

# WHAT COST SHARING IS EQUITABLE WHEN STORMWATER IS THE MAJOR SOURCE OF POLLUTION?

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## Executive Summary

As with all legal matters, an understanding of the legal framework is important when evaluating the equity principles that apply to imposing liability on any person, including a local government. The Falls rules are the only set of rules in North Carolina which impose on local governments the responsibility to reduce nutrient loading from existing development within their respective jurisdictions regardless of the source of the nutrients being discharged.<sup>1</sup> The rule requires a determination of the amount of nutrient loading at the boundaries of the jurisdiction. Accordingly, the classifications of nutrients include natural sources (such as forests), fallow lands, overflows or discharges from stormwater control measures, groundwater recharge burdened with nitrogen from historic land uses, and overflows not controlled by agricultural measures to address nutrient loading. Thus, the rule is unique by imposing on the local governments the obligation to address nutrient loading regardless of who owns the property or whether the Legislature has authorized the local government to regulate the source of the loading.<sup>2</sup>

This rule does not rely on specific legislative authority to impose the legal liability for cleanup of pollutants on the local government because it is the location from which the nutrient loading arises. The historic approach to sources which are naturally occurring or outside the control of the party being assessed is to address the costs from environmental taxes imposed on benefitting users of the resource or the general population of the primary government. i.e. the State.<sup>3</sup>

In its prior work on the readoption of the Falls rules, the N.C. Environmental Finance Center developed a list of existing authorities by which local governments could finance the cost of these remedial efforts.<sup>4</sup> The DWR projected collective cost of the reductions is staggering at more than \$1 billion. Because the requirement is found in the rules of the N.C. Environmental Management Commission, the requirement is enforceable as a part of the stormwater system permit issued to each local government

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<sup>1</sup> 15A N.C.A.C. 2B .0278.

<sup>2</sup> The State's Inactive Hazardous Waste Site Act, at Part 3 of Article 9 of Chapter 130A is one the most aggressive environmental liability laws, and it requires a showing that the person to be assessed costs of remediation contributed to the problems, even if only as a subsequent landowner.

<sup>3</sup> Note: "Why Environmental Liability Regimes in the United States, the European Community, and Japan Have Grown Synonymous With the Polluter Pays Principle," 38 *Vanderbilt Journal Transactional Law* 541, 556 (2005). Eric Larson.

<sup>4</sup> "Paying for Nutrient Reduction and Management," *Jordan Lake Study Final Report to the North General Assembly* December 2019.

in the Falls Lake Basin. As part of a NPDES (National Pollution Discharge Elimination Permit), it can also be enforced by citizen suits pursuant to the federal Clean Water Act.<sup>5</sup>

This research looks more closely at the sources of authority identified by the Environmental Finance Center, and in particular, at the limitations or impediments which arise with each suggested approach for additional sources of revenue to fund the requirements of the current rule. Given the legal limitations on the proposed revenue sources, the researcher concludes that the most effective means to address this fiscal need is by a tax to be levied by the General Assembly on the users of the drinking water supplied from Falls Lake. A primary benefit of the nutrient reductions in Falls Lake is improved quality of the drinking water supply at no cost to the more than 600,000 users of Raleigh Water. As currently applied in setting nutrient loading reductions, the nonpoint source cost allocation scheme is inequitable and should be amended. An equitable means to address this problem, in part, is a tax on the water users who rely upon the waterbody.

## I. The Status Quo

The current Clean Water statutes were adopted before stormwater was regulated under the Federal Clean Water Act.<sup>6</sup> At that time, only wastewater treatment plants and other point source dischargers were regulated. The primary means to implement reductions in nutrient loading are budgets applied through NPDES permits for point sources and Municipal Separate Storm Sewer Systems (“MS4”) permits for regulated stormwater dischargers.<sup>7</sup> Additional restrictions have included agriculture.<sup>8</sup> For some nutrient management strategies, the Environmental Management Commission (“EMC”) has also required MS4 permit holders, i. e. local governments, to reduce the nutrient loading from existing development in addition to controlling new development loading.<sup>9</sup> However, the implementation of the Jordan Lake rule has been suspended by legislation and it is yet to be implemented.

The fiscal note for the Falls rules showed that the reduction of loading from existing development would be a huge expense in the total projected cost of \$1.54 billion, with a cost of \$606.3 million by 2024. It also showed that the drinking water users could avoid advanced treatment technology at the EM Johnson Water Treatment Plant if the water quality improved - a cost avoided of more than \$120 million in construction along with significant annual operating expenses. It also showed that the greater cost for existing development retrofit falls on the Upper Lake basin. The total cost for Existing Development nutrient control was estimated to be \$776 million. With its small footprint in the Falls basin, the City of Raleigh has slight expense to address its part of the existing development retrofit reductions. However, Raleigh was estimated to have avoided costs

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<sup>5</sup> See Public Law 101-4, codifying 33 USC §1342(p).

<sup>6</sup> See Public Law 102-240 (1991).

<sup>7</sup> See e.g. 15A NCAC 2B .0275.

<sup>8</sup> See e.g. 15A NCAC 2B .0280.

<sup>9</sup> See 15A NCAC 2B .0278 of the Falls rules and 15A NCAC 2B .0266 of the Jordan rules.

of \$120 million in capital construction for advanced treatment technology at its EM Johnson Water Treatment Plant and operating and maintenance cost in a range of \$43 million to \$266 million depending on the upgrade selected.

In setting the budget for nutrient reductions, the EMC included numerous sources of nutrients which do not result from loading activities of the local governments. Brown and Caldwell, the consultant to the Upper Neuse River Basin Association, provided estimates of the loading sources for nitrogen and phosphorous in the Falls Lake Basin.<sup>10</sup>

<b>LOADING SOURCES IN THE FALLS BASIN</b>	
Urban Lands	= 15% of Nitrogen and 11% of Phosphorous
Dep't of Transportation	= 3% of Nitrogen and 1% of Phosphorous
WWTPS	= 6% of Nitrogen and 3% of Phosphorous
Onsite	= 2% of Nitrogen and 1% of Phosphorous
Agriculture	= 18% of Nitrogen and 10% of Phosphorous
<b>REGULATED</b>	<b>= 44% of Nitrogen and 26% of Phosphorous</b>
Unmanaged Lands	= 48% of Nitrogen and 55% of Phosphorous
Streambank ERO	= 1% of Nitrogen and 15% of Phosphorous
Dry & Wet to Lake	= 6% of Nitrogen and 3% of Phosphorous
Initial System Mass	= 1% of Nitrogen and 3% of Phosphorous
<b>UNREGULATED</b>	<b>= 56% of Nitrogen and 73% of Phosphorous</b>

In addition, Brown and Caldwell reported that 60% of the watershed is forest, 75% is unmanaged, and 50% of the total nutrient loading impacting the basin is from atmospheric deposition. By the reduction burdens placed on the regulated local governments, the rules substantially overstated the amount of nutrient loading by the sources within the local governments for which the local governments have responsibility. In addition, the nutrient loading budget included groundwater recharge as a source of jurisdiction loading. The resulting budget for nutrient reduction imposes an inequitable burden on the regulated local governments to improve a drinking water supply for a population almost exclusively downstream from the lake.<sup>11</sup>

To date, the existing development reduction loading requirement has been implemented in only Falls Lake, but the two nutrient strategies that rely on such reductions are for impoundments in the Piedmont. Both reservoirs were constructed by the U.S. Army Corps of Engineers and the designated uses of the reservoirs include drinking water supply. When the reservoirs are used as a drinking water supply, there is a substantial

<sup>10</sup> See November 1, 2022 Path Forward Committee presentation for average to wet years.

