## STATE OF FLORIDA – ENVIRONMENTAL REGULATION COMMISSION

FLORIDA STORMWATER ASSOCIATION, INC., A FLORIDA NOT-FOR PROFIT CORPORATION,

Petitioner

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent

DEPTOFENVIRONMENTAL PROTECTION

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OFFICE OF
GENERAL COUNSE

PETITION FOR RULE-MAKING TO AMEND FLORIDA WATER QUALITY STANDARDS BY REVISING EXISTING WATER BODY CLASSIFICATIONS TO PROVIDE NEW AND MORE APPROPRIATE BENEFICIAL USES AND USE EXPECTATIONS

1. Petitioner, the Florida Stormwater Association, Incorporated (hereafter "FSA") is a not-for profit Florida Corporation, a voluntary, membership based organization whose mission is to help its members improve water quality through enhanced stormwater management practices. The association has 295 organizational members including cities, counties, water management and other districts, academic institutions, and consulting and engineering firms, all engaged in some aspect of stormwater management and with an interest in water quality-related issues. Petitioner's address and phone number are as follows:

Florida Stormwater Association, Inc. C/O Kurt A. Spitzer, Executive Director 719 East Park Avenue Tallahassee, FL 32301 Telephone: 850-561-0904

2. The Florida Department of Environmental Protection (hereafter the "Department" or "DEP"), by the Environmental Regulation Commission, is authorized by Sections 403.061, 403.804 and 403.805,

Florida Statutes, to adopt and amend Florida Water Quality Standards which include Classifications and Designated Uses of waters that are the subject of this petition. The existing rule to be amended is Section 62-302.400 of Chapter 62-302, Florida Administrative Code (hereafter "FAC").

3. This petition is authorized by Section 120.54, Florida Statutes, and Petitioner, FSA, has standing to file the petition by the provisions of Section 62-302-400, FAC, and by the substantial interests of its members in the subject matter of this rulemaking. City, county and other members of FSA engage in activities that are regulated by the Department and are required to obtain Municipal Separate Storm Sewer System permits under the National Pollution Discharge Elimination System program from the Department.

## RULEMAKING REQUESTED

- 4. This petition seeks the amendment of sub-sections (1) through (12) of Section 62-302-400, FAC, which establish a Classification of Surface Waters according to Designated Uses. By the provisions of existing sub-section (1) of 62-302-400, FAC, all surface waters of the State are classified by five designated uses, which are predominantly human or economic uses of waters in the State. All surface waters of the State, including fresh, marine, wetlands, flowing or intermittent, natural or manmade, pristine or impacted, are, by sub-section (10), classified as Class III unless otherwise included in the Class IV exception to Class III or specifically placed in other Classes elsewhere in the Rule.
- 5. This petition seeks the adoption of a new waterbody classification system, similar to that as was developed by an advisory committee to the Department known as the Designated Use and Classification

Policy Advisory Committee ("PAC") to include seven Human Uses and four Aquatic Life Uses, as follows:

HU-1	Protection of potable water supply suitable for consumption following conventional drinking water treatment, fish consumption, full body contact
HU-2	Protection of shellfish harvesting for human consumption, fish consumption, full body contact
HU-3	Protection of full body contact and possible ingestion and fish consumption
HU-4	Protection of incidental contact and fish consumption
HU-5	Contact limited or restricted due to unsafe conditions, protection of fish consumption
HU-6	Protection of waters for crop irrigation or consumption by livestock
HU-7	Utility and industrial uses
AL-1	Propagation and maintenance of aquatic communities that approximate the biological structure and function of natural background
AL-2	Propagation and maintenance of a healthy, well-balanced aquatic community with minimal deviation of biological structure and function relative to natural background
AL-3	Protection of an aquatic community with moderate deviation of Biological structure and function relative to natural background
AL-4	Protection of an aquatic community with substantial deviation of Biological structure and function relative to natural background

The term "natural background," used in the description of aquatic life uses above has the same meaning expressed in the Definitions of existing DEP rule 62-302, F.A.C.: "the condition of waters in the absence of human-induced alterations based on the best scientific information available to the Department."

