Exploring Options for Debt Financing Distributed Infrastructure: A Preliminary Investigation for Tampa Bay Water
About the Environmental Finance Center

The Environmental Finance Center at the University of North Carolina at Chapel Hill is part of a network of university-based centers that work on environmental issues, including water resources, solid waste management, energy, and land conservation. The EFC at UNC partners with organizations across the United States to assist communities, provide training and policy analysis services, and disseminate tools and research on a variety of environmental finance and policy topics.

The Environmental Finance Center at the University of North Carolina at Chapel Hill is dedicated to enhancing the ability of governments to provide environmental programs and services in fair, effective, and financially sustainable ways.

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# TABLE OF CONTENTS

Table of Contents

EXECUTIVE SUMMARY .................................................................................................................. 3

I. INTRODUCTION .......................................................................................................................... 5
  Tampa Bay Water .............................................................................................................................. 5
  Distributed Infrastructure .............................................................................................................. 6

II. SUMMARY OF TAMPA BAY WATER’S LEGAL FRAMEWORK ........................................... 7
  Overview ...................................................................................................................................... 7
  Florida Constitution Gift Clause – Article VII, §10 ........................................................................ 7
  Regional Water Supply Authorities – Florida Statutes §373.713 .................................................. 9
  West Coast Regional Water Supply Authority – Florida Statutes §373.715 ............................... 10
  Florida Interlocal Cooperation Act of 1969 – Florida Statutes §163.01 ........................................ 11
  Revenue Bond Act of 1953 – Florida Statutes §159, Part I ......................................................... 11
  Florida Industrial Development Financing Act – Florida Statutes §159, Part II ......................... 12
  1998 Interlocal Agreement for Tampa Bay Water ....................................................................... 13

III. CURRENT LIMITATIONS ......................................................................................................... 15
  Limited Definitions for What Projects May Be Funded with Bonds ............................................ 15
  Paying Bonds Through Uniform Member Rates ......................................................................... 16
  Recommended Modifications ....................................................................................................... 17

IV. LESSONS FROM OTHER STATES AND OTHER SECTORS .................................................. 20
  Judicial Interpretation of Conservation Measures as Producing Supply .................................. 20
  PACE financing (Fla. Stat. §163.08) ............................................................................................ 20
  Other Entities Utilizing Bond Financing of Distributed Assets .................................................... 22

V. ACCOUNTING ISSUES ............................................................................................................ 24
  Compliance with GAAP ............................................................................................................... 24

VI. TAX CONCERNS .................................................................................................................... 25

VII. FINDINGS AND CONCLUSIONS ......................................................................................... 26
  Experts Consulted ....................................................................................................................... 27
  Endnotes ..................................................................................................................................... 28
EXECUTIVE SUMMARY

This study investigates the concept of investing in distributed infrastructure by using publicly issued debt as a cost effective method of water resource management and specifically focuses on whether such a funding option is prohibited in insurmountable ways in Florida (e.g. in violation of state constitution or general law). For the purposes of this study, “distributed infrastructure” embodies “improvements, devices, and technologies installed at diffused properties that enhance a utility system by reducing the need for expanding the utility system or the scale of expansion needed.” Additionally, this study touches on the potential accounting or tax issues that may arise if utilizing this funding approach. Under Florida Law, this approach has been recently codified and greatly expanded in the energy sector, but is still in the early phases in the water sector.

Although this study was initially driven by the question of whether Tampa Bay Water, a regional water supply authority, could utilize debt funding to finance distributed infrastructure on a regional scale for its member governments, some of the statutes which govern bond financing for regional water supply authorities also govern bond financing by local government entities, including counties and cities. Therefore, an individual member government, interested in utilizing bond financing for its own distributed infrastructure program can benefit from the analysis of such statutes.