<sup>11</sup> In the draft "20 – Year Neuse and Tar-Pamlico Nutrient Management Strategy Retrospective: An Analysis of Implementation and Recommendations for Adaptive Management" issued May 16<sup>th</sup>, 2023, DWR proposed reallocation of "forest loading reductions across regulated sources, and local governments would be called on to take on long-term responsibility for making progress on reducing loads from existing developed lands." See page 86.

economic benefit to a local government which is using the reservoir for its drinking water supply. When the benefiting local governments are near the dam for the reservoirs, their responsibility for assisting in the cost of the remedial actions is substantially smaller than the benefit enjoyed from the drinking water supply which is improved in quality by the remedial regulatory scheme. Consequently, the upstream local governments, with limited or no access to the drinking water supply, have a disproportionate cost for implementation of the remedial program. That substantial inequity should be addressed, especially as it arises from the requirement to reduce loading from sources outside the direct control of the upstream local governments.

The State implemented a water supply watershed protection program in 1989.<sup>12</sup> Each reservoir with a nutrient management strategy is located in a water supply watershed; however, watersheds with a reservoir typically include little to none of the jurisdiction of the downstream using the reservoir as a drinking water supply. The users of the protected water supplies do not pay a fee or otherwise support the cost of the water supply watershed protection program despite the benefits derived from the drinking water supply. By imposing a charge on the downstream users to such watersheds, the economic burden will fall on both local governments with lands draining into the reservoirs and the population deriving benefits by improved water quality in their drinking water supply.

The Falls rules rely on N.C. Gen. Stat. § 143B-282(c) and (d), including the decision on how to assign nutrient loading reductions to be achieved.

(c) The Environmental Management Commission shall implement the provisions of subsections (d) and (e) of 33 U.S.C. § 1313 by identifying and prioritizing impaired waters and by developing appropriate total maximum daily loads of pollutants for those impaired waters. The Commission shall incorporate those total maximum daily loads approved by the United States Environmental Protection Agency into its continuing basinwide water quality planning process.

(d) The Environmental Management Commission may adopt rules setting out strategies necessary for assuring that water quality standards are met by any point or nonpoint source or by any category of point or nonpoint sources that is determined by the Commission to be contributing to the water quality impairment. These strategies may include, but are not limited to, additional monitoring, effluent limitations, supplemental standards or classifications, best management practices, protective buffers, schedules of compliance, and the establishment of and delegations to intergovernmental basinwide groups.

N.C. Gen. Stat. §143B-282.

In a related statute on basin planning, the Legislature discussed preparation of a basin plan when nutrient impaired waters are included. The statute provides:

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<sup>12</sup> Chapter 426 of the N.C. Session Laws of 1989.

(b) Each basinwide water resources management plan shall:

(1) Provide that all point sources and nonpoint sources of pollutants jointly share the responsibility of reducing the pollutants in the State's waters in a fair, reasonable, and proportionate manner, using computer modeling and the best science and technology reasonably available and considering future anticipated population growth and economic development.”

N.C. Gen. Stat. §143-215.8B(b).

Because the nutrient strategy for Falls Lake does not regulate all the identified sources which give rise to the nutrient loading, the reallocation of load reduction to the regulated parties, i.e. local governments in particular, is inequitable and questionable with the statutory powers of the EMC. That inequity should be addressed in the next adoption of the Falls Lake nutrient strategy and its implementing rules.

## II. Solid Waste Tax to Address Inequity

A similar historic contamination issue was addressed in the Solid Waste Amendments in 2009.<sup>13</sup> Given the substantial time between the waste disposal and the ordered remedial actions in 2000, it was not practical or possible for the local governments to identify or collect costs of remediation from the users of the landfills, some of which were put in place in the early 20<sup>th</sup> century. However, as a landowner or user of the landfill, the local governments were responsible for cleanup costs under the Inactive Hazardous Waste Sites law. The cost of cleanup for pre-1983<sup>14</sup> local government was significant. Generally, those landfills were constructed before separating wastes to exclude hazardous chemicals and similar contamination was required and before solid waste landfills were required to be lined. The State cleanup laws, like the CERCLA federal laws, were grounded in the Polluter Pays Principle<sup>15</sup>. Consequently, liability for cleanup costs fell on the entities which created and used the landfills for disposal of the contaminated waste. During its comprehensive revision of solid waste disposal laws, the General Assembly amended the law to accept State liability for the cost of remediation of those landfills.<sup>16</sup> To fund those costs, the General Assembly adopted a tax on new shipments of solid waste to landfills.<sup>17</sup> The tax is set at \$2.00 per ton of municipal solid waste and construction and demolition debris. After reduction by the administrative fees set by statute, 50% of the tax proceeds are distributed to pay for the cleanups of such landfills and the remaining 50% is distributed to support education programs on waste stream separation.

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<sup>13</sup> See N.C. Gen. Stat. §130A-310.11; Section 14. of Chapter 550 of the N.C. Session Laws of 2007.

<sup>14</sup> The requirement to use lined landfills to collect the discharges to groundwater were instituted in 1983 for new landfills.

<sup>15</sup> The Polluter Pays Principle is discussed *infra* in the “Conclusion.”

<sup>16</sup> N.C. Gen. Stat. §130A-310.6(c).

<sup>17</sup> N.C. Gen. Stat. §105-187.61.

The Falls local governments now mandated to achieve reductions in nutrient loading from impacted reservoirs typically have established stormwater utilities and derive the funds for reducing nutrient loading with funds from their stormwater fees. Legislation directing the local governments which benefit from the drinking water supply to pay a tax for environmental remediation costs for the impaired drinking water supplies would address the current inequities and expedite the improvement of the water quality of the reservoir. A tax rate of 5% on the monthly bill for water service, including the monthly bill by Raleigh to other local governments contracting for water supply from the reservoir, will raise approximately \$5.5 million annually to apply to the cost of addressing loading from existing development.<sup>18</sup> When applied for the anticipated duration of the remedial efforts to reduce nutrient loading of 50 years, Raleigh would pay approximately \$275 million, or approximately 30% of the forecast cost to address nutrient loading from sources outside the basin.

