Issues Affecting the Development of Evidence-Based Fertilizer Policy

The following points identify serious issues of evidence-based policy making related to this specific matter. Local governments are charged with an implicit burden of developing policy based on facts, science and sober judgment, divorced of emotional and reactionary impulses.

- ❑ The suffering of the area's citizens, marine life, and businesses because of the red tide are undeniable, yet they are not evidence of something which can be remedied by quick fixes like fertilizer restrictions, regardless of their length.
- ❑ Any policy decision of this magnitude must be based on hard evidence, and deserve a process of objective and deliberate public workshops and hearings.
- ❑ There is an absence of any substantive evidence that the current 4-month fertilizer blackouts along the gulf coast of Florida, many of which have been in place for nearly 10 years and which were heralded to prevent the current situation, have accomplished any measurable nutrient reductions.
- ❑ Unfortunately, no gulf coast governments implementing existing blackouts have established any process of identifying changes in the specifically-identifiable stable isotopes of urban fertilizer.
- ❑ By the blackout authors' own assertions, the existing summer blackouts were implemented to stop the worst of any urban fertilizer impacts (i.e. alleged to be summer applications). By their definition, and after nearly 10 years of no measurable benefit, extending those blackouts beyond the existing time period offers nothing.
- ❑ There is an absence of any independent scientific or regulatory authority indicating that a year-long blackout will accomplish anything material or predictable relative to future red tide outbreaks.
- ❑ Local governments and blackout proponents must address the inexplicable refusal to recognize the *FDEP WM869 Study* – its size, scope, authority and most importantly its conclusions – which essentially eliminates any material contribution to runoff from urban fertilizer applied in the active growing season.
- ❑ There are documented successes in Orange County and elsewhere in removing impaired water bodies from their TMDL/BMAPS while still embracing an exemption of licensed professionals and BMP-trained homeowners as part of their 4-month blackout, all attributed to the success of a collaborative education-forward approach, versus a regulatory one.
- ❑ There must be a candid recognition that prolonged red tide episodes, like hurricanes, far more severe than the one recently experienced have plagued Florida's west coast intermittently for centuries, before there was anyone or anything to blame. That undeniable history must be substantively reconciled to the speculation that a year-round fertilizer blackout is going to prevent or even lessen future episodes.
- ❑ Regulatory efforts should focus immediately on the far more identifiable connections to coastal nutrient loading created by septic tank contributions, as well as on the

region's nitrogen-enriched reclaimed water discharges and any substandard stormwater management systems which may exist.
- ❑ Florida's green industry professionals should be treated as partners and not culprits – the benefits of their immense knowledge base as an asset in this mutual effort is routinely ignored and disparaged.
- ❑ **Education has repeatedly proven to be far more effective in reducing irresponsible behavior than regulatory approaches. Reference is made to the enormously successful water conservation education messaging undertaken by the state's water management districts.**

Manatee County's "strong" fertilizer blackout ordinance, passed in 2011, serves as a very useful case study for all those passed on the gulf coast. We are prepared to provide the following report: *AN ANALYSIS OF WATER QUALITY MONITORING DATA IN THE CONTEXT OF MANATEE COUNTY ORDINANCE 11-21, THE 'FERTILIZER ORDINANCE'* by Stuart Z. Cohen, Ph.D., CGWP and Sandra M. Hoover, Environmental Scientist; Environmental & Turf Services, Inc., Wheaton, Maryland (the Report).

The relevance of the Report runs directly to the passage of ANY fertilizer blackout as follows:

- ❑ Manatee County has a robust water quality data base atlas containing water sampling results in multiple locations of multiple parameters dating back to 1995.
- ❑ Most of the relevant parameters recorded by Manatee County (specifically selected and highlighted by Manatee County itself in a recent public workshop) were improving well prior to the implementation of the fertilizer blackout, reflecting the real reasons for improvements in nutrient loading there and elsewhere on the gulf coast – namely decades of large-scale stormwater projects, cessation of direct discharges of reclaimed water into natural systems, and the decades-long implementation of best practices employed by local governments and industry. Please see the attached *Tampa Bay's Valuable Lesson, TBO.com, March 22, 2104*.
- ❑ **The Report concludes there is no statistical improvement in any of the relevant parameters when evaluated in the context of results occurring before/after the passage of the ordinance.**
- ❑ The undeniable conclusion of the Report is that there is simply no credible basis for employing urban fertilizer blackouts as a tool for reducing urban runoff.

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 TMDL is the largest nutrient TMDL in the world and serves as the gold standard for large-scale watershed nutrient management.
- ❑ The Chesapeake Bay turf fertilization rules were created by the University of Maryland and are a mirror image of the FDACS Urban Turf Rule in terms of establishing limited local fertilizer application rates, and a confirmation of the *FDEP WM869 Study* that encourages winter rather than summer blackouts – and discouraging the baffling logic of the current blackouts which starve plants during

their growing season and feeds them during their dormancy (resulting in the detrimental impacts noted in the body of our letter and in the following point).

- The Chesapeake Bay TMDL establishes that turf nutrition and turf health are critical to the prevention of erosion and to the protection of the Bay. Erosion arising from deprived turf stands were determined to result in an increase in nutrient loading as well as in total dissolved solids.