The different legislation in Florida, which authorizes debt financing, includes definitions of “acceptable projects” which do not explicitly include distributed infrastructure. While some of the language could possibly be “interpreted” to include distributed infrastructure, it is recommended that if Tampa Bay Water or other utilities are interested in debt financing, they should pursue legislation expressly authorizing it. This has already been done in the energy sector and could be done with a few strategic language modifications in different existing debt authorization statutes.

Given that governmental accounting is based primarily on the assumption public funds are used for publicly owned assets, it is not surprising questions arise about how to account for capital investments in distributed infrastructure. Utilities and several non-governmental agencies interested in distributed assets have investigated this limitation and early evidence suggests the existing accounting/reporting framework can address these investments. Scenarios using this framework to account for water conservation and efficiency programs have been reviewed and approved by Governmental Accounting Standards Board (GASB) staff.

Utilities interested in using debt financing will also have to be aware of potential tax implications of this type of project. Since distributed infrastructure may be on private land, owned by private individuals and providing some private benefit – the tax deductibility of the bonds used to finance the infrastructure will have to be carefully examined by bond counsel. It is also possible the utility may have to report the value of the projects to individuals as income – something currently being debated nationally and which is also an issue for non-debt funded distributed infrastructure payments.
This study was put together to identify funding options for local and regional distributed infrastructure programs, and it is the intent that implementation options for such programs will continue to be investigated in the future. Both existing law and Tampa Bay Water’s interlocal agreement impact potential implementation, by either Tampa Bay Water itself, or by any of its member governments, and also impact cost recovery options. The law provides latitude in funding implementation and Tampa Bay Water could ultimately funnel debt proceeds through their members or a third party working in partnership with their members. Cost recovery options are much more restricted and unless there were significant changes which would be extremely difficult to implement, Tampa Bay Water cannot use emerging cost recovery approaches such as Property Assessed Clean Energy to retire their debt. Rather, all programs would have to be wrapped into the uniform volumetric price members pay. This system has worked well in the past and is suitable for the future.
Exploring Options for Debt Financing Distributed Infrastructure

A PRELIMINARY INVESTIGATION FOR TAMPA BAY WATER

I. INTRODUCTION

Tampa Bay Water

Tampa Bay Water is a Regional Water Supply Authority, created in 1998 under the authority of §373.713 and §163.01, Florida Statutes.iv Tampa Bay Water supplies wholesale water to its six member governments, which collectively distribute water to more than 2.5 million people in the tri-county region.

Tampa Bay Water is one of the very few utilities in the United States to utilize a blend of groundwater, desalinated seawater, and surface water to supply the customers of its six member governments with affordable drinking water.iv As Tampa Bay Water’s reliance on surface water and other alternative water sources continues to increase, the value of increased water use efficiency in managing future long-term supply needs has become evident. As new supply development costs continue to increase, avoided cost of water supply becomes a more critical element of the water supply planning process.

With respect to its role in achieving conservation, Section 3.01 of Tampa Bay Water’s interlocal agreement provides that regional cooperation is necessary to ensure water needs are met in a manner that prioritizes conservation of water, and further requires member governments “continue their cooperative efforts to develop and implement effective conservation programs in order to reduce per capita demand for water”.iv Additionally, the Master Water Supply Contract, entered into by Tampa Bay Water and its member governments in conjunction with the interlocal agreement, includes a provision stating that member governments “shall have primary responsibility for implementing means, methods and techniques related to [w]ater conservation,” while still allowing Tampa Bay Water to “continue to plan and coordinate the conservation efforts of the Member Governments.”v

Thus, in carrying out its agreed upon role, Tampa Bay Water has been actively involved in quantifying water demand and potential changes in demand through water use efficiency efforts, mainly through member government implementation, since adoption of its first demand management plan in the mid 1990’s. Additionally, Tampa Bay Water developed tools to quantify ongoing member water use efficiency programs that helped to meet original Board of Directors adopted planning goals.

