

December 6, 2017

Hand Delivery

Trey Glenn, Regional Administrator
Region 4, Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-3104

Dear Regional Administrator Glenn:

We represent the 52 Waterkeepers and Waterkeeper Affiliates in EPA Region 4. Waterkeeper Alliance is the largest and fastest growing nonprofit solely focused on clean water. We preserve and protect water by connecting and supporting local Waterkeeper Organizations and Affiliates worldwide. Our goal is drinkable, fishable, swimmable water everywhere. We represent our communities in support of clean water for ourselves, for economic security, and for generations to come. We look forward to advancing a mission we share with EPA: protecting human health and the environment.

As Waterkeepers, we work at “ground zero” of the region’s water quality challenges. This work allows us a unique and informed perspective on many of the water quality issues that Region 4 will address during your tenure. As you begin to formulate the goals of your agency for this administration, we urge you to prioritize the following important issues facing Region 4 and the states we work in.

Hydrologic Alteration and Flow Protections

One area where Region 4 has made great strides in recent years is in the area of hydrologic alteration under the Clean Water Act, also known as flow. EPA clarified in August 2015 Integrated Report Guidance how states and tribes should address waters impaired due to pollution not caused by a pollutant. See EPA, *Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions* (August 13, 2015) (https://www.epa.gov/sites/production/files/2015-10/documents/2016-ir-memo-and-cover-memo-8_13_2015.pdf., last accessed November 20, 2017)(hereinafter “2015 EPA IRG”).

If a state agency has data or information of impairment due to hydrologic alteration, those waterbodies should be listed under Category 4C and included in the state’s biennial reports. Category 4C is different than Section 303(d) which is for waters impaired due to a pollutant. Some common examples of hydrologic alteration include: a perennial water is dry; no

longer has flow; has low flow; has stand-alone pools; has extreme high flows; or has other significant alteration of the frequency, magnitude, duration or rate-of-change of natural flows in a water; or a water is characterized by entrenchment, bank destabilization, or channelization. For example, Buckhorn Creek in Alabama's Choctawhatchee watershed is heavily impacted by both agriculture/nutrients (livestock grazing and poultry) and low flow/channelization. Buckhorn Creek is a prime candidate for listing under Category 4C; the Choctawhatchee Riverkeeper has made a sound case for its listing during several triennial review cycles. Unfortunately, Alabama's Department of Environmental Management has declined to do so. Many states in the region are similarly reluctant to make full use of this category, even though EPA has found the effects of such pollution can be significant: "hydrologic alteration is extensive in the U.S. and may be a primary cause of ecological impairment in river and stream ecosystems." *Id.* at 13.

Region 4 has encouraged both states and tribes "to consider explicit expression of flow as a water quality standard, either through a narrative standard, (i.e. such as that used by Tennessee '... flow shall support the aquatic criteria ...') or through a numeric standard (i.e. such as used by Vermont, 'no more than 5% 7Q10 change from natural flow regime ...')." See *EPA Region 4's Review of Georgia EPD's Triennial Review Revisions* (March 15, 2015). Some states in the Southeast have adopted a flow standard but others (e.g., Alabama) have not. Although existing water quality standards offer some implicit protections for flow through narratives for protection of aquatic life, protection of designated uses, biological integrity, habitat protection and antidegradation, we urge EPA Region 4 to continue its focus on hydrologic alteration and explicit flow protections. As a part of this focus, we hope that Region 4 will require every state in the region to formulate a water quality standard for flow. We also hope that Region 4 will continue to encourage states to list waters impaired due to hydrologic alteration under Category C.

TMDL Development

We also hope that Region 4 will continue to prioritize the development of Total Maximum Daily Loads ("TMDLs") for waters listed as impaired under Section 303(d) of the Clean Water Act. Some of our impaired waters have been waiting for the development and implementation of TMDLs for over twenty years (e.g., Alabama, Georgia). We support EPA's work with states to develop a prioritization process for TMDL development and hope that this important work will continue. We also hope that EPA will encourage states to ensure that adequate resources are devoted to TMDL development for impaired waterbodies. Staffing and resource issues at the state and federal level have contributed to the slow pace of TMDL development in the past.