### **III. Constitutional Provisions**

In its Final Report on Jordan Lake from 2019, the Collaboratory, the EFC reported on potential funding sources for nonpoint sources of nutrient loading. Several provisions of the Constitution of North Carolina require consideration for a closer examination of the potential funding sources identified by the Collaboratory in the Final Report on Jordan Lake from 2019. In particular, the limitations on local acts by the General Assembly in Article II, Section 24 may determine whether enabling legislation can be local or must be statewide. The second important provision is Article V, Section 2 regarding taxation and other forms of raising revenue such as assessments. In light of a recent decision by the Court of Appeals, two other articles relating to the use of public trust waters should also be considered. Article I, Section 38 and Article XIV, Section 5.<sup>19</sup> Finally, the rights of property owners established by the Common Law may present an issue under Article I, Section 19 if the fee or tax imposed will interfere with exercise of rights that run with the property as either a riparian owner or the owner of property relying on ground water beneath their property.

#### **A. Local Acts Limitation**

The local acts limitation requires that certain legislation can only be adopted on a Statewide basis. Although the Constitution addresses local and statewide taxation in Article V, local legislation for addressing the nutrient problems in Falls Lake which extended to a subject other than a revenue generating measure likely would be barred by this limitation.

§ 24. Limitations on local, private, and special legislation.

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<sup>18</sup> The Raleigh City Budget includes anticipated revenues from water sales and related expenses of \$108,998,000 for FY 2022-23.

<sup>19</sup> See *Coastal Conservation Ass'n v. State*, 285 N.C. App. 267, 878 S.E.2d 288 (2022).

**(1) Prohibited subjects.**— The General Assembly shall not enact any local, private, or special act or resolution:

(a) Relating to health, sanitation, and the abatement of nuisances;

N.C. Const. Art. II, § 24

The Supreme Court closely examined this provision as it relates to water and sewer facilities in 2016. The General Assembly had adopted legislation transferring ownership of the water treatment plant owned by the City of Asheville to a metropolitan water and sewer authority. The Court found the legislation was subject to this limitation as its classification was so narrow as to apply only to the City of Asheville, thus it was local legislation. In reaching its decision, the Court set out the test for deciding whether the bill was included within the provision as it was asserted to be limited to the governance of the water treatment plant only.

As a result, in light of the relevant constitutional language and the import of our prior decisions interpreting and applying the prohibition set out in Article II, Section 24 of the North Carolina Constitution, the ultimate issue that we must decide in this case is whether, in light of its stated purpose and practical effect, the legislation has a material, but not exclusive or predominant, connection to issues involving health, sanitation, and the abatement of nuisances.

In view of the fact that "[p]ure water is the very life of a people," *Drysdale*, 195 N.C. at 732, 143 S.E. at 535, and the broad interpretation that this Court has given to Article II, Section 24(1)(a) since *Reed*, we have no hesitation in concluding that the legislation impermissibly relates to health and sanitation.

*City of Asheville v. State*, 369 N.C. 80, 103, 794 S.E.2d 759, 776 (2016).

The fact that the proposed revenue generating classification will apply only to drinking water customers of the City of Raleigh, and other local governments which contract to purchase Falls Lake sourced drinking water from Raleigh, does not mean that it is automatically a local bill as a matter of law. A statewide revenue generating measure can meet the uniformity requirement so long as it applies equally to all persons subject to its provision. When a law "by its terms uniformly operates without discrimination or distinction upon all persons composing the described class, it meets the requirements of the Constitution of North Carolina above referred to. *Hajoca Corp. v. Clayton*, 277 N.C. 560, 178 S.E. 2d 481 (1971)." *In re Appeal of Champion International Corp.*, 74 N.C. App. 639, 646, 329 S.E.2d 691, 695 (1985) [in response to the contention the tax applied only to one party].

In addition, as other nutrient impaired waterbodies have nutrient management strategies adopted by the EMC, the law will apply to the beneficiaries of the improved water quality in the reservoirs should the nutrient management strategy include a provision shifting an inequitable burden on the upstream local governments with no

assistance from the beneficiaries of the improved water quality in providing for improvements to reduce loading from existing development runoff of stormwater. However, legislation that is uses a classification which singles out only one local government to establish a revenue generating measure to address the pollution caused by excess nutrients will likely result in a decision that it is barred by be deemed this Constitutional limitation on local legislation.

The Constitution contains another provision regarding local legislation. It is found in Article XIV Section 3.

§ 3. General laws defined.

Whenever the General Assembly is directed or authorized by this Constitution to enact general laws, or general laws uniformly applicable throughout the State, or general laws uniformly applicable in every county, city and town, and other unit of local government, or in every local court district, no special or local act shall be enacted concerning the subject matter directed or authorized to be accomplished by general or uniformly applicable laws, and every amendment or repeal of any law relating to such subject matter shall also be general and uniform in its effect throughout the State. General laws may be enacted for classes defined by population or other criteria. General laws uniformly applicable throughout the State shall be made applicable without classification or exception in every unit of local government of like kind, such as every county, or every city and town, but need not be made applicable in every unit of local government in the State. General laws uniformly applicable in every county, city and town, and other unit of local government, or in every local court district, shall be made applicable without classification or exception in every unit of local government, or in every local court district, as the case may be. The General Assembly may at any time repeal any special, local, or private act.

N.C. Const. Art. XIV, Sec. 3

The application of this provision has identified another limitation to be considered if the legislation imposes a revenue measure applicable to benefiting users of the drinking water who reside in multiple local governmental units. For example, Raleigh Water has customers residing outside of the seven municipalities which compose the utility by way of inter-local agreements. In addition, some customers reside outside of Wake County.<sup>20</sup>

The Supreme Court has applied this provision *inter alia*, when upholding (1) the Coastal Area Management Act [Article 7 of Chapter 113A of the N.C. Gen. Stat.] and (2) an act designating a beach where driving on the beach was prohibited. In the first of those cases, the Court examined a law that applied to 20 counties instead of all 100 counties in the State. The challengers focused on the failure of the law to be applied in all counties. In the second case, the challengers focused on its application to a single beach in the State. From these two cases, two separate tests for consideration of

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<sup>20</sup> For example, when municipalities, subdivisions, or other developments straddle county lines, inter-local agreements are used to authorize utility lines to provide service from one utility instead of from both utilities. Raleigh has such agreements for service in Durham, Johnston, Franklin and Nash Counties.



challenges under this provision have emerged; the more generally applied “reasonable classification” test and a site-specific test when the reasonable classification test was “ill-suited to the question presented in [that] case, since by definition a particular public pedestrian beach access facility must rest in but one location.” *Town of Emerald Isle v. State*, 320 N.C. 640, 650-651, 360 S.E.2d 756, 762-763 (1987). The Court distinguished the two tests in *Williams v. Blue Cross Blue Shield*, 357 N.C. 170, 184-185, 581 S.E.2d 415, 426 (2003). In *Williams*, the Court struck a local act which authorized only Orange County to adopt a comprehensive civil rights ordinance.

