as practicable according to rules adopted by DACS, or no longer applies fertilizers or other soil-applied nutritional materials containing nitrogen or phosphorus;<sup>51</sup> or
- No longer apply fertilizers or other soil-applied nutritional materials containing nitrogen or phosphorus.<sup>52</sup>

The “findings and intent,” “fees,” “purpose,” “waiver of liability,” and “rulemaking” provisions of s. 576.045, F.S., are scheduled to expire on December 31, 2022, whereas the “compliance” and “other provisions” subsections of s. 576.045, F.S., are scheduled to expire on December 31,

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<sup>44</sup> Section 576.045(4), F.S.; *see also* s. 403.076(7)(c)3., F.S. (also incentivizing BMP implementation via a waiver of liability provision).

<sup>45</sup> Section 576.045(5), F.S.; *see also* s. 403.076(7)(c)3., F.S. (also incentivizing BMP implementation via a presumption of compliance provision).

<sup>46</sup> *See* s. 376.307(5), F.S.

<sup>47</sup> Section 576.045(4), F.S.

<sup>48</sup> Section 576.045(4)(a)1.-2., F.S.

<sup>49</sup> Section 576.045(4)(b), F.S.

<sup>50</sup> Section 576.045(5), F.S.

<sup>51</sup> Section 576.045(5)(a)1.-2., F.S.

<sup>52</sup> Section 576.045(5)(b), F.S.

2027.<sup>53</sup> These expiration dates have been included in the statute since it was first enacted and have been periodically extended, most recently in 2012.<sup>54</sup>

### **American Society of Agronomy**

The American Society of Agronomy (ASA) is the professional home for scientists dedicated to advancing the discipline of the agronomic sciences.<sup>55</sup> Agronomy employs the disciplines of soil and plant sciences to crop production, with the wise use of natural resources and conservation practices to produce food, feed, fuel, fiber, and pharmaceutical crops for the world's growing population.<sup>56</sup> A common thread across the programs and services of the ASA is the dissemination and transfer of scientific knowledge to advance the profession.<sup>57</sup>

The ASA offers certification programs to become a Certified Crop Adviser (CCA) or a Certified Professional Soil Scientist (CPSS).<sup>58</sup> Certification as a CCA is appropriate for any adviser/consultant that spends the majority of his or her time advising growers or farm managers/operators on agronomic practices and can meet the standards of the program.<sup>59</sup> Certification as a CPSS is appropriate for any individual whose education, experience, and career path is in some aspect of the soil science profession and can meet the standards of the program.<sup>60</sup>

The ASA also offers a specialty certification in 4R Nutrient Management Planning.<sup>61</sup> The four "Rs" refer to building a nutrient management plan that puts the (1) right nutrient resources, at the (2) right rate, in the (3) right place, and at the (4) right time. The specialty is focused on addressing environmental and resource management concerns in order to improve water quality and environmental stewardship. It also considers the integration of agronomic practices with economic analysis and environmental interaction. Proficiency areas tested include nutrient management planning; nitrogen, phosphorus, and potassium; secondary macronutrients and micronutrients; and manure management.<sup>62</sup>

### **Citrus Diseases**

The Department of Citrus has reported that citrus production in Florida could drop by as much as 82 percent by 2026, due in large part to citrus diseases.<sup>63</sup> These diseases pose significant threats to the Florida citrus industry. They include all of the following:<sup>64</sup>

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<sup>53</sup> Section 576.045(8), F.S.

<sup>54</sup> Ch. 94-311, s. 8, Laws of Fla. (creating s. 576.045, F.S.); *see also* ch. 2003-147, s. 1, Laws of Fla. (extending the expiration dates); *see also* ch. 2012-190, s. 26, Laws of Fla. (further extending the expiration dates).

<sup>55</sup> American Society of Agronomy (ASA), *Membership*, <https://www.agronomy.org/membership> (last visited Jan. 5, 2022).

<sup>56</sup> *Id.*

<sup>57</sup> *Id.*

<sup>58</sup> ASA, *Certifications*, <https://www.agronomy.org/certifications> (last visited Jan. 5, 2022).

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> ASA, *New Nutrient Management Certification Offered*, <https://www.agronomy.org/news/media-releases/releases/2015/0518/671> (last visited Jan. 11, 2022).

<sup>62</sup> *Id.*

<sup>63</sup> Florida Farm Bureau, *Hope for Florida's Declining Citrus Industry*, <https://www.floridafarmbureau.org/hope-for-floridas-declining-citrus-industry/> (last visited Jan. 6, 2022).

