



Issues Affecting the Development of Evidence-Based Fertilizer Policy

The following points identify important issues of evidence-based policy making related to protecting Florida's water quality. Local governments are charged with an implicit burden of developing policy based on facts, science and sober judgment, divorced of emotional, political and reactionary impulses.

- The impacts on the area's citizens, natural systems, and businesses because of nutrient loading need to be understood and addressed scientifically and are not something which can be addressed with policy based on conventional wisdom, however appealing it may seem.
- Any policy decision of this magnitude must be based on hard evidence and deserves a process of objective and deliberate public workshops and hearings.
- There is an absence of any substantive evidence that any of fertilizer blackouts in Florida, many of which have been in place for 10 years or more, have accomplished any substantive nutrient reductions. On the contrary, none have set up structured before-and-after testing to establish conclusive cause and effect. None have specifically tested for the specific signature of fertilizer among the many more common forms of Nitrogen (e.g. pet and wild animal waste, reclaimed water, sanitary sewer discharges, septic systems, atmospheric deposition, decayed vegetation, etc.). For those citing data showing general declines in nutrients or Total Nitrogen, all such declines clearly began BEFORE the implementation of the ordinances.
- The summertime blackouts depend on the upside-down proposition that it is unlawful to feed lawns and landscapes in the growing season when their need and ability to uptake nutrients is inarguably very efficient, and lawful to feed them when they are in their slower off-season growth mode.
- After no measurable benefit from summertime blackouts, there is a need for new, collaborative and effective policy ideas. The Indian River Lagoon area is an example of the false hope of summertime fertilizer blackouts where years after lavish promises of a summertime blackout miracle, nothing has happened, and attention has instead become properly focused on sewer, septic and other large-scale infrastructure problems causing nutrient impairments.
- The summertime blackouts are not supported by FDEP, FDACS, UF/IFAS or the State's water management districts.
- There continues to be an inexplicable refusal of blackout supporters to recognize the *FDEP WM869 Study* – its size, scope, authority and most importantly its unambiguous conclusions – which essentially eliminates any material contribution to runoff from urban fertilizer applied in the active growing (summer) season. **This is the**

single most important piece of independent peer-reviewed research that addresses fertilizer fate from lawn fertilization, period.

- There are documented successes in Orange County in removing impaired water bodies from their TMDL/BMAPS, all attributed to the success of a collaborative education-forward approach, versus a regulatory one.
- Florida's green industry professionals should be treated as partners – the benefits of their immense knowledge base as an asset in this mutual effort is often ignored and even disparaged. **Lumping them in with users who act irresponsibly or out of ignorance is like treating all drivers like drunk drivers. Punishing the innocent is never good public policy.**
- Education has repeatedly proven to be far more effective than regulatory approaches in reducing irresponsible behavior over the long term. Reference is made to the enormously successful water conservation education messaging undertaken by the state's water management districts (e.g. "Skip-A-Week" of off-season irrigation).

It should be noted that during the development of these points, the efforts related to the management of nutrient loads in the Chesapeake Bay were examined by EREF, with the following highlights:

- The Chesapeake Bay Total Maximum Daily Load (TMDL) is the largest nutrient TMDL in the world and serves as the gold standard for watershed nutrient management.
- The Chesapeake Bay turf fertilization rules were created by the University of Maryland and are a mirror image of Florida's Urban Turf Rule in terms of establishing limited local fertilizer application rates, and a confirmation of the *FDEP WM869 Study* that supports summertime nutrient applications.
- The Chesapeake Bay TMDL establishes that turf nutrition and turf health during the summer growing season are critical to the prevention of erosion and to the protection of the Chesapeake Bay. Erosion (the real mortal enemy of water quality) arising from nutrient-deprived turf stands and landscapes was determined to result in an increase in nutrient loading as well as in total dissolved solids.