The local taxing power and the assessments authority are examples of revenue generating measures where this issue becomes important. Both are powers that must be authorized by State legislation. Accordingly, the issue arises as to whether “a reasonable classification” exists for the disparate treatment among the counties. It has long been recognized that acts extending powers to local governments must be based upon a reasonable classification if the powers are not extended to all local governments. The failure to comply with that requirement caused a tax provision to be struck in *Hajoca Corp. v. Clayton*, 277 N.C. 560, 178 S.E. 2d 481 (1971) as a delegation of the taxing power that was unequally applied by local governments.

A law is general if “any rational basis reasonably related to the objective of the legislation can be identified which justifies the separation of units of local government into included and excluded categories.” *Adams v. N.C. Dep’t. of Natural & Econ. Res.*, 295 N.C. 683, 691, 249 S.E.2d 402, 407 (1978) (quoting Joseph S. Ferrell, *Local Legislation in the North Carolina General Assembly*, 45 N.C. L. Rev. 340, 391 (1967)).

*Williams v. Blue Cross Blue Shield*, 357 N.C. 170, 184-185, 581 S.E.2d 415, 426 (2003).

## **B. Power of Taxation**

The legislative power to establish fees and taxes at the state or local level is found in the Constitution. The key provision is Article V of the Constitution, in particular in Section 2, paragraph (2) of that Article. Other provisions of the Constitution inform the authority and its scope as it applies to this situation.

(2) Classification.— Only the General Assembly shall have the power to classify property for taxation, which power shall be exercised only on a State-wide basis and shall not be delegated. No class of property shall be taxed except by uniform rule, and every classification shall be made by general law uniformly applicable in every county, city and town, and other unit of local government.

N.C. Const. Art. V, § 2.

The recommendation to establish a tax on drinking water use reflects limitations in the State’s Constitution on the powers of the General Assembly to address the unequal burden created by the environmental regulatory scheme. In its prior analysis for Jordan Lake, the Environmental Finance Center discussed a potential tax on all drinking water

supplied through holders of allocations from Jordan Lake. For Falls Lake, Raleigh has entered into a contract with the US Army Corps of Engineers to pay the costs of storage of the drinking water pool for Falls Lake. The tax will be paid into a fund to pay for the award of grants to local governments, subject to a nutrient management strategy in the basin, for projects to reduce loading from existing development in the water supply watershed.

The Courts have established a set of tests for tax legislation to assure its compliance with the limits in the Constitution. The tax must be used for a “public purpose”; be uniformly applied within the classification of taxpayers; and be based on a classification based on reasonable, and not arbitrary distinctions.

The public purpose requirement for taxation is set forth in Article V, Section 1 of the Constitution. The requirement to improve water quality so as to meet the designated uses for a water body is required by the Federal Clean Water Act.<sup>21</sup> The EMC is directed to implement the program for NC waters of the State.<sup>22</sup> The EMC does not have the power to adopt taxes or to otherwise mandate that local governments, or other regulated persons, establish or contribute to grant programs to assist with the restoration of water quality to meet the designated uses. However, the policy of the State is to protect and restore the waters of the State. NC. Gen. Stat. § 143-211.

**§ 143-211. Declaration of public policy.**

(a) It is hereby declared to be the public policy of this State to provide for the conservation of its water and air resources. Furthermore, it is the intent of the General Assembly, within the context of this Article and Articles 21A and 21B of this Chapter, to achieve and to maintain for the citizens of the State a total environment of superior quality. Recognizing that the water and air resources of the State belong to the people, the General Assembly affirms the State's ultimate responsibility for the preservation and development of these resources in the best interest of all its citizens and declares the prudent utilization of these resources to be essential to the general welfare.

The Constitution also includes provisions establishing that the protection and enhancement of the waters of the State is a public purpose. See N.C. Constitution Article XIV, Section 5 [“It shall be the policy of this State to conserve and protect its land and waters for the benefit of all its citizenry, and to this end it shall be a proper function of the State of North Carolina . . . to control and limit the pollution of our air and water . . .”). Legislation to address the problems arising from pollution has long been acknowledged to meet the public purpose requirement.

Beyond any doubt air and water pollution have become two of modern society's most urgent problems, and noise pollution is likewise a major modern evil. Such pollution knows no boundaries, for it cannot be contained in the area where it occurs. 61 Am. Jur. 2d, *Pollution Control*, §§ 19-30, 53-60, 100 (1972). Regardless of where it occurs, the

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<sup>21</sup> 33 USC § 1313.

<sup>22</sup> NC Gen. Stat. § 143B-282(c) and (d).

abatement and control of environmental pollution are immediately necessary to the public health, safety, and general welfare; and, in the exercise of the State's police power, the legislature has plenary authority to abate and control pollution of all kinds. *Taylor v. Racing Asso.*, 241 N.C. 80, 93, 84 S.E. 2d 390, 400 (1954). See also *Shelby v. Power Co.*, 155 N.C. 196, 71 S.E. 218 (1911); *Durham v. Cotton Mills*, 141 N.C. 615, 54 S.E. 453 (1906); 61 Am. Jur. 2d *Pollution Control*, § 69 (1972). For examples of the legislature's exercise of the State's police power to control pollution see, *inter alia*, the following statutes: N.C. Gen. Stats. ch. 143, Art. 21 (Supp. 3C, 1971); ch. 130, Art. 13 (1964), *as amended*, (Supp. 3B 1971); ch. 113A (Supp. 3A 1971); G.S. 14-382 (1919); G.S. 20-128 (1937); G.S. 20-128.1 (1971); G.S. 75A-6(O) (1971); G.S. 75A-10(c) (1965); G.S. 113-265 (1971); G.S. 160A-185 (1971); G.S. 160A-193 (1971).

*Stanley v. Department of Conservation & Dev.*, 284 N.C. 15, 36-37, 199 S.E.2d 641-655-656 (1973)

A tax based on the volume of usage of the drinking water applied to all consumers of the drinking water supplied by Falls Lake, and similar impoundments, will be uniform. The associated question with this aspect of the analysis is whether the classification of the benefiting persons is reasonable.