For example, the Florida Basin Management Action Plans ("BMAPs") are making little progress in promoting TMDL implementation. BMAPs are multi-year implementation plans

designed to achieve the limits set by the TMDL within a 20-year timeframe. These plans can be loading targets that were established more than a decade earlier; they fail entirely to account for the land use intensification and additional loading that has occurred in the interim, e.g. the Caloosahatchee Estuary BMAP. BMAP loading estimates have been absent from Florida BMAP progress reports, where only concentration trends from very limited data acceptance has been used as a proxy for loading.

In south Florida there is little or no integration of TMDL/BMAP load reduction requirements with NPDES stormwater MS4 permit programs. These CWA based programs should be working in concert to meet water quality standards. Unfortunately, we see verified impairments increasing and even some receiving waters with antidegradation standards become impaired. Matlacha Pass State Aquatic Preserve which is a Florida Outstanding Water and National Wildlife Refuge is such an example. Unfortunately this high value water has not been designated as a priority water body for TMDL development by FDEP.

While states have the primary authority and duty under the CWA to compile the Section 303(d) list and establish TMDLs for each waterbody on the list, EPA shares in this responsibility. *See Sierra Club v. Meiburg*, 296 F. 3d 1021, 1026-27 (11th Cir. 2002). EPA has oversight authority over the various reports and plans which the state is required by the Act to produce. *Id.* If Region 4 identifies situations where “the state's efforts are either inadequate or too long delayed,” EPA can and should “establish its own TMDLs.” *Id.*

Nutrients

In the past, addressing nutrient pollution in our nation’s waters has been a priority that EPA and our groups have in common. As the Agency recognizes, “identifying nutrient-impaired waters is an important step in a State’s process to prioritize and accelerate nutrient reduction efforts.” *EPA 2015 IRG* at 9. We ask Region 4 to ensure that states are properly identifying waters impacted by nutrients for the Section 303(d) list for States without numeric nutrient water quality criteria. We also ask that EPA ensure that states are implementing proper nutrient-related assessment methodologies to develop the Section 303(d) list. Finally, we ask that Region 4 assist states in addressing nonpoint nutrient pollution and implementing strong chlorophyll-a standards.

Where nutrient TMDLs exist, we hope Region 4 will encourage states to properly enforce existing permits to attain applicable numeric limits, which is not always the case. For example, Jordan Lake (North Carolina) is a 14,000 acre reservoir and drinking water supply for over 300,000 people that has been impaired since 2002 due to excess algae that results from high nutrient input from upriver cities and other sources. Although a TMDL was approved as part of the larger Jordan Lake nutrient management plan in 2009, that TMDL has been delayed, rather

than implemented. We ask that, in situations like Jordan Lake, EPA use its oversight authority to insist that the state appropriately implement the TMDL to reduce the nutrient pollution from upriver sources and meet water quality standards as required by the Clean Water Act.

Where nutrient TMDLs are still being developed, we urge Region 4 to require states to develop sound, numeric criteria for nutrients. A numeric standard will help evaluate the health of Region 4's waterbodies for impaired status as well as help states make scientific permitting decisions that will better protect surface waters. Implementation of these numeric criteria, if properly developed, will go a long way towards solving numerous water quality issues. These criteria will alleviate the organic enrichment that causes algae blooms, making surface waters safer for wading, swimming, and drinking water. Reduction of algae blooms will also have the effect of improving dissolved oxygen concentrations making our waters more conducive to the survival of fish and other aquatic organisms. Taking these measures is critical, given the importance of outdoor recreation and related activities to the economies of Region 4 states.

