Sierra Club, Numeric Nutrient Criteria, Urban Fertilizer and the University of Florida

Nutrient pollution in Florida is a controversial issue. In 2010 we have concurrently experienced a 100 mile long toxic algae bloom and accompanying fish kill in the St. Johns River, and a full court press from the state’s largest polluters to delay and defeat efforts to meet the Clean Water Act provisions that would prevent such an environmental and economic disaster.

Numeric Nutrient Criteria

The connection between urban fertilizer management and the lawsuit filed and settled in federal court by the Sierra Club and other environmental groups to require the U.S. Environmental Protection Agency to impose quantifiable – and enforceable – limits (numeric nutrient criteria) for fertilizer, sewage and animal waste runoff is an important one. The first set of numeric nitrogen and phosphorous limits, those relating to lakes and flowing waters, go into effect November 2010. Florida communities are now looking for the lowest cost alternatives for reducing nutrient loads to area water bodies, both to meet the new criteria and to protect their economic engines from the type of environmental disaster experienced on the St. Johns River.

Strong urban fertilizer management is the least costly of possible alternatives and can be instituted and effective immediately. It is far more cost-effective to prevent nutrient pollution than it is to utilize hundreds of thousands or millions of tax dollars in restoration efforts for impaired waters – the cost of removing nitrogen from water resources runs from $40,000-$200,000 per ton. For this reason, the communities along the southwest gulf coast so devastated by the Red Tide blooms of 2005 were the first in the state to adopt strong fertilizer ordinances.

The cost of meeting the EPA proposed numeric nutrient criteria has been the rallying point for those (utilities, agriculture and industry) who oppose the new standards. However, cities and counties can reduce nutrient pollution at little or no cost by adopting strong urban fertilizer rules.

For example, in 2008 the Tampa Bay Estuary Program established a model fertilizer and landscape ordinance that with 50% compliance would prevent an estimated 30 tons of nitrogen per year from entering Tampa Bay from Hillsborough County alone at a negligible cost; the seasonal sales ban would have acted as enforcement for the application ban. In Tampa Bay, those 30 tons prevented would offset the annual nitrogen discharge from five wastewater treatment plants, thereby saving tax payers dollars spent on waste water treatment.

While the fertilizer and pest control industries and FDACS actively oppose the implementation of numeric nutrient criteria due to the cost of clean-up, they also oppose the cheapest way to reduce nutrient pollution.


The Florida Department of Environmental Protection (FDEP) and the University of Florida/Institute of Food and Agricultural Sciences (UF/IFAS) have published guides to Florida-friendly landscaping since 1994 under the title Florida Yards and Neighborhoods (FYN) Handbook.

The 2009 FYN Handbook states in the Preventing Pollution section (pages 23-24) of the Fertilize Appropriately chapter:
“Fertilizer is a powerful tool that can help plants thrive—if used appropriately. If applied incorrectly, it can not only harm plants, but also the environment. To prevent water pollution from nutrient leaching and runoff, always follow these steps when fertilizing your lawn or landscape:

- Choose slow-release products.
- Keep fertilizer off hard surfaces.
- If you spill fertilizer on the lawn, collect whatever you can.
- Never fertilize within 10 feet of any water body.
- Don’t fertilize before a heavy rain.
- Know your water source.
- Apply fertilizer only when grass is actively growing.
- Use a broadcast spreader with a deflector shield.
- Avoid using “weed and feed” products.
- Apply an iron source instead of a nitrogen fertilizer [during the summer].”

These FYN recommendations are promoted by FDEP, UF/IFAS Extension, water management districts, stormwater professionals, the state’s National Estuary Programs and water quality advocates around the state.

In 2009 the Florida Legislature found “that the use of Florida-Friendly Landscaping and other water use and pollution prevention measures to conserve or protect the state’s water resources serves a compelling public interest and that the participation of homeowners’ associations and local governments is essential to the state’s efforts in water conservation and water quality protection and restoration” [373.185 f. s. Local Florida-friendly landscaping ordinances (3) (a)].