The power of local governments to make assessments for public improvements is a part of the sovereign right of taxation; however, the assessment power must meet the same public purpose test applicable to other forms of taxation.<sup>23</sup> The assessment authority of counties is set forth in N.C. Gen. Stat. §153A-185. Pursuant to (3) b. of the statute, assessments may be made for watershed improvement projects. This further demonstrates that taxation of persons who are benefitted by watershed improvement projects is for an authorized public purpose.<sup>24</sup>

Limited exceptions to the requirement to raise monies for public purposes in accordance with the limitations in Article V, Section 2 of the Constitution have been found lawful. "We held in *Sanderlin v. Luken*, 152 N.C. 738, 68 S.E. 225, that drainage district assessments are not taxes." *Northampton County Drainage Dist. Number One v. Bailey*, 326 N.C. 742, 751, 392 S.E.2d 352, 358 (1990). However, none of those exceptions is useful in this situation. The most relevant may be the power to raise monies established in drainage districts. Drainage districts have a long history as a power to use public funding within a defined area to alter the natural drainage system so as to make lands useful for agriculture and to establish drainage canals for transportation and removal of water from wetlands. This purpose has the opposite impact on water quality as the restoration of land to store and slowly drain stormwater. The modification of drainage districts to this purpose is inconsistent with the recognized and accepted purpose for establishment of a drainage district.

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<sup>23</sup> *City of Durham v. Durham Pub. Serv. Co.*, 182 N.C. 333, 109 S.E. 40, (1921)), *aff'd*, 261 U.S. 149, 43 S. Ct. 290, 67 L. Ed. 580, (1923).

<sup>24</sup> See *Parker v. New Hanover County*, 173 N.C. App. 644, 654-659, 619 S.E.2d 868 (2005).

The proposed tax provision must also be examined regarding the reasonableness of the classification. For this issue, the Courts have accorded "wide latitude" to the Legislature. The legislative classification "must be founded upon reasonable, and not arbitrary distinctions." *In re Champion International Corp.*, 74 N.C. App. 639, 645, 329 S.E. 2d 691, 694, *appeal dismissed*, 314 N.C. 540, 335 S.E. 2d 15 (1985). In the judicial review, the court may find the classification valid if supported by justifiable reasoning. The justifiable reasoning can be shown by resort to common knowledge of subjects which pertain to the subject of the classification.<sup>25</sup>

The court upheld a license fee imposed on the operators of ocean fishing piers with the coastal fishing waters. The statute imposing the fee also afforded the operator with an exclusive 750-foot zone where other commercial and recreational fishing is prohibited, with the exception of surf casting. Since neither the license nor the exclusive fishing zone was provided to piers over interior waters, the court upheld the license requirement.

In light of the foregoing authorities, we hold that N.C. Gen. Stat. 113-156.1 satisfies the requirements of uniformity, equal protection and due process under both the state and federal constitutions. *Realty Corp.*, *supra*, 291 N.C. at 617, 231 S.E. 2d at 661-62. The statute applies equally to "[e]very manager of an ocean fishing pier within the coastal fishing waters who charges the public a fee to fish in any manner from the pier . . ." N.C. Gen. Stat. 113-156.1. Given N.C. Gen. Stat. 113-185(a), which affords the operators of such piers the opportunity to establish an exclusive 750 foot zone within which other commercial and recreational fishing is prohibited (with the exception of surf casting), to require a license for managers of ocean piers only is a wholly reasonable classification. N.C. Gen. Stat. 113-185(a) does not apply to piers over interior waters such as sounds and rivers. The opportunity to establish an exclusive zone around ocean piers, and the cost to the State of enforcing this zone, distinguish ocean piers from other piers and provide reasonable grounds for their separate license tax classification.

*State v. Rippy*, 80 N.C. App. 232, 235, 341 S.E.2d 98, 100 (1986).

With these Constitutional and public policies in mind, the following section of this report examines the alternative sources of raising funds to address the inequities created the EMC's decision to assign the responsibility for non point sources of nutrient loading to the local governments without power to regulate more than half of the sources.

## **IV. Alternatives for Raising Funds to Address Non-point Existing Development Loading**

### **A. Withdrawal Permit Fees**

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<sup>25</sup> *Snyder v. Maxwell, Comr. of Revenue*, 217 N.C. 617, 620, 9 S.E. 2d 19, 21 (1940).

While North Carolina is generally recognized as a Common Law riparian rights state, the riparian rights have been codified regarding impoundments, in particular federally created impoundments, and the Common Law is not applicable.<sup>26</sup> Those statutes are found in Parts 4 and 5 of Article 21 of Chapter 143 of the General Statutes. Part 4 provides for the entry of contractual agreements by the State and local governments with the Federal government for civil works projects involving rivers and harbors, flood control and other civil works projects. The legislation expressly declares public policy regarding such expenditures.

To this end, it is also hereby declared that within the meaning of the North Carolina Constitution expenditures for such projects and obligations incurred for such projects are for public purposes, that county and municipal and other local government expenditures and obligations incurred therefor are necessary expenses, and that county expenditures therefor are for special purposes for which the special approval of the General Assembly is hereby given.

N.C. Gen. Stat. §143-215.39

Part 5 addresses the use of waters from impoundments. It includes this important change in the Common Law.

§ 143-215.49. Right of withdrawal for use in community water supply. A person operating a municipal, county, community or other local water distribution or supply system and having a right of withdrawal may assert that right when its withdrawal is for use in any such water system as well as in other circumstances.

N.C. Gen. Stat. §143-215.49.

This statute is an exception to the prior Supreme Court ruling that local governments had no priority in access to waters of the State for use as a drinking water supply.<sup>27</sup>

Two means of securing the right to withdraw from impoundments are established - direct contractual rights or a right from the State for water held by the State in its contractual relationship with the impounding party. For Falls Lake, the right to withdraw is incidental to the contract between the City of Raleigh and the Corps of Engineers. The City's payments are for the cost of providing storage for the water supply pool within the Lake. The City is authorized to withdraw the water in the water supply pool and thus relies on the impoundment statute. For Jordan Lake, the State entered into the agreement with the Corps of Engineers to establish and maintain the water supply pool. The local governments holding the right of withdraw obtain the rights by assignment from the State.<sup>28</sup>

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<sup>26</sup> "Where Will You Go When the Well Runs Dry? Local Government Ownership and Water Allocation in North Carolina," *32 Campbell Law Review* 51 (2009) Daniel F. McLawhorn.

<sup>27</sup> See *Pernell v Henderson*, 220 N.C. 79, 80, 16 S.E.2d 449, 450 (1924).

<sup>28</sup> See N.C. Gen. Stat. § §143-215.45 and 143-354(a)(11).

These statutory rights to withdraw do not address the issue of whether a fee, a tax, or other revenue strategy can be applied without interfering with the existing contract rights. However, the Constitution includes an express prohibition on the taxation of property owned by local governments.

(3) *Exemptions.*— Property belonging to the State, counties, and municipal corporations shall be exempt from taxation.