Developing appropriate numeric nutrient criteria is a relatively simple short-term investment of time and money that will pay off with long-term benefits, making both the permitting process and the evaluation of stream impairment cheaper and easier for the foreseeable future. We highly recommend that Region 4 work with states which have not developed numeric nutrient criteria to develop them as soon as possible.

Concentrated Animal Feeding Operations

EPA has cited industrial agriculture as the nation's largest source of nonpoint pollution. *See The National Water Assessment* (<https://www.epa.gov/nps/nonpoint-source-agriculture>, last accessed November 20, 2017). Excess animal waste in public waters threatens human health, fishing, and the public's ability to enjoy Region 4's waterbodies. Research has identified pesticides, hormones, heavy metals, and harmful bacteria, including antibiotic-resistant strains, miles downstream from concentrated animal feeding operations or their waste application sites.

We hope that Region 4 will actively partner with our states to improve the regulation and control of pollution from industrialized swine, poultry, and dairy facilities.

Sewage

In its 2017 Infrastructure Report Card, the American Society of Civil Engineers ("ASCE") calls the nation's 14,748 wastewater treatment plants "the most basic and critical infrastructure systems for protecting public health and the environment." (<https://www.infrastructurereportcard.org/cat-item/wastewater/>, last accessed November 20, 2017). Even so, state and local governments cannot invest enough to build and

maintain this critical infrastructure: the Report Card assigns a 2017 grade of “D+” to America’s wastewater systems. *2017 Infrastructure Report Card*. More than 56 million new users will be connected to centralized treatment systems in the U. S. over the next two decades, requiring at least \$271 billion to meet current and future demands. *See id.* According to the ASCE report, these funds are needed to replace aging facilities, comply with Clean Water Act regulations and keep pace with economic development. *Id.* We can agree that success in the global economy requires significant infrastructure investment at all levels of government --- and continuing to delay these investments not only escalates the costs and risks of an aging wastewater treatment systems, but also hampers our ability to compete globally. *Id.*

We hope that EPA will continue to be an active part of solutions to the problem of failing wastewater infrastructure. For example, in November 2012, EPA partnered with the Mississippi Department of Environmental Quality and negotiated a comprehensive Clean Water Act settlement with the City of Jackson for violating Section 301 of the Clean Water Act and the conditions of its NPDES permits. That settlement required the city of Jackson to pay civil penalties, to spend \$875,000 on a supplemental environmental project, and to conduct early action evaluation and rehabilitation of its wastewater and transmission program within the next 18 years, with the majority of the work to be completed in the first 11 years. It is critical that the agency continue to participate in solutions like this, as well as ensure the proper implementation of the injunctive relief portions of the settlement, which are vital to ensure that the wastewater system is properly rehabilitated.

You have a difficult job, in that Region 4 must encourage states and local communities to find and dedicate necessary funding to fix these plants, which is no easy task. Our waterways and communities continue to wrestle with the problem of sewage overflows and treatment failures, as well as where to secure the funding to fix them. The recent tragedy of Hurricane Irma underscores the vulnerabilities for municipal sewage systems. Millions of gallons of sewage spilled in Florida due to a variety of avoidable failures, even though system deficiencies were known and these failures anticipated. Unfortunately, state oversight has failed to bring about the needed investments and improvements that Region 4 communities need to protect their waterways and health. We ask you to continue to work with states to develop a solution to this longstanding problem.

Stormwater

Stormwater runoff from the built environment is a major contributor to water quality impairment in Region 4. In addition to carrying chemical, industrial and microbial contaminants, stormwater discharges are a physical hazard to aquatic habitats and stream function, due to the increase in water velocity and volume that result on a watershed scale when the natural environment becomes the built environment. Our states contain dozens of waters that do not meet water quality standards because of stormwater pollution. Just as concerning, flooding

increases as solid surfaces replace natural vegetation, because water is unable to slowly filter into the landscape. Stormwater deposits sediment that decreases the depth of waterways, further increasing flooding.

