FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

FLORIDA CONSUMER FERTILIZER TASK FORCE FINAL REPORT

TO THE 2008 FLORIDA LEGISLATURE



JANUARY 15, 2008 http://consensus.fsu.edu/Fertilizer-Task-Force/index.html

> QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

Report By Jeff A. Blair and Robert Jones Florida Conflict Resolution Consortium Florida State University



FINAL REPORT Table of Contents

Table of Contents	2
Executive Summary	3
FINAL REPORT	5
I. INTRODUCTION	5
II. TASK FORCE MISSION, GUIDING PRINCIPLES AND VISION OF SUCCESS	6
III. FINDINGS AND CONSIDERATIONS	7
A. Legislative Findings	7
B. TASK FORCE CONSIDERATIONS	7
IV. TASK FORCE RECOMMENDATIONS	8
A. STATEWIDE GUIDELINES AND STANDARDS FOR USE RECOMMENDATIONS	8
B. LOCAL GOVERNMENT REGULATIONS BASED ON SOUND SCIENCE—MODEL LOCAL	
ORDINANCE RECOMMENDATIONS	10
C. LOCAL GOVERNMENT MECHANISMS TO PROMOTE AND ENCOURAGE PROPER USE	
RECOMMENDATIONS	
D. TRAINING AND EDUCATION ON PROPER USE RECOMMENDATIONS	
E. Research and Studies Needs and Recommendations F. Funding Recommendations	
F. FUNDING RECOMMENDATIONS	13

APPENDICES

1. Task Force Membership	14
2. Legislative Charge—Section 576.092, Florida Statutes	
3. DACS Labeling Requirements for Urban Turf Fertilizers Rule, Rule 5E-1.003(2)	
4. Model Fertilizer Local Ordinance	20
5.UF-IFAS Consumer Potential Fertilizer Research Projects	
6.UF-IFAS Proposed Consumer Fertilizer Communications Campaign	29
7. Task Force Science Subcommittee on Future Research Charge and Membership	31
8. Task Force Process Overview and Meeting Schedule	

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

FLORIDA CONSUMER FERTILIZER TASK FORCE FINAL REPORT JANUARY 15, 2008

Executive Summary

The Florida Consumer Fertilizer Task Force was created by the Florida Legislature in 2007 to review and provide recommendations on the state's policies and programs addressing consumer fertilizers. It was comprised of 13 individuals representing a range of stakeholder interests who were technically qualified by training, education, or experience in water quality, horticultural, or agronomic science and who were appointed, respectively, by the President of the Senate, Speaker of the House, Commissioner of Agriculture, Florida League of Cities, and the Florida Association of Counties. The Florida Department of Agriculture and Consumer Services (DACS) provided the staffing and support for the Task Force.

Using the services of the professional facilitators of the Florida Conflict Resolution Consortium at Florida State University, the Task Force adopted a consensus process that required support of 75% of its members for any substantive decisions on findings and recommendations. During the course of six public meetings between September 6, 2007 and January 11, 2008, the Task Force developed a series of recommendations addressing statewide guidelines and standards for consumer fertilizer use, local government regulations based on sound science and a model local ordinance for consumer fertilizers, local government mechanisms to promote and encourage proper use, training and education on proper use, research studies, and funding. The Task Force took public comment at each meeting and provided a website for dissemination of meeting information, key documents, and public input.

During the course of the process the Task Force found that nutrient reduction in phosphorous & nitrogen requires a comprehensive, multi-faceted approach, and consumer fertilizer is an important component of this effort. The Task Force expects that through implementation of the DACS rule and registration process and the Task Force's recommendations, there will be a significant reduction in phosphorous and nitrogen applied in the urban environment that will contribute to decreasing environmental impacts and non-point pollution sources. In developing recommendations, the Task Force ensured that their recommendations were informed by the best available consensus-based data and science, assessed nutrient enrichment and surface waters due to fertilizer, focused on reducing water quality impacts associated with fertilizer as a component of non-point source pollution, assist local governments to comply with state and federal water quality standards, and provide uniformity while accounting for geographic diversity and variations within Florida.

Key recommendations adopted by the Task Force include:

- 1. Support for the current DACS labeling requirements for urban turf fertilizers, Rule 5E-1.003(2), and that the Rule serve as the statewide guideline for formulations, with the understanding that the rule will be reviewed and revised based on updated science by December 31, 2012.
- 2. Expansion of the Limited Commercial Landscape Maintenance (LCLM) certification established in Chapter 482, F.S. and additional authority to require all commercial applicators to have an appropriate certification based on modifying existing LCLM to include fertilizer best management practices (BMP's) and by adding BMP's and updates to continuing education requirements. In addition, the Task Force recommended that the Legislature modify Chapter 482 to authorize DACS to require limited certification for those who only apply fertilizer commercially (a new "Limited Commercial Fertilizer Applicator Certification" LCFAC). The Task Force recognized that the

existing Green Industry BMP training network, including DEP, IFAS, industry and private training providers could conduct the training necessary for obtaining this new certification.

- 3. A model ordinance concerning the use of nonagricultural fertilizer for use by local governments who choose to adopt an ordinance as directed by the Legislature. The Task Force recommended that Local Governments can adopt additional or more stringent provisions to the model ordinance provided the local government can demonstrate they meet at least one of the following criteria:
 - They have verified impaired waters and are facing existing or possible Total Maximum Daily Loads (TMDL) requirements (under state and federal laws); or
 - They have verified harm to human health or harm to the environment that warrants additional consumer fertilizer requirements; or
 - That they will improve water quality or prevent future impacts of consumer fertilizers on the environment.
- 4. Support of public education regarding fertilizer use based on six best practices for lawn care elements developed by the Institute of Food and Agricultural Sciences (IFAS), as well as a set of supplemental landscape management tips. The six best practices are:
 - Choose a fertilizer designed for lawns.
 - Apply fertilizer when grass is actively growing.
 - Apply fertilizer to the lawn and keep off other surfaces and away from water.
 - Mow lawn at highest lawnmower setting.
 - Use water wisely through proper irrigation.
 - Spot treatments for pests and weed problems.
- 5. Continued support of ongoing research projects on consumer fertilizer management, and support for future research on "real-world" assessment of fertilizer nutrient leaching and runoff from existing urban residential lawns, assessment of nutrient leaching and runoff from ground cover, native landscapes, and other alternative landscapes, and a mass balance or "box model" study to assess the ultimate sinks, fate and chemical transformations of N and P in turf, soil, and shallow groundwater systems. The Task Force recommended that the Legislature direct the DACS Best Management Practices Research Extension Coordinating Committee (BRECC) to address the research recommendations from the Task Force.
- 6. A dedicated source of funding be provided for education and training initiatives that address the appropriate application of consumer fertilizers, and that the Florida Legislature authorize DACS to increase the tonnage fee on the sale of nitrogen and phosphorus up to \$1.00 per ton, with the recommendation that DACS will determine the exact amount of the increase, not to exceed \$1.00/ton, by conducting a rule making initiative with affected interests. The Task Force recommends that an amount of money equal to or greater than the percent of sales of consumer fertilizers be used for funding consumer fertilizer training and education initiatives.

Following a unanimous adoption of the draft recommendations at the January 11, 2008 meeting, the Task Force authorized DACS to transmit this Final Report and adjourned. Information on the meetings, deliberations, public comments submitted, and support documents can be found at http://consensus.fsu.edu/Fertilizer-Task-Force/index.html.