- 6. The Designated Uses established by a Waterbody Classification System comprise the goals or expectations that should be attained in each waterbody and provide a basis for deriving water quality criteria and other protections that will maintain the adopted beneficial uses. The PAC recognized that one of the greatest deficiencies in the existing State Water Quality Standards is that no Designated Use Expectations have been adopted. It was further the consensus of the PAC that the following Use Expectations should be adopted together with Beneficial Use Designations:
  - HU-1 Maintaining a level of water quality suitable for potable water or Intended to be suitable after receiving conventional drinking water treatment. Also protective of HU-3 uses.
  - HU-2 Water shall contain no substances in concentrations that will make shellfish inedible due to undesirable tastes or would cause a hazard to humans after consumption. Also protective of HU-3 uses.
  - HU-3 Recreational uses may support prolonged and direct contact with the water, involving minimal risk of ingesting water in quantities sufficient to pose a health hazard. Fish consumption involves maintaining a level of water quality that will prevent any unpalatable flavor or accumulation of harmful substances in fish tissue
  - HU-4 Recreational uses may result in contact with the water that is either incidental or accidental. The probability of ingesting appreciable quantities of water is minimal. Water depth may preclude full body immersion. Also protective of fish consumption as in HU-3
  - HU-5 The activities or conditions expected in the waterbody make it unsafe or not possible to conduct recreational activities. Also protective of fish consumption as in HU-3.
  - HU-6 Maintaining a level of water quality useful for consumption of water by livestock or surface water withdrawal for irrigation of cropland. No protection of recreational activities or fish consumption.
  - HU-7 Maintaining a level of water quality useful for utility and industrial purposes. No protection of recreational activities or fish consumption.
  - AL-1 Natural structural, functional and taxonomic integrity is preserved or approximated; structure and function similar to natural community; ecosystem level functions are fully maintained

- AL-2 Overall balanced distribution of all expected groups of taxa; ecosystem functions largely maintained. May have changes in biological structure evidenced by the replacement of sensitive ubiquitous taxa by more tolerant taxa.
- AL-3 Changes in biological structure and function have resulted in an altered aquatic community. Represents the transition between a community dominated by sensitive or expected taxa to one dominated by tolerant taxa.
- AL-4 Substantial changes in biological structure and function have resulted in a limited aquatic community. Community consists primarily of tolerant taxa able to survive and propagate under severe or variable environmental conditions.

The petitioner requests adoption of a system similar to these Beneficial Uses Expectations together with corresponding Use Designations as proposed by the PAC.

7. In adopting these proposed Beneficial Uses and Expectations there will be a need to adopt appropriate implementing provisions, similar to those in the existing 62-320-400, FAC, which can be developed in the course of further rule development and adoption proceedings. These implementing provisions may include a process for further refinement of Beneficial Uses and Expectations. Further, the adoption of the proposed Beneficial Use Classes is the first step in three phases of rule making. Following adoption of a new Classification System, appropriate criteria for each class will be needed and finally the designation of surface waters to the appropriate Classification of Human and Aquatic Life Support Uses.

## WHY THE PROPOSED RULEMAKING IS NEEDED

8. The Department's existing water classification system, recognizing only five Designated Uses, was adopted by the Pollution Control Board in 1968. In the mid-1970's, following enactment of the Federal "Clean Water Act" in 1972, the Florida Legislature reorganized the State's environmental

agencies by creating the Department of Environmental Regulation (the precursor to DEP) and providing the Environmental Regulation Commission with the exclusive authority to adopt water quality standards. In 1978, the Environmental Regulation Commission adopted a major expansion of water quality criteria, based on EPA Guidance Documents, but retained the existing Classification system with no change from what existed in 1968. For the most part, the new water quality criteria were applied to Class III waters that included the great majority of all waters, of all types, in the State.

- 9. As noted above, the Designated Uses and corresponding Use Expectations established by a Waterbody Classification System provide the goals that should be attained in each waterbody. EPA has in recent years encouraged refinement of Designated Uses and the adoption of Use Expectations to more effectively protect the wide variety of waters as exist in Florida. EPA has also in recent years placed more emphasis on the management of ambient water quality through the Total Maximum Daily Loads (hereafter "TMDL") program, recognizing the limitations of protecting waters primarily through point source discharge controls. The Department has concluded that the existing Water Body Classification system needs improvement as a foundation for the TMDL and other water resource management programs.
- 10. In February of 2005, the Department filed a report with the Florida Legislature assessing the first five years of the TMDL program. In that Report, the Department discussed the inadequacies of existing Water Body Classifications in the following relevant excerpts:

In the early 1970's, there was no clear understanding of how, comprehensively, to evaluate overall water quality or protect whole aquatic ecosystems from all sources of pollution, which are the exact objectives of the Watershed Restoration Act of 1999. This contradiction of older standards and newer mandates has led to a number of dilemmas, among them:

- Most Florida waterways are identified as Class III, "fishable and swimmable." It has become clear in recent years that this classification, which includes rivers, streams, lakes and estuaries as well as wetlands, urban drainage ditches, urban lakes and canal systems, is too broad. Some of these water bodies or water body types never did and indeed should not be expected to provide the same quality of "swimmable or fishable" recreation as others.
- Florida's freshwater dissolved oxygen (DO) criterion requires oxygen levels in surface waters to be at or above five milligrams per liter (5 mg/l) at all times at all places, ostensibly in an effort to protect water quality. In fact, wetlands, springs, drainage ditches and canals do not typically exist, whether naturally or as artificially created, with DO levels as high as 5 mg/l, often because of the significant inflow of low-oxygen ground water into surface waters. In effect, some water bodies are being required to meet unnatural conditions or conditions that are otherwise caused by pollutants.
- As noted in the introduction to this section, water quality standards were
  developed primarily to address regulation of point sources of pollution and they
  are applied, typically, at the end of the discharge pipe, to be met at all times.
  It is not possible to apply this same logic to entire rivers, lakes, streams,
  estuaries and other surface waters, the conditions of which vary naturally over
  time, and which simply will not meet every water quality criterion at every
  moment in every location.

Florida's existing surface water quality standards are the benchmark against which the Department must measure water body impairment and determine whether TMDL's, and subsequent clean-up actions, are necessary. The circumstances outlined above have required DEP to list as impaired some water bodies that likely are not, in fact, impaired. The result is that DEP may have to develop and adopt unnecessary TMDLs, wasting limited resources and diverting attention from real water quality problems.

11. More recently, in April of 2007, responding to concerns expressed regarding the PAC, Mimi Drew, Deputy Secretary of DEP wrote to the Florida Media, including the following excerpts:

All surface waters in the state are currently classified by one of five designated uses. By far the largest number of waters in the state falls into a broad, general category known as "Class III" waters. This includes drainage ditches, upland cut canals and other manmade features. The Class III designation brings with it the requirements to meet certain minimum water quality standards. In many cases, due to the manmade nature of the waters, such standards are not attainable and are unnecessary to support the practical use of those artificial waters. Conversely, waters, such a springs, require much more stringent protection than is currently

required within our classification system to ensure that their fragile biological systems are protected.

This system, used over the past 30 years, has been successful in addressing regulatory actions needed to reduce pollutants, but does not effectively address watershed restoration projects. Much has changed over that time frame - science and technology have improved and our restoration efforts should as well.

Decisions on water quality standards have huge fiscal implications for the communities that will be asked to use tax dollars to restore water bodies. Therefore, it is critical that water bodies are classified in a way that reflects the actual purpose of the water body, whether it is a ditch, a stream, or a spring – to ensure that our critical waterways are protected and our tax dollars are well spent.

- 12. There has been a similar recognition at the national level that designated uses and expectations must be revised in order to implement the TMDL program and related environmental management and restoration efforts. In March of 2000 the U.S. General Accounting Office reported on the lack of data and program guidance available to states that are needed to establish water quality standards, identify impaired waters and adopt TMDLs. In October 2000 Congress suspended EPA's implementation of "final" TMDL program rules and later requested that the National Research Council of the National Academy of Science assess the scientific basis of the TMDL program and availability of sufficient data and guidance for program purposes.
- 13. In response to Congress's request, the "TMDL Committee" of the National Research Council, chaired by Professor Kenneth H. Reckhow, Ph.D., of Duke University, came to several broad conclusions and made recommendations for the use of scientific data and information within the TMDL program. For purposes of this petition, the relevant recommendations are summarized as follows:
  - The success of the TMDL program should not be measured by the number of TMDLs adopted or the number of NPDES permits issued but rather demonstrated by the achievement of a water body's designated use and use expectations.