N.C. Const. Art. V, § 2.

Water service provided by a local government includes the sale of water. To engage in that proprietary function, the courts likely will find that water obtained by local governments under these statutes and contracts is owned by the local government.<sup>29</sup> Accordingly, a tax by the State on withdrawal of water provided to a local government pursuant to a contract with the impounding owner of the reservoirs is unlikely to be upheld.<sup>30</sup> A permit to withdraw the water from an impoundment raises an additional issue — whether it interferes with an existing contract between the local water government utility and the owner of the impounded water.

Our courts have examined fees and taxes as separate means of raising revenue. Generally, fees are imposed to defray the cost of government programs related for which the fee is imposed.<sup>31</sup> The Courts explained the difference between taxes and fees. “A tax within the meaning of the constitutional prohibition against nonuniformity of taxation is a charge levied and collected as a contribution to the maintenance of the general government, and it is imposed upon the citizens in common at regularly recurring periods for the purpose of providing a continuous revenue.” *State ex rel. Utilities Comm’n v. Carolina Util. Customers Ass’n.*, 336 N.C. 657, 682-683, 446 S.E.2d 332, 347 (1994) [quoting from *State ex rel. Dorothea Dix Hospital v. Davis*, 292 N.C. 147, 232 S.E. 2d 698 (1977)]; *Barnhill Sanitation Service v. Gaston County*, 87 N.C. App. 532, 541-542, 362 S.E.2d 161, 167 (1987), *disc. rev. denied*, 321 N.C. 742, 366 S.E.2d 856 (1988); *Stafford v. County of Bladen*, 163 N.C. App. 149, 154-155, 592 S.E.2d 711, 715 (2004). Because the proposed withdrawal fee would not be related to the cost of implementing the regulatory program, it would likely be deemed by the courts to be an unconstitutional tax imposed on the property of local governments. These limitations make it difficult, if not impossible, for legislation to establish a fee to be imposed on the local governments for withdrawal of water from impoundments.

## **B. Local Tax District for Watershed Improvement**

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<sup>29</sup> See *Mulberry-Fairplains Water Assn. v. Town of North Wilkesboro*, 105 N.C. App. 258, 264-65, 412 S.E.2d 910, 914-15, *disc. review denied*, 332 N.C. 148, 419 S.E.2d 573 (1992); *Jones v Town of Angier*, 181 N.C. App. 121, 124-125, 638 S.E.2d 607, 608-610 (2007).

<sup>30</sup> See *In re Appeal of University of North Carolina*, 300 N.C. 563, 268 S.E.2d 472, (1980).

<sup>31</sup> See e.g. N.C. Gen. Stat. §160D-402(d) for development related fees; N.C. Gen. Stat. §160A-314 for water and sewer user fees.

The Constitution also includes a clause by which the General Assembly may authorize special tax districts. This clause is the source of two separate statutory schemes that allow municipalities and counties to establish special purpose tax districts.

“(4) *Special tax areas.*— Subject to the limitations imposed by Section 4, the General Assembly may enact general laws authorizing the governing body of any county, city, or town to define territorial areas and to levy taxes within those areas, in addition to those levied throughout the county, city, or town, in order to finance, provide, or maintain services, facilities, and functions in addition to or to a greater extent than those financed, provided, or maintained for the entire county, city, or town.”

N.C. Const. Art. V, § 2

The Environmental Finance Center called attention to a provision in Chapter 139 of the General Statutes which creates Soil and Water Conservation Districts. The statute authorizes counties to impose a property tax for watershed improvement within designated watersheds to accomplish the authorized purposes for the watershed improvement.<sup>32</sup> The scope of authorized watershed improvement projects appears to include a project to reduce nutrient loading adversely impacting a water supply.<sup>33</sup> The counties are afforded flexibility in the designations of the watersheds, and thus the properties subject to taxation to support the program, which will allow the county to avoid applying a tax to an area where the properties will be receiving no potential benefit value from the tax.

It is the intention of the General Assembly that such powers shall normally be exercised within all or parts of one or more single watersheds, or of two or more watersheds tributary to one of the major drainage basins of the State, but exceptions to this policy may be permitted in appropriate cases; provided, however, it is not the intention of the General Assembly to authorize hereby the diversion of water from one stream or watershed to another.

N.C. Gen. Stat. §139-41(a).

Local governments are also authorized to combine efforts to achieve the purpose of the local service district as well as to include industry or private water utilities in the district.<sup>34</sup>

However, two potential issues of concern arise. First, the tax is applied to property and must be applied uniformly to properties in the watershed. With a purpose of addressing nutrient loading and its adverse impact on the quality of drinking water, equity issues arise for property owners who do not rely on the drinking water supplied from a

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<sup>32</sup> See N.C. Gen. Stat. § 139-39.

<sup>33</sup> See N.C. Gen. Stat. §139-3. “(17) A “watershed improvement project” means a project of watershed improvement (whether involving flood prevention, drainage improvement, water supply, soil and water conservation, recreation facilities, fish and wildlife habitat, or other related purposes, singly or in combination) . . .”

<sup>34</sup> See N.C. Gen. Stat. §139-48.

reservoir such as Falls Lake. Secondly, the plans for the improvement must be approved by the local Soil and Water Conservation Board. In its review, the Board must find:

(b) The Soil and Water Conservation Commission shall approve a watershed work plan if, in its judgment, it:

- (1) Provides for proper and safe construction of proposed works of improvement;
- (2) Shows that the construction and operation of the proposed works of improvement (in conjunction with other such works and related structures of the district and the watershed) will not appreciably diminish the flow of useful water that would otherwise be available to existing downstream water users during critical periods;
- (3) Determines whether a program of floodplain management in connection with such proposed works is in the public interest, and the Soil and Water Conservation Commission may withhold approval until satisfactory floodplain management measures are incorporated; and
- (4) Is otherwise in compliance with law.

N.C. Gen. Stat. § 139-41.2

There is a tension between the duty of the Soil and Water Conservation Commission to find that the improvements “will not appreciably diminish the flow of useful water” to downstream users and the primary means to control nutrient loading from by stormwater which are retention for groundwater absorption or slow release to retain nutrients in the stormwater control measures. As the EFC noted, there is no known example of that taxing power having been exercised.

The second legislative program with potential application is the municipal and county service district program authorized N.C. Gen. Stat. Chapter 160A, Article 23 and Chapter 153A, Article 16. The purposes of such districts include water improvement districts.<sup>35</sup> The districts are created by the local governments and may be tailored to fit the watershed rather than having to include all properties in the local government. In municipalities, property owners may be excluded from the service district upon “[I]f the city council finds that the tract or parcel is not in need of the services, facilities, or functions of the proposed district to a demonstrably greater extent than the remainder of the city, the city council may exclude the tract or parcel from the proposed district.” N.C. Gen. Stat. §160A-537(c1). Property within a county service district is removed only if 100% of the residents petition for removal and the county finds the services are no longer needed.<sup>36</sup> N.C. Gen. Stat. §153A-303.1. Property within the corporate limits of a municipality is excluded from service districts in the county.<sup>37</sup>

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<sup>35</sup> N.C. Gen. Stat. § § 160A-536(a)(5); 153A-301(a)(8).