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

FLORIDA CONSUMER FERTILIZER TASK FORCE FINAL REPORT

TO THE 2008 FLORIDA LEGISLATURE JANUARY 15, 2008



Introduction

Ι

The Task Force was created by the Florida Legislature in 2007 to review and provide recommendations on the state's policies and programs addressing consumer fertilizers. It was composed of 13 individuals representing a range of stakeholder interests and elected Andy Rackley to serve as its chair and Casey Fitzgerald to serve as its vice chair. The Florida Conflict Resolution Consortium served as the Task Force facilitators. The Task Force adopted a consensus process that required a super majority of 75% support of its members for any substantive decisions on findings and recommendations.

It met for six meetings between September, 2007 and January, 2008 and received briefings and public comments at each meeting. It also established an online website to provide information on the Task Force's work and an additional opportunity for online public comment.



Public Comment at the December 17, 2007 Task Force Meeting, Apopka

II Task Force Mission, Guiding Principles and Vision of Success

A. Task Force Mission and Guiding Principles

At its organizational meeting, the Task Force reviewed its legislative charge then discussed, drafted, refined and later adopted a mission statement and a set of guiding principles.

Mission Statement

The mission of the Florida Consumer Fertilizer Task Force is to develop and deliver a package of consensus recommendations to the Florida Legislature designed to ensure that the education and regulation for the proper use of consumer fertilizers is informed by best available science and is uniform subject to variations necessary to meet local state and federal water quality standards. The Task Force will recommend statewide guidelines for management strategies (nonagricultural fertilizer use rates, formulations, and application), based on the best available science as well as model ordinances for municipalities and counties.

Guiding Principles

- 1. The overall purpose of the Florida Consumer Fertilizer Task Force is to develop recommendations for submittal to the Florida Legislature regarding the education and use, and management strategies and regulation of consumer fertilizers.
- 2. The Florida Consumer Fertilizer Task Force shall operate under clear, concise, consistent, and fair procedural protocols.
- 3. The Florida Consumer Fertilizer Task Force shall strive to achieve consensus on substantive recommendations made to the Florida Legislature.
- 4. The Florida Consumer Fertilizer Task Force shall serve as an accessible liaison between the Task Force and their representative constituency groups to meet their mission.

B. Task Force Vision of Success

Members discussed what was at stake for Florida's communities in terms of potentially huge future commitments of funding to enhance water quality in our lakes, rivers and bays, growing conflicts between upstream and downstream communities because of the failure to establish consistent science based standards; and a growing enforcement/compliance problem and the continued degradation of Florida's water quality.

Members subsequently offered a shared vision of a new, more successful approach for the use and application of consumer fertilizers in Florida in the next decade. The members vision was of great improvements in the water quality of the state's rivers, lakes and bays as a result of solving the problem of runoff and leaching of nitrogen and phosphorus from consumer fertilizer using a system of regulation that: is simple and straightforward; relies on an ongoing commitment to the use of sound science to inform best management practices; uses fact-based consumer and professional education to dramatically improve compliance; and relies on a public-private partnership that is committed to implementing a solution that is practical and sustainable.

III FINDINGS AND CONSIDERATIONS

A. LEGISLATIVE FINDINGS

The following legislative findings were included in the charge to the Task Force:

- 1. There is a need for better training and education regarding the proper use of consumer fertilizers.
- 2. There should exist a mechanism to help local governments promote and encourage the proper use of fertilizers, thereby eliminating or minimizing the potential for environmental impacts.
- 3. Local government regulation of fertilizer uses for nonagricultural applications should be based on sound science, including water quality, agronomics, and horticulture.
- 4. There is a need for education regarding the use of consumer fertilizers.
- 5. There is a need for improved standards regarding nonagricultural fertilizer use and application.
- 6. While the constituents in fertilizer are naturally occurring in the environment, the improper use of fertilizer can be one of many contributors to non point source pollution.
- 7. The state's local governments are potentially subject to regulatory enforcement action by state or federal entities as a result of non point source pollution caused by storm water runoff.

B. TASK FORCE CONSIDERATIONS

In the course of evaluating options and developing recommendations, based on direction from the Florida Legislature, the following considerations were identified by the Task Force and informed their discussions and development of recommendations:

- Use the best available consensus-based data and science,
- Assess nutrient enrichment and surface waters due to fertilizer,
- Reduce water quality impacts associated with fertilizer-non-point source pollution,
- Comply with state and federal water quality standards, and
- Ensure uniformity while accounting for geographic diversity and variations.



IV TASK FORCE RECOMMENDATIONS

Nutrient reduction in Phosphorous & Nitrogen requires a comprehensive, multi-faceted approach, and consumer fertilizer is an important component of this effort. The Task Force expects that through implementation of the DACS rule and registration process and the Task Force's recommendations, there will be a significant reduction in phosphorous and nitrogen applied in the urban environment that will contribute to decreasing environmental impacts and non-point pollution sources.

In addressing its legislative charge, the Task Force was briefed on and developed recommendations regarding the following six topics:

- Statewide Guidelines for Use (use rates, formulations, and applications)—Developing Improved Standards
- Local Government Regulations Based on Sound Science—Model Ordinances
- Local Government Mechanisms to Promote and Encourage Proper Use
- Training and Education on Proper Use
- Research and Studies Needs and Recommendations
- Funding

A. RECOMMENDATIONS FOR STATEWIDE GUIDELINES AND IMPROVED STANDARDS FOR USE

- 1. The Task Force expressed support for the current DACS labeling requirements for urban turf fertilizers rule, Rule 5E-1.003(2), on the basis that the rule was based on the best available science at the time of promulgation, and recommends that the Rule serve as the statewide guideline for formulations, with the understanding that the rule will be reviewed and revised based on updated science by December 31, 2012. Research is currently being conducted by IFAS to quantify nutrient leaching in lawn grasses. This DEP funded turf nutrient leaching research will provide the best available science under which to review the DACS Rule's labeling requirements for urban turf fertilizers, including the prescribed application rates of nitrogen and phosphorus for sustaining turf grass and minimizing or preventing leaching.
- 2. The Task force addressed consumer fertilizer applications through expansion of the Limited Commercial Landscape Maintenance (LCLM) certification and additional authority to require all commercial applicators to have an appropriate certification. The Task Force supports and recommends that a combined training program be established, modifying the existing LCLM certification to include fertilizer BMP's and adding BMP's and updates to continuing education requirements. The Legislature should modify Chapter 482 to authorize DACS to require limited certification for those who only apply fertilizer commercially (a new "Limited Commercial Fertilizer Applicator Certification" LCFAC).

The Task Force recognizes that several thousand people already have attended and passed the Green Industry BMP Training Program developed by DEP and administered by UF IFAS. Therefore, we recommend that anyone who has been or will be certified through this program not be required to obtain additional LCFAC training. Such individuals can submit their certification to DACS to obtain the LCFAC certification.

The minimum training program for the application of fertilizers to turfgrasses or landscape plants for hire shall consist of training in the following subjects, except that applicants already holding any valid FDACS pesticide license may, but shall not be required to, attend the final pesticide law and licensing, IPM, and safety module. The course shall be designed, approved and made available by DEP and UF/IFAS and include:

- Overview of nonpoint source pollution, laws and effects on water quality; effects on business, economy, and quality of life; BMPs as both good business and environmental benefit.
- Florida turfgrass species and characteristics including fertilizer requirements and the effects of landscape design, mowing, irrigation, shade, wear, pest, disease, cold and heat stresses on fertilizer materials, amounts and timing, and conversely, the effects of fertilization on these cultural aspects in addition to direct effects on water quality, including nutrient pollution, erosion and sedimentation, and water usage rates.
- Irrigation systems and the effects of irrigation on volatilization, leaching, runoff, excessive withdrawal and water quality issues. Effects of over/under irrigation on plants and fertilizer needs. Diagnoses of irrigation vs. fertilizer problems. Importance of proper repair to maintain distribution uniformity to prevent spot leaching/runoff of fertilizers resulting in more fertilizer use and more pollution.
- Florida landscape plants and characteristics including fertilizer requirements and the effects of landscape design, pruning, irrigation, shade, pest, disease, cold and heat stresses on fertilizer materials, amounts and timing, and conversely, the effects of fertilization on these cultural aspects in addition to direct effects on water quality.
- Pesticide (including fertilizer pesticide mixtures) and licensing law, IPM, and safety.