As part of its long-term water supply planning process, Tampa Bay Water is updating its most recent (2013) Demand Management Plan (DMP) on a 5 year schedule. This plan investigates the benefits and costs of
water demand management as a quantifiable, alternative water supply source. The DMP is considered one component of Tampa Bay Water’s strategic goals to achieve reliability of its water supply and delivery system to its member governments. As part of this update, the Board requested staff to investigate various implementation strategies that could insure demand management efforts be implemented in a timely and quantifiable fashion. Implementation would include funding for programs and Tampa Bay Water is interested in exploring, as one option, the legal potential for using debt financing to fund more wide-scale conservation initiatives that could rely on distributed infrastructure projects.

Distributed Infrastructure

For the purposes of this paper, the phrase “distributed infrastructure” embodies “improvements, devices, and technologies installed at diffused properties that enhance a utility system by reducing the need for expanding the utility system or the scale of expansion needed.” Other utilities around the country have implemented various types of distributed infrastructure projects and programs, such as water catchment facilities, permeable parking lots, drought-resistant landscaping, toilet fixtures, and point-of-use water catchment and treatment systems. Distributed infrastructure has also become a significant part of green infrastructure and clean energy strategies for many communities. Debt financing this type of infrastructure poses challenges for many public entities that have traditionally only financed centralized infrastructure assets that they own and control.

Distributed infrastructure can provide both private and public benefits. In the case of Tampa Bay Water, the benefits of distributed assets that lead to measurable and lasting water use reduction provide significant benefits to the utility, all of its members, and the entire service population regardless of where the distributed asset implementation occurs due to the structure of how Tampa Bay Water operates. Additional capacity created (freed up) by implementation and funding of distributed assets in one member’s service area provides capacity that can be used by all members and reduces future supply investment needs for all members. The public benefits of distributed demand programs are reflected in the key planning and interlocal agreements governing how Tampa Bay Water operates.

For Tampa Bay Water, exploring the types of distributed infrastructure programs that would benefit the tri-county region, or determining how exactly such programs could be funded and/or implemented, revolves around the general questions addressed by this paper. Specifically:

- What are the limits on Tampa Bay Water’s bonding authority?
- Are there state constitutional provisions preventing a regional water supply authority from using its bonding powers to fund distributed infrastructure on private property or preventing another government or entity from implementing the programs?
- What cost recovery mechanisms are available if an entity uses its bonding authority for distributed infrastructure programs?
- What are utilities in other states doing, if anything, with respect to these sorts of programs?
II. SUMMARY OF TAMPA BAY WATER’S LEGAL FRAMEWORK

Overview

To create a complete picture of the legal framework under which Tampa Bay Water operates, it is helpful to look at the enabling statutes allowing for the creation of regional water supply authorities, statutes governing bonding by local government entities, statutes governing interlocal agreements, the state constitution, and Tampa Bay Water’s current interlocal agreements. Evaluating such a mass of authority reveals varying provisions, depending on the age of the authority and the purpose for its enactment. Regional water supply authorities are unique entities because they operate legally as a single local government, but are made up of multiple different local governments. While most of the statutes addressed below apply only to Tampa Bay Water and not its individual member governments, the analysis for two statutes, the Revenue Bond Act, and the Florida Industrial Development Financing Act, can be applied to individual member governments. Additionally, it is worth noting that the use of debt financing to fund distributed infrastructure is a new concept for many utilities and states, and therefore much of the legal language has not yet been amended to include specific definitions or provisions to address such a concept.

Florida Constitution Gift Clause – Article VII, §10

Most states have clauses in their constitutions which limit the ability of government entities to grant, donate, or otherwise subsidize private individuals, associations, or corporations. In some states, such “gift clauses” are extremely broad and have been interpreted by the courts to act as absolute prohibitions. In other states, such as Florida, the gift clauses have been interpreted to allow for exceptions for the government providing funds to private entities, if such provision serves a public purpose.