<sup>36</sup> N.C. Gen. Stat. § § 160A-536(a)(5); 153A-301(a)(8).

<sup>37</sup> N.C. Gen. Stat. §153A-302(4).



As with the Watershed Improvement District, a separate property tax is established to pay for the cost of the service district.<sup>38</sup> The tax includes all property owners within the service district, unless removed by decision of the municipal governing body. This legislation has similar limitations as the Watershed Improvement Tax. Both must be authorized by each local government separately. Both tax property owners regardless of use of the water supply being protected. A very limited ability to avoid the taxation exists despite the fact that the improved quality of the water supply only has direct benefits for users of the water supply. The municipal exclusion upon petition is done by each individual property owner. The tax is not applicable to users of the water who are not property owners.

### C. Assessment Power

Local governments also have the power to assess costs to property owners. Like the two forms of taxation available at the local level to protect and improve watershed protection, no legislation was found where a State agency has been authorized to exercise the assessment power.<sup>39</sup> Instead, the authority to impose assessments has been exercised by local governments, including municipalities<sup>40</sup>, counties, drainage districts, sanitary districts, and water and sewer authorities<sup>41</sup>. The assessment power is applied against the “benefited property within the” jurisdiction imposing the assessment. Assessments can be for all or any part of the costs of the project. The county power is found in N.C. Gen. Stat. §153A-185(3)b. which reads: “(3) Acquiring, constructing, reconstructing, extending, renovating, enlarging, maintaining, operating, or otherwise building or improving . . . b. Watershed improvement projects, drainage projects and water resources development projects (as those projects are defined in G.S. 153A-301).” Because the county assessment authority expressly includes the watershed improvement projects, it is doubtful that a watershed improvement assessment by a municipality would be upheld by the appellate courts.<sup>42</sup>

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<sup>38</sup> N.C. Gen. Stat. § § 160A-542; 153A-307.

<sup>39</sup> See “Levying Special Assessments to Fund Public Infrastructure” by Kara Millonzi, Coates’ Canons of Local Government Law, published November 11, 2014.

<sup>40</sup> The municipal statute is N.C. Gen. Stat. §160A-216. It does not include the authority to make assessments for watershed improvement projects. However, it does include that authority to make assessments to improve water systems and storm sewer and drainage systems.

<sup>41</sup> While the statute for water and sewer authorities does not include the authority to make assessments for watershed improvement projects. However, it does include the power to make assessments for improvements to water systems. N.C. Gen. Stat. §162A-6(a)(14a).

<sup>42</sup> “Though the enabling statutes allow municipalities to charge for “services furnished,” unlike similar county water and sewer district enabling statutes, the language at issue here fails to authorize Carthage to charge for services “to be furnished.” See *McNeill v. Harnett County*, 327 N.C. 552, 570, 398 S.E.2d 475, 485 (1990) (holding that the latter part of the enabling phrase “services furnished or to be furnished,” N.C.G.S. § 162A-88 (1987) (emphasis [\*\*\*10] added) (governing county water and sewer districts), plainly allowed the charge for prospective services, which are “not limited to the financing of maintenance and improvements of existing customers”). *Quality Built Homes, Inc. v. Town of Carthage*, 369 N.C. 15, 20, 789 S.E. 2d 454, 458 (2016).

The assessment will be applied to the property owners, not the direct beneficiaries of the watershed improvement, i.e. the consumers of the water supply. To implement a project in multiple counties, each county would have to impose an assessment. To the extent an assessment power exists in municipalities, it is questionable whether a municipality receiving water service from Raleigh has assigned to Raleigh the authority to collect assessments from the property owners receiving service from Raleigh Water.

Finally, the assessment power is treated as a part of taxation in several respects. It must meet the public purpose test. This will be problematic if the assessment is applied to property which does not receive any benefit from the watershed protection, e.g. groundwater users or consumers who receive water supply from another watershed. The classification must be justified. The allocation of cost burden must be reasonable. The assessment statutes also require consideration of factors such the distance from the water course or the distance from the project. See N.C. Gen. Stat. §153A-186(c). In addition, the implementation of the special assessment statutes involves a series of procedures including individual notification of each property holder to be assessed. The justification of the amount of the assessment for various classifications of property owners can also be complex and has resulted in challenges to classifications. Professor Millonzi of the UNC School of Government provides a closer examination of the difficulties in using this tool. Collectively, these difficulties make assessments an unrealistic option for addressing the inequities.

## **V. TAX ON DRINKING WATER USAGE TO BALANCE INEQUITY**

The General Assembly has adopted several taxation provisions to address inequities that arise from the otherwise applicable laws regarding the liability to remediate existing impacts harmful to natural resources. Earlier, the tax to collect funds to use for the remediation of past unlined solid waste landfills was discussed. That tax is statewide, but it applies only to the current users of solid waste landfills in North Carolina. The tax is collected from local governments and others who deliver solid waste to existing landfills. Other programs which have used such a tax include the dry-cleaning solvents cleanup program<sup>43</sup>, the disposal of scrap tires<sup>44</sup>, and the disposal of white goods.<sup>45</sup>

This proposal will apply to basins in which the regulatory program for addressing the water quality standards not meeting the EMC established criteria for protecting the designated uses requires reductions in loading of the pollutant of concern which cannot be achieved without reductions in loading from existing development at the time the regulatory program was adopted. The basis of this proposal is the substantial benefit provided to the consumers of the drinking water supplied from reservoirs, such as Falls Lake, in which the regulatory program requires reductions of pollutant loading from existing development. Currently, the approximate number of consumers using the

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<sup>43</sup> N.C. Gen. Stat. § 143-215.0104A et seq.

<sup>44</sup> N.C. Gen. Stat. § 130A-309.51 et seq.

<sup>45</sup> N.C. Gen. Stat. § 130A-309.80 et seq.

drinking water supplied from Falls Lake exceeds 600,000. In 2019, Raleigh added 22 million gallons a day to its existing contract for water supply from Falls Lake. The City considers that additional supply sufficient to meet its needs, along with its much smaller supply from Swift Creek, to meet its needs until 2047.<sup>46</sup> The current projections by the UNRBA modeling efforts show that continued reductions in nutrient loading from existing development will be required to achieve the water quality standard for chlorophyll-a during that period of time.