An individual who is only applying fertilizer may apply for the new "LCFAC" specific to application of fertilizers.

The test material will be the same for the revised LCLM certifications and the new "LCFAC", and will include at a minimum ensuring knowledge of the DEP developed Green Industries BMP's training material. At a minimum the training would include the DEP material.

It is anticipated that the existing Green Industry BMP training network, including DEP, IFAS, industry and private training providers would conduct the training necessary for obtaining the Green Industry BMP certification. For those who only want to obtain the LCFAC, IFAS would coordinate the training opportunities and would administer the test. For those who pass the test, they would apply to DACS for their LCFAC, submit their fee, and DACS would issue the certification. DACS, DEP, and local governments would provide enforcement mechanisms within their existing structure and programs.

Businesses, whether composed of one employee or many, that only apply consumer fertilizer must have at least one individual who has the new "LCFAC", and this individual is responsible to ensure that each employee who applies fertilizer has received appropriate annual training according to the curriculum, training, and records keeping provisions as established by DACS.

- 3. Use rates are addressed through the DACS urban turf labeling Rule and BMP's, and the model ordinance approach as well as through the training and education, and funding recommendations.
- 4. The Task Force has developed a model ordinance for use by municipalities and counties concerning the use of nonagricultural fertilizer for use by local governments who choose to adopt an ordinance

DACS Consumer Fertilizer Task Force Final Report—January 15, 2008

as directed by the Legislature. The Task Force recommends that Local Government can adopt additional or more stringent provisions to the model ordinance provided the local government can demonstrate they meet at least one of the following criteria:

- They have verified impaired waters and are facing existing or possible TMDL requirements (under state and federal laws); or
- They have verified harm to human health or harm to the environment that warrants additional consumer fertilizer requirements; or
- That they will improve water quality or prevent future impacts of consumer fertilizers on the environment.

B. RECOMMENDATIONS FOR LOCAL GOVERNMENT REGULATIONS BASED ON SOUND SCIENCE—MODEL ORDINANCE

The Model Fertilizer Use ordinance drafted and agreed to by the Task Force is another tool to reduce sources of nutrients coming from urban landscapes and to reduce the impact of nutrients on Florida's surface and ground waters. (*See the Model Local Ordinance in Appendix #4*)

C. LOCAL GOVERNMENT MECHANISMS TO PROMOTE AND ENCOURAGE PROPER USE

The Task Force addressed this issue through the development of the model ordinance with the ordinance's provisions serving as BMP's for the proper use of consumer fertilizer. In addition proper use is addressed as a result of the training, education, and certification for fertilizer applicators through the expansion of the Limited Commercial Landscape Maintenance (LCLM) certification and proposed new "Commercial Fertilizer Applicator Certification" (LCFAC), and the seeking of additional legislative authority requiring all commercial applicators to either have or be under the direct supervision of an individual having the DACS administered certification. The Task Force recommendations regarding educational messages is another vehicle to assist local governments in promoting and encouraging proper use of consumer fertilizers.



A fertilizer spreader that features a deflector shield to deflect fertilizer granules away from all impervious surfaces, fertilizer-free zones and water bodies, including wetlands. is a provision of the model ordinance developed and recommended by the Task Force.

D. TRAINING AND EDUCATION ON PROPER USE

1. Best Practices for Lawn Care

The Task Force endorses the six (6) best practices for lawn care elements proposal as the starting point, that may be amended as well as revised for Florida specific conditions. They are as follows:

- Choose a fertilizer designed for lawns.
- Apply fertilizer when grass is actively growing.
- Apply fertilizer to the lawn and keep off other surfaces and away from water.
- Mow lawn at highest lawnmower setting.
- Use water wisely through proper irrigation.
- Spot treatments for pests and weed problems.

2. Additional Consumer Tips/Messages

In addition the Task Force supports the following additional consumer tips and messages to be used as part of any communications initiative:

- Provide the reasons why consumer should follow BMP's and labeling requirements.
- Deviating from label directions can contribute to pollution of area surface waters.
- If you choose to fertilize, fertilize properly. However, it is not necessary to fertilize in all cases.
- Avoid water bodies in applying fertilizer.
- Look for low to no phosphorous in consumer fertilizers.
- "Right plants in the right place".
- Use of native plants in the landscape may decrease the need for consumer fertilizer.

- "A properly maintained landscape provides a good environmental filter for urban runoff."
- Chose a fertilizer designed for lawns and landscape shrubs and follow the label application directions. Use an appropriate fertilizer this is one that will have some of the N in slow-release form*, no or very low P, K for stress tolerance, and other nutrients as needed
- Apply fertilizer when grass is actively growing. Apply fertilizer to the lawn and keep off other surfaces and away from water. Do not apply fertilizer to dormant turfgrass.
- Mow lawn at highest lawnmower setting. Be specific about mowing height based on the type of turfgrass. (e.g. St. Augustinegrass and bahiagrass -- 3.5 to 4 inches; Centipedegrass and zoysiagrass -- 1.5 to 2 inches; Dwarf St. Augustinegrass cultivars -- 2-2.5 inches).
- Use water wisely through proper irrigation. Be specific about the time to water.
- Be specific about fertilizer type and application time.
- Spot treatments for pests and weed problems. Non-chemical application practices can be encouraged also.
- Don't bag your clippings.
- Irrigate fertilizer in with ONLY about ¹/4" of water. More water may cause leaching or runoff while no water may cause volatilization or burn.
- Avoid fertilizing immediately prior to a significant rain since excessive water may cause fertilizer to run off the landscape.
- Do not leave fertilizer on walks, driveways, patios or other impervious surfaces. Sweep these granules onto the lawn.
- Keep a buffer zone around lakes, streams and rivers and be sure that fertilizer granules are not getting directly into water.

3. UF-IFAS Proposed Consumer Fertilizer Communications Campaign

The Task Force reviewed an IFAS proposal for a specific communications campaign with associated costs as a possible approach for providing consumers with information on best practices. (*See, Appendix 6 for the UF-IFAS proposed communication campaign.*)



E. RESEARCH AND STUDIES NEEDS AND RECOMMENDATIONS

The Task Force recognizes that there are ongoing research projects and recommends the continued support of these efforts. The Task Force identified information gaps and the Future Research Needs

(Science) Subcommittee recommended, and the Task Force supports the following research topics which should be factored into defining future research priorities:

1. In situ or "real-world" assessment of fertilizer nutrient leaching and runoff from existing urban residential lawns.

2. Experimental and *in situ* assessment of nutrient leaching and runoff from ground cover, native landscapes, and other alternative landscapes. These landscapes should be assessed for nutrient loss in conditions of fertilization augmentation and where no fertilization is necessary.

3. A detailed mass balance or "box model" study to assess the ultimate sinks, fate and chemical transformations of N and P in turf, soil, and shallow groundwater systems.

4. Consumer behavior studies to assess residential urban turf irrigation rates, actual fertilizer application rates, and other factors with respect to understanding urban turf management by consumers. Analyses may be nested in a residential subdivision approach to attain trends within communities in addition to statewide trends between communities across the state.

5. Assessment of the fate of urea-nitrogen in fertilizer leachate and runoff in urban turf landscapes. Although urea-N is widely known to rapidly transform into inorganic nitrogen in the soil environment, whereby it can be rapidly assimilated by turf, what proportion of the urea-N may actually be lost in leachate and runoff needs to be researched.

Possible examples of research projects that IFAS has identified and shared with the Task Force are found in Appendix #5.