<sup>64</sup> UF/IFAS Citrus Research and Education Center, *Disease Identification*, <https://crec.ifas.ufl.edu/citrus-production/disease-identification/> (last visited Jan. 5, 2022).

- Alternaria brown spot
- Black spot
- Blight
- Canker
- Exotic citrus diseases
- Greasy spot
- Citrus greening (HLB)
- Melanose
- Phytophthora
- Postbloom fruit drop
- Postharvest diseases
- Scab
- Tristeza
- Virus-like diseases<sup>65</sup>

Citrus greening, also known as Huanglongbing (HLB), is among the most serious citrus diseases in the world.<sup>66</sup> It is widespread in Asia, Africa and the Saudi Arabian peninsula. In August 2005, it was found for the first time in the U.S. in south Miami-Dade County.<sup>67</sup> Every citrus grove in Florida is now being adversely impacted by HLB.<sup>68</sup>

HLB is a bacterial disease that attacks the vascular system of plants.<sup>69</sup> Once infected, there is no cure for the disease, and in areas where the disease is endemic, citrus trees decline and die within a few years. There are three known forms: Asian, African and Brazilian. The HLB bacteria is transmitted primarily by insect vectors (citrus psyllids), but can also be spread through plant grafting and movement of infected plant material.<sup>70</sup>

Another serious threat is citrus canker.<sup>71</sup> Citrus canker is a bacterial disease that causes lesions on leaves, stems and fruit. It is not harmful to humans, but it causes premature leaf and fruit drop and will eventually render trees unproductive. Fruit infected with canker is safe to eat, but it is too unsightly to be sold.<sup>72</sup>

### III. Effect of Proposed Changes:

**Section 1** amends s. 576.011, F.S., to include definitions for the terms “certified professional” and “rate tailoring”:

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<sup>65</sup> *Id.*

<sup>66</sup> DACS, *Huanglongbing (HLB)/Citrus Greening Disease Information*, <https://www.fdacs.gov/Agriculture-Industry/Pests-and-Diseases/Plant-Pests-and-Diseases/Citrus-Health-Response-Program/Citrus-Pests-and-Diseases/HLB-Citrus-Greening> (last visited Jan. 5, 2022).

<sup>67</sup> *Id.*

<sup>68</sup> Dep’t of Citrus (DOC), *Orange Production*, <https://www.floridacitrus.org/newsroom/citrus-411/orange-production/> (last visited Jan. 6, 2021).

<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

<sup>71</sup> DACS, *Citrus Canker FAQ*, <https://www.fdacs.gov/Agriculture-Industry/Pests-and-Diseases/Plant-Pests-and-Diseases/Citrus-Health-Response-Program/Citrus-Pests-and-Diseases/Citrus-Canker-FAQ> (last visited Jan. 5, 2022).

<sup>72</sup> *Id.*



- A “certified professional” is defined to mean an individual who holds a certified crop adviser designation issued by the American Society of Agronomy, who has passed the society’s Southeast Region Certified Crop Adviser Exam, who holds a 4R Nutrient Management Specialty certification, and whose credentials have been verified by the society’s Florida Certified Crop Adviser Board.
- “Rate tailoring” is defined to mean the application of nutrients in accordance with the rate tailoring provisions created in Section 2 of the bill.

The bill also renumbers various subsections in s. 576.011, F.S., to accommodate the new definitions.

**Section 2** amends s. 576.045, F.S., to include the following Legislative findings:

- Nutrient application rate recommendations are general guidelines, not site-specific absolute rates, and such rates may not take into account the latest methods of producing agricultural commodities or changes to nutrient application practices which are appropriate due to disease, new crop varieties, changes in U.S. Department of Agriculture Agricultural Marketing Service Standards, growing techniques, or market conditions.
- To gain efficiency and be able to compete successfully with foreign producers that benefit from lower costs of production and favorable trade conditions, many producers in this state grow more product per acre, resulting in higher production at lower overall costs. This high-efficiency crop production requires nutrient application to be based on the intensity of production on a per-acre basis, rather than the lower per-acre production on which past research based its recommended nutrient application rate.
- Florida citrus faces challenges that include citrus greening, citrus canker, freezes, windstorms, and other events that result in the fruit not being harvested. In order to continue production of the state’s iconic crop, nutrient application rates must reflect fruit grown on the tree after the bloom during the growing season and not fruit ultimately harvested for market delivery.

The bill provides that the Legislature intends to:

- Accommodate continued agricultural production without interruption as research to formally revise nutrient application rates is completed.
- Authorize the use of rate tailoring in recommended nutrient application rates, when rate tailoring is supported by written recommendations from a certified professional and documented using production and field data that is retained for review during the best management practices (BMPs) implementation verification process.