The failure to develop and implement controls to reduce stormwater pollution to the Maximum Extent Practicable (“MEP”) exacerbates some of the problems we identify as priorities in this letter. For example, poorly controlled stormwater pollution contributes infiltration and inflow to already overburdened sewage treatment systems. Stormwater runoff can contain nitrogen and phosphorus pollutants from fertilizers, pet and yard waste, further increasing nutrient concentrations in local waterways. Stormwater can also carry unsightly trash and other pollutants through municipal storm systems into local waterways. Few NPDES permits for our municipal storm systems include specific requirements and measurable goals to reduce pollutants of concern in § 303(d) or TMDL waters, further hampering efforts to restore impaired waterbodies.

We would like to partner with Region 4 in the development of strategies and programs to more fully protect our waterbodies from this significant source of water pollution and impairment. We believe that necessary water quality improvements and compliance with the Clean Water Act can only be achieved through more rigorous requirements of practices designed to reflect MEP or, where appropriate, the consideration of water quality based effluent limitations.

Enforcement

We ask Region 4 to hold our states accountable for meeting enforcement standards, set clear and consistent performance benchmarks for state programs, and act effectively to curtail inconsistent enforcement by states. NPDES permit limits and TMDLs are only effective if enforced; similarly, state water quality standards and antidegradation policies produce clean water and healthy communities only if they are carefully drawn and actively implemented.

Climate Change and Sea Level Rise

Climate change and sea level rise pose real threats to ecosystems and communities throughout Region 4. Our waterways are ecological and aesthetic jewels with fragile coral reefs, seagrass meadows, mangrove forests, salt marshes, black water swamps, and powerful rivers. Many of these waterways are located in the some of the nation’s largest and fastest growing metropolitan centers or follow the rural backbone of the southeast. Our waters host hundreds of species of fish and dozens of threatened, endangered, or otherwise protected marine, freshwater, or estuarine species such as manatees, sharks, turtles, and dolphins. Region 4 states Alabama and Tennessee lead the nation in freshwater biodiversity. But, there is an inherent tension between the built and natural environments, requiring constant management and vigilance to prevent

declines from threats such as pollution and climate change. In particular, climate change is one of the most complex challenges we face as a region.

Considered ground zero for sea level rise, Miami has the most resources at risk worldwide from rising seas. Since 1996, seas have risen four inches in Miami, and they are continuing to do so at an accelerating rate. Many conventional tools to prevent flooding simply will not work in Miami due to the unique geology, so innovative adaptations must be found and implemented. We believe South Florida, with the help of Region 4, can be at the forefront of finding solutions to protect our communities from this existential threat. Everglades restoration is an essential component to finding comprehensive solutions for recharging South Florida's drinking water supply and reducing coastal flooding risk.

But South Florida isn't experiencing isolated impacts from climate change. The southeastern United States is experiencing more major flood and storm events than ever before which compromise our sewage and drinking water systems. EPA Region 4 must continue to support and invest in sustainable and sea level-rise-ready development -- in particular for power plants and sewage infrastructure, promote the reduction of carbon emissions, use renewable and safe energy resources, and increase natural infrastructure to protect shorelines and rivers.

Our Waterkeeper organizations believe that climate change and resiliency are central to nearly every decision that EPA Region 4 makes. We urge you to take an integrative approach in EPA decision-making that considers climate change and associated impacts.

Conclusion

Thank you for your consideration of our comments. All of us look forward to partnering with you and Region 4 to better achieve the fishable, swimmable water promised by the Clean Water Act. Please do not hesitate to contact us if you have any questions or if you require any additional information. Please consider Savannah Riverkeeper Tonya Bonitatibus (riverkeeper@savannahriverkeeper.org and (706) 826-8891 the primary point of contact.

For Clean Water and Healthy Communities,



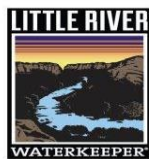
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