The Task Force recommends that the Legislature direct the DACS Best Management Practices Research Extension Coordinating Committee (BRECC) to address the recommendations from the Task Force in Section E, Research and Studies Needs and Recommendations, including a review of the existing research.

F. FUNDING RECOMMENDATIONS

The Task Force recommends that a dedicated source of funding be provided for education and training initiatives regarding enhancing the appropriate application of consumer fertilizers in accordance with the DACS labeling requirements for urban turf fertilizers rule, Rule 5E-1.003(2), and all of the provisions in these recommendations. The Task Force recommends that all users of non-agricultural fertilizers comply with the provisions contained within the recommendations, including but not limited to: homeowners, golf courses, commercial properties, and multi-family and condominium properties.

The Task Force recommends that the Florida Legislature authorize DACS to increase the tonnage fee on the sale of nitrogen and phosphorus up to \$1.00 per ton. DACS will determine the exact amount of the increase, not to exceed \$1.00/ton, by conducting a rule making initiative with affected interests. The Task Force recommends that an amount of money equal to or greater than the percent of sales of consumer fertilizers be used for funding consumer fertilizer training and education initiatives. The Task Force recommends that the tonnage fee increase for the sale of Nitrogen and Phosphorus (N & P) apply to all fertilizer sales in recognition of the fact that, to date, little funding has been spent on consumer fertilizer education and training. DACS will work with partners such as IFAS, non-profits and industry associations in developing and conducting training and education initiatives.

APPENDIX #1

TASK FORCE MEMBERSHIP AND STAFF

Task Force Members	Representation
Scott Dudley	Florida League of Cities, Inc. ¹
Senator David Aronberg	Florida Senate
Peter John Barile	Environmental Community
Jerry Brooks	Department of Environmental Protection
Richard Budell	DACS Office of Agricultural Water Policy
Casey Fitzgerald (Vice-chair)	Water Management Districts
Richard Martinez	National Fertilizer Industry
Representative Bryan Nelson	Florida House of Representatives
Ron Olson	Florida-Based Fertilizer Industry
Andy Rackley (Chair)	Department of Agriculture and Consumer Services
Jerry Sartain	UF Institute for Food and Agricultural Sciences
Karen Taylor	Registered Landscape Architect
Commissioner Jon Thaxton	Florida Association of Counties

Jeff Blair and Robert Jones Task Force Facilitators FSU Florida Conflict Resolution Consortium



DACS Consumer Fertilizer Task Force Final Report-January 15, 2008

¹ Mayor Jay Arend served as the Florida League Cities Representative until January 8, 2008.

APPENDIX # 2

LEGISLATIVE CHARGE—SECTION 576.092, FLORIDA STATUTES

Section 10. Section 576.092, Florida Statutes, is created to read:

576.092 Consumer Fertilizer Task Force.--

- (1) The Legislature finds that:
 - (a) There is a need for better training and education regarding the proper use of consumer fertilizers.
 - (b) There should exist a mechanism to help local governments promote and encourage the proper use of fertilizers, thereby eliminating or minimizing the potential for environmental impacts.
 - (c) Local government regulation of fertilizer uses for nonagricultural applications should be based on sound science, including water quality, agronomics, and horticulture.
 - (d) There is a need for education regarding the use of consumer fertilizers.
 - (e) There is a need for improved standards regarding nonagricultural fertilizer use and application.
 - (f) While the constituents in fertilizer are naturally occurring in the environment, the improper use of fertilizer can be one of many contributors to nonpoint source pollution.
 - (g) The state's local governments are potentially subject to regulatory enforcement action by state or federal entities as a result of nonpoint source pollution caused by stormwater runoff.

(2)(a) There is hereby created the Consumer Fertilizer Task Force within the Department of

Agriculture and Consumer Services for the purposes of:

- 1 Assessing existing data and information regarding nutrient enrichment and surface waters due to fertilizer, assessing management strategies for reducing water quality impacts associated with fertilizer, and identifying additional research needs.
- 2 Developing statewide guidelines governing nonagricultural fertilizer use rates, formulations, and applications with attention to the geographic regions identified in Rule 5E-1.003, Florida Administrative Code.
- 3 Taking public input and testimony concerning the issues in this section.
- 4 Recommending methods to ensure local ordinances are based on best available data and science and to achieve uniformity among local government ordinances where possible, unless local ordinance variations are necessary to meet mandated state and federal water quality standards.
- 5 Developing model ordinances for municipalities and counties concerning the use of nonagricultural fertilizer.

(b)1. The task force shall consist of 13 members who are technically qualified by training, education,

or experience in water quality, horticultural, or agronomic science, and who shall be appointed as follows: three members appointed by the President of the Senate, one of whom shall be a representative from the Department of Environmental Protection, one of whom shall be a representative of the environmental community, and one of whom shall be a member of the Senate; three members appointed by the Speaker of the House of Representatives, one of whom shall be a representative from a water management district, one of whom shall be a representative of the University of Florida's Institute for Food and Agricultural Sciences, and one of whom shall be a member of Agriculture, one of whom shall be a representative from the Department of Agriculture and Consumer Services, one of whom shall be a representative from the national fertilizer industry, one of whom shall be a registered landscape architect; one member appointed by the Florida League of Cities, Inc.; and one member appointed by the Florida Association of Counties.

- 2. Members shall choose a chair and vice chair from the membership of the task force.
- (3) Staffing for the task force shall be provided by the Department of Agriculture and Consumer Services.
- (4) The task force shall review and evaluate the issues identified in paragraph (2)(a) and take public testimony. A report of the recommendations and findings of the task force, including recommendations for statutory changes, if any, shall be submitted to the President of the Senate and the Speaker of the House of Representatives by January 15, 2008, and the task force shall be abolished upon the transmittal of the report.

Section 12. This act shall take effect July 1, 2007.

APPENDIX # 3

RULE 5E-1.003(2) LABELING REQUIREMENTS FOR URBAN TURF FERTILIZERS

(2) FERTILIZER LABEL REQUIREMENTS FOR URBAN TURF, SPORTS TURF OR LAWNS.

(a) Definitions

1. "Urban Turf" or "Lawns" means non agricultural land planted in closely mowed, managed grasses except golf courses, parks and athletic fields.

2. "Sports TurP' means non agricultural land planted exclusively for golf courses, parks and athletic fields.

3. "No Phosphate Fertilizer" means fertilizer products with phosphate levels below 0.5% intended for established urban turf or lawns.

4. "Low Phosphate Fertilizer" means fertilizer products intended for new or established urban turf or lawns, with phosphate levels equal to or above 0.5% or as provided in paragraph (2)(b).

5. "Starter Fertilizer" means a fertilizer formulated for a one-time application at planting or near that time to encourage root growth and enhance the initial establishment.

6. "Established Urban Turf" means urban turf older than 12 months.

7. "New Urban Turf" means urban turf established less than 12 months.

(b) Fertilizer products labeled for use on sports turf, urban turf or lawns shall be no phosphate or low phosphate and have labeling that meets the restrictions set forth in this rule for the application of nitrogen.

1. No phosphate fertilizers shall not contain more than 0.5% of available phosphate expressed as P2O5. The "grade" shall indicate a zero guarantee.

2. Fertilizers labeled as Low phosphate shall have use directions that do not exceed an application rate of 0.25 lbs P2O5/1000ft2 per application and not to exceed 0.50 lbs P2O5/1000ft2 per year. Label use directions may be included that allow higher rates if an annual soil sample representative for the site shows the need for a higher application rate.

3. Fertilizers labeled as, or formulated for use as, starter fertilizer shall have use directions that do not exceed an application rate of 1.0 lb of P2O5/1,000 ft2 and that subsequent applications shall be made with products meeting the definition of Low or No Phosphate fertilizers. The term "Starter Fertilizer" shall be part of the brand name.