The bill authorizes the use of rate tailoring to recommended nutrient application rates, where rate tailoring is supported by a certified professional, and where the following conditions are met:

- When recommended nutrient application rates published by the Institute of Food and Agricultural Sciences at the University of Florida (UF/IFAS) or other state universities and Florida College System institutions that have agricultural research programs are not appropriate for a specific producer due to soil conditions, disease, crop varieties, subsequent crop rotations, planting density, market requirements, or site-specific conditions, written recommendations from a certified professional may be used to tailor the recommended nutrient application rates for that producer. The determination that the published nutrient

application rates are not appropriate and the recommendation for the tailoring of nutrient application rates must be documented with one or more of the following records:

- soil tests,
- plant tissue tests,
- pathology reports,
- yield response curves,
- growth records, or
- site-specific conditions.
- The producer must document records specifying the application rate, the types or forms of nutrients used, the nutrient sources used, and the placement and timing of the nutrient sources.
- The producer must retain the records for 5 years to support the use of rate tailoring.
- Producers using rate tailoring must be enrolled in and implementing all other BMPs adopted by the Department of Agriculture and Consumer Services (DACS) and identified in the enrolled notice of intent required under the waiver of liability and presumption of compliance provisions of the section or the best management practices paragraph in s. 403.067(7), F.S.
- As recommended nutrient application rates for crops are revised by UF/IFAS or other state universities and Florida College System institutions that have agricultural research programs, such recommendations must provide an application range or authorize rate tailoring to crop and field conditions.
- Notwithstanding any other law, producers implementing rate tailoring in compliance with the bill are provided a presumption of compliance with state water quality standards, may rely on the waiver of liability provision in the section, and are deemed to be in compliance with the BMPs for pollution reduction in existing law as well as the waiver of liability and presumption of compliance provisions of the section.

The bill clarifies that property owners and leaseholders who implement interim measures, BMPs, or other measures that have been adopted by DACS and verified by the Department of Environmental Protection (DEP) as effective, are presumed to have complied with s. 576.045, F.S., and the BMPs for pollution reduction in existing law.

The bill amends s. 576.045(9), F.S., to provide that the “findings and intent,” “fees,” “use of funds,” “waiver of liability,” and “rulemaking” provisions expire on December 31, 2032, and the “rate tailoring,” “compliance,” and “other provisions” subsections expire on December 31, 2037.

**Section 3** of the bill amends s. 403.067(7)(c)3., F.S., to provide that implementation of BMPs that have been authorized by s. 576.045, F.S., also qualify for the presumption of compliance and waiver of liability provisions in that subparagraph. It also amends the subparagraph to conform it to the bill.

**Section 4** of the bill 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:**

The bill extends the expiration date currently applicable to the existing “fees” provision in the statute from December 31, 2022 to December 31, 2032. Art. VII, s. 19 of the Florida Constitution requires supermajority votes on a separate bill by the Legislature to either impose new or raise existing state taxes or fees. This bill extends an existing fee at its current rates.

**E. Other Constitutional Issues:**

None.

**V. Fiscal Impact Statement:****A. Tax/Fee Issues:**

The bill extends the expiration date of the “fees” provision in the statute from December 31, 2022 to December 31, 2032.

**B. Private Sector Impact:**

Because the bill extends the expiration date currently applicable to the existing “fees” provision in the statute from December 31, 2022 to December 31, 2032, the private sector will continue to be subject to them.

**C. Government Sector Impact:**

Because the bill extends the expiration date currently applicable to the existing “fees” provision in the statute from December 31, 2022 to December 31, 2032, the government sector will continue to collect them. These fees are collected and paid by licensees to protect the state’s water resources, by funding research concerning best management practices, education, and incentives for the agricultural industry and other major users of fertilizers.<sup>73</sup>

**VI. Technical Deficiencies:**

None.

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<sup>73</sup> Section 576.045(1)(b), F.S.

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill substantially amends sections 576.011, 576.045, and 403.067 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.)

**CS by Environment and Natural Resources on January 10, 2022:**

- Revises the definition of “certified professional” to also require the individual to hold a 4R Nutrient Management Specialty certification.
- In the provision requiring producers using rate tailoring to be enrolled in and implementing all other best management practices adopted by the department and identified in the enrolled notice of intent, provides that in addition to the enrolled notice being required under subsections (5) and (6), it may also be required under s. 403.067(7)(c), F.S.

**B. Amendments:**

None.