The Fiscal Note for the implementation of the Falls Lake rules shows that the cost to address loading from existing development in place by 2006 will cost \$606.3 million by 2024. The proposed tax will generate approximately \$5.5 million per year based on 2022 sales of treated water to the customers of Raleigh. The plan to bring the reservoir into compliance with the water quality standard for chlorophyll-a is estimated to take at least 50 years.

Like the solid waste tax, this tax will most efficiently be collected by the utilities supplying water. The alternatives discussed earlier for local taxes have two primary impediments; the tax can only be collected from property owners and the tax can only be collected from designated properties within the jurisdiction of the local government. In the Falls Lake instance, the consumers of the drinking water supply from Falls Lake are in five counties and at least nine municipalities. For other large utilities, the customers will likely reside in multiple local governments.

The Department of Revenue will collect the tax proceeds from the local governments and disburse the funds to the Division of Water Infrastructure for use by local governments in the basin as grants (1) from the Local Assistance for Stormwater Infrastructure Investments Program; (2) to purchase lands for conservation of existing forested properties important to the future water quality of the reservoir; and (3) to provide assistance to low income customers in an amount not to exceed the cost of this tax. The Division will maintain a separate account for each basin subject to the tax. The Division may reserve funds to reimburse its expenses for implementation of the program, but not to exceed 10% of the tax proceeds for the cost of administering the program in each reservoir. In watersheds with a coalition program approved by the EMC pursuant to N.C. Gen. Stat. §143-214.14, the coalition may make application for grants to provide for the needs of the members of the coalition as determined by the coalition. Such funds will be administered in accordance with the five-year workplans of the coalition for stormwater improvements and for acquisition of existing forested areas important to the future water quality of the reservoir.

A local government collecting the tax which has water supplied from more than one basin eligible for funding from this program may make application for grants to reduce loading from existing development in the other basins, so long as the grant does not exceed the *pro rata* share of the tax collected from water supplied by the other basins. If the local government collecting the tax does not have another basin eligible for funding,

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<sup>46</sup> Raleigh currently uses approximately 50% of its water supply from Falls Lake. The City forecasts that it will need its full water supply resources as early as 2047.

then all taxes collected shall be used to fund the eligible basin. A local government grant to provide financial assistance to low-income customers shall not exceed 15% of the total amount of tax collected by the local government.

## CONCLUSION

The Polluter Pays Principle (“PPP”) was established as an economic principle to prevent governments from establishing dominance by discounting production costs otherwise necessary to avoid pollution of the environment. Pursuant to the PPP, damages are required to be paid by the polluting government. The PPP originated in the early 20<sup>th</sup> century as an economic principle. As nations began to adopt more rigorous environmental law such as the Clean Water Act, PPP became an underlying philosophy used to craft those regulatory schemes.

According to the polluter-pays principle, governments should require polluting entities to bear the costs of their pollution rather than impose those costs on others or on the environment. Economic development, in short, should not come at the expense of social development, natural resources protection or even other types of economic development. Use of the polluter-pays principle should thus result in greater efficiency. The polluter-pays principle also would prevent the involuntary wealth redistribution that occurs when some benefit at the expense of others.

“Article: Furtive Subsidies: Reframing Fossil Fuel’s Regulatory Exceptionalism,” 35 *Va. Env’tl. L. J.* 420, 426. Patrice L. Simms. [Emphasis Applied]

The complexity of the history of nutrient loading and the sources of loading from outside the basin makes it a good alternate example of a practical problem recognized with the PPP.

Second, because liability is allocated after environmental harm is noticeable or rises to the level of a legally cognizable injury, a long period of time lapses and tracing fault becomes difficult. For example, it has proven very difficult to assign liability from massive deforestation due to acid rain, from multiple sources of air pollution and particulate matter (including hybrid pollution effects from the automotive industry, end-users, and coal fired power plants). Allocating liability to parties and determining an appropriate extent is almost impossible in such a complex scenario. Moreover, with respect to greenhouse gas production, it is impossible to relate the cost of the resulting harm to a specific polluter, further complicating the causation analysis.

“Article: Analyzing the Polluter Pays Principle Through Law and Economics,” 18 *Southeastern Env’tl. L. J.*, 39, 59-59. [Citations Omitted]

As indicated, the PPP is intended to apply to the sources of the contamination, and it does not include reapportionment of the loading from sources which are not subject to regulation. For sources which are excluded from liability or part of the natural resources of the basin, the cost of the remediation has traditionally been borne by the general

public by taxes.<sup>47</sup> In the Falls Lake rules, the EMC expanded the scope of the pollutants to be addressed. It included nutrients generated outside of the local governments to which it assigned a duty to clean up that additional nutrient loading. This inequity was established in reliance on the provisions of the federal Clean Water Act. It is an inequity that has been discussed by legal scholars.

## 2. Try to Place the Burden on the Polluter or Beneficiary, Even If Imperfectly

A second proposition is that the burden for adaptation measures should fall, as much as possible, on the polluters who contribute to the need for adaptation and/or are the beneficiaries of adaptation. As discussed below, and as others have concluded, it can be difficult to precisely match polluters or beneficiaries with the adaptation problems. The need for adaptation in large part arises from the polluters of the past, many now long gone and who were spread around the globe.

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Linking the adaptation payment obligation, where possible, to a class of polluters or beneficiaries is likely to mean that the tax base (what is being taxed) will bear environmentally related features. If the polluters are paying for adaptation, the tax should be keyed to the polluting activities. If the beneficiaries are paying for the value they receive from the adaptation activity, the payment is likely to be based on an inherently environmental benefit.

“Article: Storms Ahead: Climate Change Adaptation Calls for Resilient Funding,” 39 *Vt. L. Rev.* 819- 845-846. Janet L. Milne.

The concept of beneficiaries paying a tax to assist with the pollutant loading from sources not subject to the regulatory powers of the EMC has merit in the Falls Lake nutrient strategy. The beneficiaries are avoiding a significant cost to clean the raw drinking water before distribution to the users of the water.

As discussed above, other tax powers now available are inadequate and generally dependent on the beneficiaries agreeing to tax themselves. In addition, none of the identified local tax statutes allow the public water supply utility to seek contribution for the cost, or the resulting value, from persons non-resident in the jurisdiction. The concepts outlined above will address the inequity now in place and provide a source of nutrient reduction that compensates for at least part of the value the downstream local governments receive from the reduction of these sources of pollution which do not arise

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<sup>47</sup> “The wider natural environment has traditionally been considered a "public good" for which society in general should remain responsible, rather than a resource that individual parties should bear the responsibility for maintaining. The introduction of strict liability under the polluter pays principle for polluters of the environment, as proposed in the White Paper, is expected to generate more preventative and cautious conduct on the part of economic actors concerning the unprotected environment.” 38 *Vand. J. Transnational Law* at 556.

in the upstream local governments, but from the general population of the State.