However, despite publication, promotion and statute, attempts to reach state-wide compliance with these measures have been met by a formidable and controversial pushback from the most unlikely players.

**Urban fertilizer legislation 2007, 2008**

In response to the adoption of strong urban fertilizer management ordinances in several gulf coast communities, in 2007 and 2008 the Florida turfgrass, fertilizer and pest control industries, with the support of FDACS, lobbied for a preemption of municipal and county-level control of urban fertilizer management in both legislative sessions and in the Florida Consumer Fertilizer Task Force proceedings.

However, the need for low-cost options for reducing nutrient pollution at the community level kept industry from achieving their goal; their efforts were unsuccessful.

**Urban fertilizer legislation 2009**

In 2009, proponents of urban fertilizer management preemption took a different route and agreed to legislation that did not preempt local control but rather set up a minimum model ordinance (2009 Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes published by FDEP) to which local governments located within a nutrient pollution impaired watershed must adhere; the ability to go beyond the minimum would depend upon meeting certain procedural criteria.

That legislation, SB 494, was supported by some water quality advocates, the Association of Counties and the League of Cities. SB 494 was signed by Governor Crist and the Model Ordinance became the industry’s ace in the hole: since then it has been proclaimed by industry to be the entire answer to the state’s urban nutrient pollution problems.
The Sierra Club opposed SB 494 because the Model Ordinance contained low-bar fertilizer application standards and was not sufficiently protective of Florida’s water resources.

**Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes**

Sierra Club opposition to the 2009 Model Ordinance lies with the fact that the model does not reflect the recommendations found in the FDEP-UF/IFAS FYN Handbooks. Rather, the model contains less protective fertilization standards found in the 2008 Florida Friendly Best Management Practices for Protection of Water Resources by the Green Industries (BMP Manual); the BMP Manual is published by FDEP but written by fertilizer and pest control industry representatives. For example, Erica Santella, Regional Technical Director for TruGreen and past president of the Florida Turfgrass Association, served as committee chair for the original development of the BMP Manual.

The BMP Manual contains those practices voluntarily accepted by industry representatives rather than the more protective water pollution controls advocated by water quality experts and the FYN program.

The dissonance between the FYN recommendations and the Model Ordinance standards has been best illustrated in the campaigns waged in communities on the southwest gulf coast and in central Florida to adopt meaningful fertilizer management standards. County and municipal natural resource personnel have recommended the stronger FYN standards in order to save tax dollars from being spent on expensive nutrient pollution clean-up infrastructure and where there has been sufficient non-profit organizational support for the FYN recommendations, those stricter standards have been codified; to date the Sierra Club has been involved in the adoption of strong fertilizer management policy in over 40 communities. However, where the industry has prevailed, the less protective Model Ordinance has been adopted.

**UF/IFAS publication SL283: Unintended Consequences Associated with Certain Urban Fertilizer Ordinances**

In March 2009 industry was handed another card to play when UF/IFAS released its publication SL 283 Unintended Consequences Associated with Certain Fertilizer. In direct conflict with UF/IFAS’ own FYN recommendations, Unintended Consequences promotes the weaker Model Ordinance standards.

Since that date, industry and FDACS have held up the Unintended Consequences publication as “scientific proof” that the stronger FYN pollution control measures are inferior to the Model Ordinance standards.

However, the verity of Unintended Consequences was challenged and the publication formally critiqued by both the Sierra Club and Pinellas County Environmental Management Department staff. These critiques were sent to UF/IFAS, FDACS and FDEP in the months after the publication’s release but to date, none of these agencies has responded to or challenged these critiques. Nevertheless, to this day, one or two UF/IFAS administrators continue to transmit Unintended Consequences to county, municipal and state-level officials as the “official” position held by UF/IFAS on urban fertilizer management.