4. Fertilizers labeled as urban turf, sports turf, or lawn fertilizer shall have directions for use for nitrogen that:

a. Are consistent with the recommendations in the following table:

Nitrogen recommendations $(lbs N / 1000 ft^2 / year)^*$ Species North Central South Bahia grass 2-3 2-4 2-4 3-5 4-6 5-7 Bermuda grass 2-3 Centipede grass 1 - 22 - 3St. Augustine grass 2-4 2-5 4-6 3-5 3-6 4-6 Zoysiagrass

Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida

North Florida is north of Ocala. Central Florida is defined as south of Ocala to a line extending from Vero Beach to Tampa. South Florida includes the remaining southern portion of the state.

b. Nitrogen shall not be applied at an application rate greater than 0.7 lbs of readily available nitrogen per 1000 ft2 at any one time based on the soluble fraction of formulated fertilizer, with no more that 1 lb total N per 1000 ft2 to be applied at any one time and not to exceed the annual nitrogen recommendations in the Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida, set forth herein. Use directions for nitrogen may be included that allow higher rates if an annual tissue sample representative of the site shows the need for a higher application rate.

5. The following language shall appear conspicuously on bags of fertilizer sold at retail: "Do not apply near water, storm drains or drainage ditches. Do not apply if heavy rain is expected. Apply this product only to your lawn/garden, and sweep any product that lands on the driveway, sidewalk, or street, back onto your lawn/garden."

(c) Specialty fertilizers labeled for urban turf or lawns shall have directions for use that include:

1. Application rates for phosphorous shall not exceed 0.25 lbs. P2O5/1000 ft2 per application and not exceed 0.50 lbs. P2O5/1000 ft2 per year. Label use directions may be included that allow higher rates if an annual soil sample representative for the site shows the need for a higher application rate.

2. Application rates for nitrogen shall not exceed 0.7 lbs of readily available nitrogen per 1000 ft2 at any one time based on the soluble fraction of formulated fertilizer, with no more that 1 lb total N per 1000 ft2 to be applied at any one time and not to exceed the annual nitrogen recommendations in the Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida. Use directions for nitrogen may be included that allow higher rates if an annual tissue sample representative of the site shows the need for a higher application rate.

3. Rates shall be expressed in units of weight or volume per unit of area coverage (where application rates are given in volume, the label shall provide sufficient information to calculate the application rates by weight).

4. Rates shall be expressed per 1000 square feet.

5. Maximum coverage area per container or bag shall be displayed prominently on the front of the container or bag. (i.e. This product covers 5000 square feet; This bag feeds 4000 square feet).

(d) Fertilizers labeled for sports turf at golf courses, parks and athletic fields shall:

1. Have directions for use not to exceed rates recommended in the document titled SL191 "Recommendations for N, P, K and Mg for Golf Course and Athletic Field Fertilization Based on Mehlich I Extractant", dated March 2007, which is hereby adopted and incorporated by reference into this rule. Copies may be obtained from the Soil and Water Science Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611 or the following website: http://edis.ifas.ufl.edu/SS404.

2. Have directions for use in accordance with the recommendations in "BMP's for the Enhancement of Environmental Quality on Florida Golf Courses", published by the Florida Department of Environmental Protection, dated January 2007. Copies may be downloaded from http://www.dep.state.fl.us/water/nonpoint/pubs.htm.

(e) Fertilizers other than specialty fertilizers labeled for urban turf shall:

 Have directions for use not to exceed rates recommended in the document titled Best Management Practices for Protection of Water Resources in Florida, June 2002, Florida Green Industries., which is hereby adopted and incorporated by reference into this rule. Copies may be obtained from http://www.dep.state.fl.us/water/nonpoint/docs/nonpoint/BMP_Book.
 (f) Existing Stock – Licensees are permitted to sell or distribute products that do not meet the label requirements of the rule for one and one-half years after the effective date of the rule. Products at the retail level on or after the effective date of the rule are permitted to be offered for sale.

APPENDIX # 4

"MODEL ORDINANCE" RECOMMENDATION

FLORIDA FRIENDLY FERTILIZER USE ON URBAN LANDSCAPES MODEL ORDINANCE

INTRODUCTION

The attached model Fertilizer Use ordinance is another tool to reduce sources of nutrients coming from urban landscapes to reduce the impact of nutrients on Florida's surface and ground waters. However, restricting fertilizer use by itself will not eliminate the impacts of nutrients from urban landscapes. Local governments are advised they should also review their existing Land Development Regulations to assure they promote "Low Impact Design", which minimizes clearing of natural vegetation and the compaction of urban soils. A Model Springs Protection Code is being developed by DCA, DEP, and other stakeholders that will include specific Land Development Regulations that promote Low Impact Design. This Model Code will be available in 2008.

Additionally, landscape design is a major determinant in the amount of fertilizer and irrigation that is needed to maintain healthy urban landscapes and minimize adverse impacts on water resources. A model Landscape Ordinance entitled "Guidelines for Model Ordinance Language for Protection of Water Quality and Quantity Using Florida Friendly Lawns and Landscapes" was developed by a group of agencies, industries, and interest groups over a two year period. It is fundamentally an adaptation of earlier water conservation ordinances revised to include water quality protections for compliance with TMDL and NPDES requirements. The language focuses on continuing education of lawn care and landscape professionals, proper planning and supervision_during development and construction, and the use of best management practices, including the Florida Yards and Neighborhoods Program. This model ordinance may be downloaded from: HTTP://WWW.DEP.STATE.FL.US/WATER/NONPOINT/PUBS.HTM#MODEL%200RDI NANCES.

Finally, the 2004 Florida Legislature directed Florida's water management districts to work with interested parties to develop landscape irrigation and Florida-Friendly design standards for new construction (section 373.228, F.S.). Local governments are to use the standards and guidelines when developing landscape irrigation and Florida-Friendly ordinances. The Committee on Landscape Irrigation and Florida-Friendly Design Standards convened and developed the standards. They are published in a booklet called Landscape Irrigation and Florida Friendly Design Standards (December 2006). This document can be downloaded from: HTTP://WWW.DEP.STATE.FL.US/WATER/WATERPOLICY/LAND_IRR.HTM

1. FINDINGS

As a result of impairment to (MUNICIPALITY / COUNTY)'S surface waters caused by excessive nutrients under the Florida Impaired Waters Rule, or, as a result of increasing levels of nitrogen in the surface and/or ground water within the aquifers or springs within the boundaries of (municipality/county) the governing body of (municipality / county) has determined that the use of fertilizers on lands within (municipality / county) creates a risk to contributing to adverse effects on surface and/or ground water. Accordingly, the governing board of (municipality/county) finds that additional measures than are otherwise required by the most recent edition of the "*Florida Green Industries Best Management Practices for Protection of Water Resources in Florida, June 2002,"*, may be required by this ordinance.

2. PURPOSE AND INTENT

This Ordinance regulates the proper use of Fertilizers by any Applicator; requires proper training of Commercial and Institutional Fertilizer Applicators; establishes training and licensing requirements; establishes a Prohibited and Restricted Application Period; specifies allowable fertilizer application rates and methods, fertilizer-free zones, low maintenance zones, and exemptions. The Ordinance requires the use of Best Management Practices which provide specific management guidelines to minimize negative secondary and cumulative environmental effects associated with the misuse of These secondary and cumulative effects have been observed in and on Fertilizers. (MUNICIPALITY / COUNTY)'s natural and constructed stormwater and drainage conveyances, rivers, creeks, canals, springs, lakes, estuaries and other water bodies. [Guidance: as appropriate] Collectively, these water bodies are an asset critical to the environmental, recreational, cultural and economic well-being of (MUNICIPALITY / COUNTY) residents and the health of the public. Overgrowth of algae and vegetation hinder the effectiveness of flood attenuation provided by natural and constructed stormwater and drainage conveyances. Regulation of nutrients, including both phosphorus and nitrogen contained in Fertilizer, will help improve and maintain water and habitat quality.