- States should develop appropriate use designations and expectations in advance of assessment and refine these use designations prior to TMDL development
- The Clean Water Act goal of "fishable and swimmable" is too broad as an expression of the designated use; greater stratification of designated use is needed in order to take advantage of the best scientific data and methods of analysis.
- 14. The TMDL Committee recognized that the TMDL program is dependent on adopting appropriate water quality standards which involves both technical and policy decisions. Establishing appropriate designated uses and use expectations for a state's water bodies is primarily a policy decision that can be "informed by technical analysis." The designated use and use expectation provides the goal for ambient water quality conditions and should be, as the Committee recommended, as specific as possible. Rather than limit the "use" to "recreation" as in Florida's Class III designated use, the more specific or stratified uses could distinguish between beach use, primary contact and secondary contact. Likewise, rather than a use supporting a "well balanced population of fish and wildlife," as in Class III, the more stratified uses could support specific aquatic, biological communities.
- 15. The TMDL Committee noted the need to consider human activities that have altered aquatic ecosystems and to recognize that an appropriate designated use may not be the aquatic condition existing in a water body's predisturbance condition. The decision should reflect a policy consensus based on the current condition of the water body, the predisturbance condition and the cost of achieving the designated use and expectation. These issues have not been addressed in Florida. Finally, the Committee recognized that if water quality standards (including use designations, expectations and criteria) are flawed, all steps in the TMDL process and related environmental management decisions will be affected. An appropriate use designation and expectation together with appropriate criteria is needed prior to TMDL development and implementation.

- 16. In June of 2003 the General Accounting Office (hereafter "GAO") reported to the U.S. House Committee on Transportation and Infrastructure on the need for further EPA guidance to States for the development of Water Quality Standards that will improve the TMDL program. In general, the GAO concluded that more accurate water quality standards are critical in making scientifically based determinations about water bodies most in need of further protection. Without improved standards, including designated uses and use expectations, there is a risk of wasting valuable resources by over protecting some waters and under protecting others.
- 17. Based on a survey of all 50 states and the District of Columbia, the GAO Report noted the following responses:
  - Nearly all states reported that further water body use designation changes were needed but have not been made because of inadequate data, resistance from interested and affected groups and uncertainty as to whether use changes will be acceptable to EPA and as to the information needed to support the use changes.
  - New data collected by states provides compelling evidence that many designated uses are either under-or over-protective.
  - EPA Headquarters officials acknowledge the needs and have formed a national working group to develop additional guidance on designated use changes.
  - Improved water quality standards, including use designations and expectations, will result in different impaired waters for TMDL development.
- 18. On July 7, 1998 the Environmental Protection Agency published in the Federal Register (Vol 63. No. 129) an Advance Notice of Proposed Rule Making seeking comment on issues relating to Water Quality Standards including Use Designations and Use Expectations. EPA noted that:
  - It is in designating uses that States and Tribes establish the environmental goals for their water resources, and it is in designating uses that States and Tribes are allowed to evaluate the attainability of those goals.

- In establishing uses and use expectations, together with appropriate criteria to protect those uses, "a State or Tribe often weighs the environmental, social and economic consequences of its decisions in designating uses." The regulation allows the State or Tribe some flexibility in weighing these considerations and adjusting these goals over time.
- Appropriate application of this process involves a balancing of environmental, scientific, technical, and economic and social considerations as well as public opinion and is therefore one of the most challenging areas of the current regulation.
- There is however, a need for the use designation process, whether implementing a general or specific classification system, to clearly articulate and differentiate intended levels of protection with enough specificity so that decision-makers can appropriately develop and implement the standards on a site- or watershed-specific basis and so that the public can understand, identify with, and influence the goals set for the waters they care about.
- Lack of precision in uses and criteria assigned to protect those uses can inadvertently result in either a lesser or greater level of protection than was actually intended when the water quality standards were adopted
- The Agency's current thinking is that there is a growing need to more precisely tailor use descriptions and criteria to match site-specific conditions, ensuring that uses and criteria provide an appropriate level of protection which, to the extent possible, is neither over nor under protective.
- 19. Petitioner has estimated that the (capital) costs of implementation of the TMDL program to local governments alone is approximately \$50 billion. Programs requiring expenditures of this magnitude must be able to assure taxpayers that each dollar spent is done so in the most effective manner, resulting in significant improvements to Florida's water bodies and the natural environment, and significant improvements in human benefit and use.
- 20. There can be no doubt that Florida's Designated Use Classifications and Use Expectations do not reflect the recommendations of many State and Federal sources summarized in this Petition nor do they provide an adequate foundation for the difficult decisions needed to adopt numeric nutrient and other

criteria for Florida's waters and to fully implement the TMDL program. The Petitioner cannot assure the Environmental Regulation Commission that the Rulemaking proposed in this Petition will be easy. On the other hand, the Petitioner is confident that the benefits of a solid foundation for Water Quality Standards provided by more appropriate Designated Uses and Expectations will justify the effort. In these times of financial stress, it is even more important to demonstrate that the expenditures that must be incurred will be justified by cost effective programs.

Respectfully Submitted,

The Florida Stormwater Association, Inc.

Kurt A. Spitzer, Executive Director