In UF scientists lobby against summertime fertilizer ban using industry-funded research, St. Petersburg Times October 24, 2009, David DeCamp and Craig Pittman uncovered that Unintended Consequences was produced by UF/IFAS at the request of industry officials and that UF/IFAS had received at least $505,000 from turfgrass industry groups in the past three years.

Since the publication of SL 283 Unintended Consequences Associated with Certain Fertilizer, the Sierra Club has appealed to the chair of the environmental horticulture department, the past and current senior
vice presidents for Agriculture and Natural Resources at UF/IFAS and the University President to resolve
the conflict, to no avail.

In April 2010 the Sierra Club was informed by UF/IFAS that Unintended Consequences had been
internally and externally reviewed and would be revised, but repeated requests for the results of that
review have gone unanswered and to date no revision has been released.

After months of denying the public access to information that should illuminate the controversial
Unintended Consequences publication, the Sierra Club submitted a formal public records request for this
information on July 29. On September 9, University of Florida legal counsel informed the Sierra Club
that our public records request would not be fulfilled claiming that the requested documents “are not
public records.” In October the Sarasota County Attorney’s Office analyzed the University’s position and
found no legal basis for the refusal and in November, the Sarasota County Board of Commissioners
passed a resolution requesting the review documents from the University.

The Sierra Club, with support from interested local governments, will continue to challenge the
University of Florida until the controversy has been resolved.

Urban fertilizer legislation 2010

In the year since SB 494 and the FDEP Model Ordinance, communities continued to pass stronger-than-
Model Ordinance rules; much to the dismay of the industry, the new statute did not legally prohibit the
codification of the FYN standards. For this reason, for the fourth consecutive year, industry lobbied for
legislation to deny county and municipal authorities local control of fertilizer management.

The battle to stave off preemption was more challenging than ever before; the largest do-it-yourself
fertilizer manufacturer in the nation, the Ohio-based Scotts Company, with backing from the Florida
Retail Federation, the Florida Nursery Growers and Landscape Association and the fertilizer and pest
control industries, spent unknown dollars and lobbying resources in an attempt to finally achieve
preemption.

However, citizen-lobbyist mobilization efforts and pressure from water quality advocates around the state,
the Florida Stormwater Association, the League of Cities and the Association of Counties worked
together once again to protect a community’s right to prevent water pollution through urban fertilizer
controls.

In the end the non-partisan nature of inexpensive water quality protection proved to be essential; the issue
brought both parties together in the senate to protect local control.

2010 Revision of FDEP Model Ordinance

FDEP announced in late May 2010 that the Model Ordinance would be revised through a series of
stakeholder comment periods and public meetings. This revision process provided water quality
advocates and local communities the chance to renew their call for a Model Ordinance that represents the
more protective FYN recommendations.

The position held by the Sierra Club is that there is no legitimate reason to keep the FYN
recommendations out of the revised Model Ordinance. However, the final revised 2010 Model was
released on September 2010 and there remain sections in the Model that are still less protective than the
FYN recommendations.
While it is impossible to draft one fertilizer rule that adequately addresses the needs of all the various regions of the state, it is necessary, for the quality of our state water resources, to draft a more protective state-level rule than the current Model Ordinance.

Florida Department of Agriculture and Consumer Services (FDACS)

FDACS has at every occasion promoted the unsubstantiated position found in *Unintended Consequences* within the processes of local fertilizer ordinance adoption around the state. They argue against stronger urban and agricultural fertilizer pollution control; in effect they are against any further regulation of fertilizer. However, the state cannot ignore the existing nutrient pollution problem and it is reckless to avoid the cheapest form of nutrient pollution reduction. By arguing against urban fertilizer regulation FDACS is only putting more pressure on the state’s farmers, utilities and taxpayers.

FDACS should not be allowed to derail effective, cheap nutrient pollution prevention.

Without serious pressure from the public demanding the vetting of *Unintended Consequences* and the reasons for UF/IFAS’ conflicting messages, Florida communities will remain at risk for preemption legislation in 2011 and only the most expensive methods to reduce nutrient pollution.