3. DEFINITIONS

For this Article, the following terms shall have the meanings set forth in this section unless the context clearly indicates otherwise.

"Administrator" means the (MUNICIPALITY / COUNTY) Administrator, or an administrative official of (MUNICIPALITY / COUNTY) government designated by the City/County Administrator to administer and enforce the provisions of this Article.

"Application" or "Apply" means the actual physical deposit of Fertilizer to Turf or Landscape Plants.

"Applicator" means any Person who applies Fertilizer on Turf and/or Landscape Plants in (MUNICIPALITY / COUNTY).

"Board or Governing Board" means the Board of City/County Commissioners of (MUNICIPALITY / COUNTY), Florida.

"Best Management Practices" means turf and landscape practices or combination of practices based on research, field-testing, and expert review, determined to be the most effective and practicable onlocation means, including economic and technological considerations, for improving water quality, conserving water supplies and protecting natural resources.

"Code Enforcement Officer, Official, or Inspector" means any designated employee or agent of (MUNICIPALITY / COUNTY) whose duty it is to enforce codes and ordinances enacted by (MUNICIPALITY / COUNTY).

"Commercial Fertilizer Applicator" means any Person who applies Fertilizer on Turf and/or Landscape Plants in (MUNICIPALITY / COUNTY) in exchange for money, goods, services or other valuable consideration.

"Fertilize," "Fertilizing," or "Fertilization" means the act of applying Fertilizer to Turf, specialized Turf, or Landscape Plant.

"Fertilizer" means any substance or mixture of substances, except pesticide/fertilizer mixtures such as "weed and feed" products, that contains one or more recognized plant nutrients and promotes plant growth, or controls soil acidity or alkalinity, or provides other soil enrichment, or provides other corrective measures to the soil. [Guidance: Regulation of pest control businesses and applicators, and of pesticide use, is preempted to the Florida Department of Agriculture and Consumer Services (FDACS) by Chapters 482.242, and 487.051 (2), F.S. and suspected pesticide misuse should be reported to FDACS. Weed and feed products are registered pesticides. The Limited Commercial Landscape Maintenance Certification Program does not allow landscape maintenance workers to make any kind of pesticide applications (including weed control and/or weed and feed products) to any turf areas. Per 482.165(3) F.S., a civil penalty for unlicensed application of pesticides, including weed and feed products, may not be less than \$500 or more than \$5,000 for each offense.]

"Guaranteed Analysis" means the percentage of plant nutrients or measures of neutralizing capability claimed to be present in a Fertilizer.

"Institutional Applicator" means any Person, other than a non-commercial or commercial Applicator (unless such definitions also apply under the circumstances), that applies Fertilizer for the purpose of maintaining Turf and/or Landscape Plants. Institutional Applicators shall include, but shall not be limited to, owners and managers of public lands, schools, parks, religious institutions, utilities, industrial or business sites and any residential properties maintained in condominium and/or common ownership.

"Landscape Plant" means any native or exotic tree, shrub, or groundcover (excluding Turf).

"Low Maintenance Zone" means an area a minimum of six (6) feet wide adjacent to water courses which is planted and managed in order to minimize the need for fertilization, watering, mowing, etc.

"Pasture" means land used for livestock grazing that is managed to provide feed value.

"Person" means any natural Person, business, corporation, limited liability company, partnership, limited partnership, association, club, organization, and/or any group of people acting as an organized entity.

"Prohibited Application Period" means the time period during which a Flood Watch or Warning, or a Tropical Storm Watch or Warning, or a Hurricane Watch or Warning, or a 3-day Cone of Uncertainty is in effect for any portion of (CITY/COUNTY), issued by the National Weather Service, or if heavy rain is expected.

"(MUNICIPALITY / COUNTY) Approved Best Management Practices Training Program" means a training program approved by the (MUNICIPALITY / COUNTY) Administrator that includes at a minimum, the most current version of the Florida Department of Environmental Protection's *"Florida Green Industries Best Management Practices for Protection of Water Resources in Florida, June 2002,"* as revised and any more stringent requirements set forth in this Article.

"Slow Release," "Controlled Release," "Timed Release," "Slowly Available," or "Water Insoluble Nitrogen" means nitrogen in a form which delays its availability for plant uptake and use after application, or which extends its availability to the plant longer than a reference rapid or quick release product.

"Turf," "Sod," or "Lawn" means a piece of grass-covered soil held together by the roots of the grass.

4. APPLICABILITY

This Ordinance shall be applicable to and shall regulate any and all Applicators of Fertilizer and areas of application of Fertilizer within the area of (MUNICIPALITY / COUNTY), unless such Applicator is specifically exempted by the terms of this Ordinance from the regulatory provisions of this Ordinance. This Ordinance shall be prospective only, and shall not impair any existing contracts. If addressed by the legislature, local government can adopt additional or more stringent provisions to the model ordinance provided the local government can demonstrate they meet at least one of the following criteria:

- They have verified impaired waters and are facing existing or possible TMDL requirements (under state and federal laws); or
- They have verified harm to human health or harm to the environment that warrants additional consumer fertilizer requirements; or
- That they will improve water quality or prevent future impacts of consumer fertilizers on the environment.

[Guidance: Florida Statues 125.568(3), 166.048(3), and 373.185(3) provided that a deed restriction or covenant entered after October 1, 2001, or local government ordinance, may not prohibit any property owner from implementing Xeriscape or Florida-friendly landscape practices on his or her land. Any restrictions created after this date are void.]

5. TIMING OF FERTILIZER APPLICATION

No Applicator shall apply Fertilizers containing nitrogen and/or phosphorus to Turf and/or Landscape Plants during the Prohibited Application Period.

6. FERTILIZER CONTENT AND APPLICATION RATES

(a) Fertilizers Applied to Turf and/or Landscape Plants within (MUNICIPALITY / COUNTY) shall be formulated and applied in accordance with requirements and directions provided by Rule 5E-1.003(2), Florida Administrative Code, *Labeling Requirements For Urban Turf Fertilizers*.

(b) Fertilizers shall be applied to Turf and/or Landscape Plants at the lowest rate necessary. Nitrogen shall not be applied at an application rate greater than 0.7 lbs of readily available nitrogen per 1000 ft² at any one time based on the soluble fraction of formulated fertilizer, with no more that 1 lb total N per 1000 ft² to be applied at any one time and not to exceed the annual nitrogen recommendations in the Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida, set forth below:

Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida

(lbs N	V / 1000	ft ² / yea	ar)*
Species	Nortl	h Centra	al South
Bahia grass	2-3	2-4	2-4
Bermuda grass	3-5	4-6	5-7
Centipede grass	1-2	2-3	2-3
St. Augustine grass	2-4	2-5	4-6
Zoysiagrass	3-5	3-6	4-6

Nitrogen recommendations

*North Florida is north of Ocala. Central Florida is defined as south of Ocala to a line extending from Vero Beach to Tampa. South Florida includes the remaining southern portion of the state.

(c) For new turf or landscape plants that are being installed or established, a one-time use of starter fertilizer as described in Rule 5E-1.003 shall be allowed at an application rate not to exceed 1.0 lb of $P_2O_5/1,000$ ft².

(d) No phosphorus Fertilizer shall be Applied to existing Turf and/or Landscape Plants within (MUNICIPALITY / COUNTY) at application rates which exceed 0.25 lbs. $P_2O_5/1,000$ ft² per application nor exceed 0.50 lbs. $P_2O_5/1,000$ ft² per year,

DACS Consumer Fertilizer Task Force Final Report—January 15, 2008

(e) Nitrogen or phosphorus Fertilizer may not be applied to turf or landscape plants except as provided above unless a soil or tissue deficiency has been verified by an approved test. [Additional Guidance: Soil and tissue tests for phosphorus are normally done by UF/IFAS or another accredited laboratory. FDEP has sponsored research (ca. 2007-2008) to compare several retail home test kits to IFAS extension lab results for a wide variety of Florida soils. This may allow more convenient testing by homeowners, although enforcement may be more difficult without written test results.]

7. IMPERVIOUS SURFACES

Fertilizer shall not be applied, spilled, or otherwise deposited on any impervious surfaces. Any Fertilizer applied, spilled, or deposited, either intentionally or accidentally, on any impervious surface shall be immediately and completely removed to the greatest extent practicable. Fertilizer released on an impervious surface must be immediately contained and either legally applied to Turf or any other legal site, or returned to the original or other appropriate container. In no case shall Fertilizer be washed, swept, or blown off impervious surfaces into stormwater drains, ditches, conveyances, or water bodies.

8. FERTILIZER FREE ZONES

Fertilizer shall not be applied within ten (10) feet, or three (3) feet if a deflector shield or drop spreader is used, of any pond, stream, water course, lake, canal, or wetland as defined by the Florida Department of Environmental Protection (Chapter 62-340, Florida Administrative Code) or from the top of a seawall. If more stringent (MUNICIPALITY / COUNTY) Code regulations apply, this provision does not relieve the requirement to adhere to the more stringent regulations. Newly planted Turf and/or Landscape Plants may be fertilized in this Zone only for the first sixty (60) day establishment period.

9. LOW MAINTENANCE ZONES

A voluntary six (6) foot low maintenance zone is strongly recommended, but not mandated, from any pond, stream, water course, lake, wetland or from the top of a seawall. A swale/berm system is recommended for installation at the landward edge of this low maintenance zone to capture and filter runoff. If more stringent (MUNICIPALITY / COUNTY) Code regulations apply, this provision does not relieve the requirement to adhere to the more stringent regulations. No mowed or cut vegetative material shall be deposited or left remaining in this zone or deposited in the water. Care should be taken to prevent the over-spray of aquatic weed products in this zone. [Guidance: Care must be taken to ensure erosion of the surface soil does not occur. Excessive erosion may be a greater pollution hazard than occasional proper applications of fertilizer.]

10. MODE OF APPLICATION

Spreader deflector shields are required when Fertilizing via rotary spreaders. Deflectors must be positioned such that Fertilizer granules are deflected away from all impervious surfaces, fertilizer-free zones and water bodies, including wetlands.

11. MANAGEMENT OF GRASS CLIPPINGS AND VEGETATIVE MATTER

In no case shall grass clippings, vegetative material, and/or vegetative debris either intentionally or accidentally, be washed, swept, or blown off into stormwater drains, ditches, conveyances, water bodies, wetlands, or sidewalks or roadways.

12. EXEMPTIONS

The provisions set forth above in this Ordinance shall not apply to:

(a) bona fide farm operations as defined in the Florida Right to Farm Act, Section 823.14, Florida Statutes, provided that fertilizers are applied in accordance with the appropriate Best Management Practices Manual adopted by the Florida Department of Agriculture and Consumer Services, Office of Agricultural Water Policy for the crop in question.

(b) other properties not subject to or covered under the Florida Right to Farm Act that have Pastures used for grazing livestock provided that fertilizers are applied in accordance with the appropriate Best Management Practices Manual adopted by the Florida Department of Agriculture and Consumer Services, Office of Agricultural Water Policy for the crop in question.

13. TRAINING

(a) All Applicators of Fertilizer within the unincorporated area of (MUNICIPALITY / COUNTY), other than private homeowners on their own property, shall abide by and successfully complete an appropriate DACS Chapter 482, F.S. certification (i.e., the new limited commercial fertilizer applicator certification), providing training and continuing education requirements in minimizing nitrogen leaching and phosphorus runoff from fertilizer applications.

(b) Non-commercial applicators not otherwise required to be certified are required to follow the recommendations of the University of Florida IFAS *Florida Yards and Neighborhoods* program when applying fertilizers.

(c) A local government may establish a certification/education program for the application of these consumer fertilizers indicating the completion of an education program for anyone not otherwise certified by existing programs consistent with the ordinance and the DACS urban turf rule.

14. LICENSING OF COMMERCIAL APPLICATORS

(a) All Commercial Applicators of Fertilizer within the unincorporated area of (MUNICIPALITY / COUNTY), shall abide by and successfully complete an appropriate DACS Chapter 482, F.S. certification (i.e., the new limited commercial fertilizer applicator certification), providing training and continuing education requirements in minimizing nitrogen leaching and phosphorus runoff from fertilizer applications prior to obtaining a (MUNICIPALITY / COUNTY) Local Business Tax Certificate for any category of occupation which may apply any Fertilizer to Turf and/or Landscape Plants. Commercial Fertilizer Applicators shall provide proof of completion of an approved training program to the (MUNICIPALITY / COUNTY) Tax Collector's office within 180 days of the effective date of this ordinance.

(b) All businesses applying fertilizer to Turf and/or Landscape Plants (including but not limited to residential lawns, golf courses, commercial properties, and multi-family and condominium properties) must ensure that at least one employee has an appropriate DACS Chapter 482, F. S. certification (i.e., the limited commercial fertilizer applicator certification), prior to the business owner obtaining a Local Business Tax Certificate. Owners for any category of occupation which may apply any fertilizer to Turf and/or Landscape Plants shall provide proof of certification to the (Municipality/ County) Tax Collector's Office.

(c) Non-commercial applicators not otherwise required to be certified are required to follow the recommendations of the University of Florida IFAS *Florida Yards and Neighborhoods* program when applying fertilizers.

APPENDIX # 5

UF-IFAS CONSUMER FERTILIZER RESEARCH PROJECTS

- 1. Quantify run-off and develop models of fertilizer runoff from buffer zone turfgrass and landscape areas
- 2. Impact of withholding fertilizer for various periods during active growth of turfgrasses
- 3. Effect of zero nitrogen and phosphorous on turfgrass and landscape plants
- 4. Determine the impact of construction related soil compaction and use of subsoil on landscape fertilizer runoff
- 5. Compare the nutrient loss (leaching) from turfgrasses and landscape plants/ground covers in newly planted and established landscapes
- 6. Determine the relationship of landscape fertilization to the occurrence of red tide
- 7. Developing a seasonal fertilization program for turfgrass and landscape plants that minimize nutrient leaching and runoff
- 8. Develop model landscape designs for communities and developments that minimizes non-point source runoff
- 9. Evaluate the reduction of fertilizer for lawns and landscapes by use of reclaimed water
- 10. Conduct research surveys and focus groups to determine consumer fertilizer practices in Florida and to document changes in consumer fertilization practices following Florida Friendly Landscape education

APPENDIX #6

UF-IFAS Proposed Communications Campaign

Phase #1 - \$250,000

The UF/IFAS Center for Landscape Conservation and Ecology Information Office could provide the following in support of the Fertilizer Task Force recommendations from May 2008 to May 2009.

\$150,000	 Underwriting <i>Gardening in a Minute</i> radio program for statewide coverage Provides Florida-friendly information in a short, fun format Corresponding website providing much more extensive scientifically-based information
\$20,000	 Radio PSAs and Press Releases 20 region-specific PSAs PSA development: researching topic, writing script, recording show, editing show, uploading to website, placement with radio stations Press releases to secure media publicity Press release development: researching, writing, editing, disseminating
\$30,000:	 Creating an editable website with an external web development firm Coordinating development of an interactive and informative site Content development
\$50,000	 Fertilizer Tips Fact Sheets 10 Fact Sheets Fact sheet development: researching topic, editing photos, writing content, formatting for the web and print, uploading to the website, printing and distribution Cross promotion and placement with Water Management Districts Utility Companies Regional Planning Boards

• Extension Offices

Phase #2 - \$500,000

The UF/IFAS Center for Landscape Conservation and Ecology Information Office could provide the following in support of the Fertilizer Task Force recommendations from May 2008 to October 2009.

\$250,000 Phase #1

DACS Consumer Fertilizer Task Force Final Report—January 15, 2008

\$125,000 Print advertisements

- advertisements
- Print advertising campaign in major metro markets
- Print advertisement development: region-specific content, design and layout, print-ready, placement, formatting and uploading to website

\$125,000 Video PSAs

- 25 videos
- Video development: researching topic, scrip writing, videotaping, editing, grahics, credits, music and uploading materials to website

Phase #3 - \$1,000,000

The UF/IFAS Center for Landscape Conservation and Ecology Information Office could provide the following in support of the Fertilizer Task Force recommendations from May 2008 to December 2009.

\$500,000 Phase #2

\$500,000 Public and Media Relations Campaign with an external public relations agency

- Coordination with external public relations agency specializing in this area. The PR agency would provide
 - o Media relations
 - Media buying and placement (print and video) for Cable and network TV, commercial radio, newspapers and magazines
 - o Cross promotions among industries
 - o News feature story and photo development

Appendix # 7 CONSUMER FERTILIZER TASK FORCE SUBCOMMITTEE ON FUTURE RESEARCH

(Appointed October 11, 2007)

The Florida Consumer Fertilizer Task Force's mission is to "develop and deliver a package of consensus recommendations to the Florida Legislature designed to ensure that the education and regulation for the proper use of consumer fertilizers **is informed by best available science** and is uniform, subject to variations necessary to meet local state and federal water quality standards. The Task Force will recommend statewide guidelines for management strategies (e.g. nonagricultural fertilizer use rates, formulations, and application), **based on the best available science** as well as model ordinances for municipalities and counties."

The Subcommittee on Future Research, Chaired by Task Force member Dr. Peter Barile, will bring back to the Task Force for consideration at its November 14 meeting, a draft set of recommendations regarding needed future research that will:

- Clarify what is the existing best available scientific research related to the Task Force's charge and mission; and
- Clarify what relevant research is currently being conducted and/or is funded to be conducted in the near future; and
- Clarify, and if possible, prioritize what additional scientific research may be needed in the future and what level of resources would be required to conduct that research and provide the results to inform future policy decisions regarding the regulation and education for the proper use of consumer fertilizers.

Dr. Peter Barile, Task Force member will chair and convene the Subcommittee composed of expert advisors from DEP, DOH, WMDs, IFAS and Industry including:

- Eric Livingston, Bureau Chief, Watershed Management, Division of Water Resource Management, DEP, <u>eric.livingston@dep.state.fl.us</u>, 850-245 8430
- o Steve Kelley, Scotts, <u>steven.kelly@scotts.com</u> 407-889-4200
- Dr. Ed Lowe, SJWMD, Director, Division of Environmental Services, <u>elowe@sjrwmd.com</u>, 386-329-4582
- o Eberhard Roeder, DOH, (Eberhard_Roeder@doh.state.fl.us)
- Dr. Laurie Trenholm, IFAS; <u>mailto:Treletr@ufl.edu</u>; Associate Professor, Environmental Horticulture University of Florida P.O. Box 110675 Gainesville, FL 32611 352-392-1831, ext. 374 352-538-0788 mobile 352-392-1413 fax

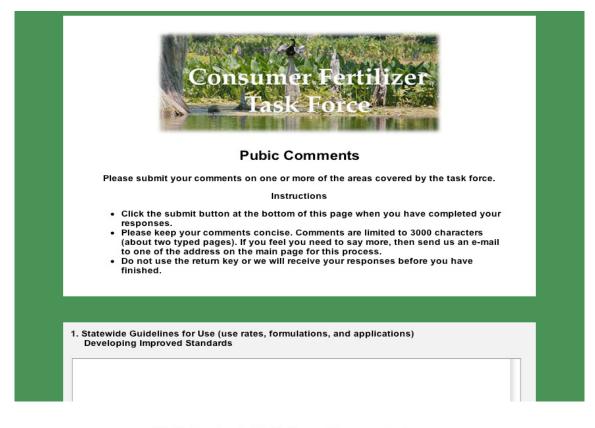
APPENDIX # 8 Task Force Process Overview and Meeting Schedule

The Florida Consumer Fertilizer Task Force (Task Force) unanimously adopted consensus procedures for developing and reaching agreement on its recommendations to the Legislature. The procedure provided, "General consensus is a participatory process whereby, on matters of substance, the members strive for agreements which all of the members can accept, support, live with or agree not to oppose. In instances where, after vigorously exploring possible ways to enhance the members' support for the final decision on a recommendation, and the Task Force finds that 100% acceptance or support is not achievable, final decisions will require at least 75% favorable vote of all members present and voting. This super majority decision rule underscores the importance of actively developing consensus throughout the process on substantive issues with the participation of all members and which all can live with. In order to conduct formal business, the Task Force will require a quorum of its appointed members. Seven (7) of Thirteen (13) members must be present to constitute a quorum.

The Task Force process included multiple opportunities for public input and comments. Each meeting of the Task Force featured opportunities for public comments.



The Task Force website included an on-line public comment page and periodically forwarded these comments to the Task Force members and posted the public comments received. For a review of these public comments, see: <u>http://consensus.fsu.edu/Fertilizer-Task Force/survey.html</u>



Florida Department of Agriculture and Consumer Services

Consumer Fertilizer Task Force

Main Page	Meetings	Resources	Workplan	Legislation and Rules	Surveys & Comments	Science Subcommittee
	All Month	and the	1			
1		S A R R R	THINK		A BAST	
1	Co	n cuin		And T	ZOT	
				N. MARINA		
1			E	HCOM		
	*			A DERIGHT		
			1995年1996年年			
			Meeting VI			

January 10 - 11, 2008 Tallahassee, FL

Note: This is a change from an earlier meeting location.

Homewood Suites By Hilton 2987 Apalachee Parkway Tallahassee, FL 850-488-3731

DACS Consumer Fertilizer Task Force Final Report-January 15, 2008

The Task Force summaries, presentations and briefings, resource documents and studies, and public comments were posted regularly on the Task Force's website.

In both the 5th and 6th meetings time was set aside on the Task Force meeting agendas to review the many public comments received and determine if these contained new ideas, suggestions or concerns that the Task Force should consider as it refined its recommendations.

The Task Force met six times between September, 2006 and January, 2007 (*see meeting schedule below*). The Task Force meeting summaries can be found at: <u>http://consensus.fsu.edu/Fertilizer-Task-Force/index.html</u>

TASK FORCE MEETING SCHEDULE

DATES	ACTIVITIES
July 2007	Appointment of Florida Consumer Fertilizer Task Force
September 6, 2007	Task Force Meeting #1—Organizational: mission, visioning, projectscoping, and identification of issuesSarasota
October 11, 2007	Task Force Meeting #2Gainesville
November 2, 2007	Task Force Meeting #3West Palm Beach
November 14, 2007	Task Force Meeting #4—Initial Draft Recommendations Public Workshop—Round One (Following Task Force Meeting) <i>Tallahassee</i>
December 17, 2007	Task Force Meeting #5—Review of Public Comments Public Workshop—Round Two (Following Task Force Meeting) <i>Apopka</i>
January 10 - 11, 2008	Task Force Meeting #6—Adoption of Final Package ofRecommendationsTallahassee
January 15, 2008	Delivery of Final Recommendations to DACS and Florida Legislature