Florida’s constitutional gift clause states that “[n]either the state nor any county, school district, municipality, special district, or agency of any of them, shall become a joint owner with, or stockholder of, or give, lend, or use its taxing power or credit to aid any corporation, association, partnership, or person...” The gift clause goes on to lay out several specific exceptions to this prohibition, none of which address water or water utility projects. However, an additional exception for projects that serve a paramount public purpose has evolved from case law.

In Jackson-Shaw Co. v. Jacksonville Aviation Authority, 8 So. 3d 1076 (Fla. 2008), the Florida Supreme Court found the Jacksonville Aviation Authority did not violate the constitutional prohibition against impermissibly pledging its credit to aid a private entity. In its analysis, the Court defined the pledging or lending of credit as follows:

[T]he assumption by the public body of some degree of direct or indirect obligation to pay the debt of a third party. Where there is no direct or indirect undertaking by the public body to pay the obligation from public funds, and no public property is placed in jeopardy by a default of the third party, there is no lending of public credit.

Further, the Court reiterated the basic proposition related to the State’s gift clause, that even where there is no proposed public indebtedness, neither the State nor a political subdivision “may expend public funds for or participate at all in a project that is not of some substantial benefit to the public.”
The Court then went on to address the test utilized if the State or a political subdivision has given, lent, or used its credit, and held in that situation, a project “must serve a paramount public purpose and any benefits to a private party must be incidental.”\textsuperscript{xii} Furthermore, the Court held that under the paramount public purpose test, if the benefits to a private party are the paramount purpose, then the project will not pass constitutional muster.\textsuperscript{xii} Finally, the Court reiterated that a broad public purpose is not enough to sustain a project that is purely a private enterprise.\textsuperscript{xiii}

Four years later, in Donovan v. Okaloosa County, 82 So.3d 801 (Fla. 2012), the Florida Supreme Court again took up a challenge to bond validity under the State’s gift clause. Specifically, the Court held a proposed beach renourishment project served a paramount public purpose as was required for the county to exercise its taxing power to support the issuance of bonds. In its holding, the Court reiterated the purpose of the State’s gift clause as being “to protect public funds and resources from being exploited in assisting or promoting private ventures when the public would be at most only incidentally benefited.”\textsuperscript{xiv}

The Court then went on to lay out a more detailed analysis to be used when addressing a bond invalidity claim under the State gift clause. The Court held if the project does not expressly qualify for one of the exceptions specifically articulated in Article VII, §10, Fla. Const., then the two-step test is: (1) whether the authority has pledged its credit or used its taxing power; and (2) whether the project to be funded serves a paramount public purpose.\textsuperscript{xv} If, the Court continues, the entity has not pledged its credit or used its taxing power, then the obligation must merely serve a public purpose; however, if the entity has pledged its credit or used its taxing power, then the purpose of the obligation must serve a paramount public purpose and any benefits to a private party must be incidental.\textsuperscript{xvi}

Turning to the question of whether the proposed beach renourishment project constituted a paramount public purpose, the Court, in Donovan, looked to legislative and constitutional language, reiterating that what constitutes a public purpose is, in the first instance, a question for the legislature to determine and its opinion should be given great weight.\textsuperscript{xvii} Relying on both the statutory language found in the Beach and Shore Preservation Act, and the constitutional language requiring conservation and protection of natural resources, the Court found the beach renourishment project met the paramount public purpose requirement.

Utilizing this constitutional analysis and framework, it would seem Tampa Bay Water’s opportunity to fund distributed infrastructure projects through bonds would not be in violation of Florida’s gift clause. First, any benefits to private parties would not be the paramount public purpose of the project; rather, the purpose of the project would be to conserve natural resources, and push off long-term supply development needs. Second, it is possible Tampa Bay Water would not be “lending credit” by funding distributed infrastructure programs, depending on how the entity is funding the programs. Specifically, this would be more likely if the bonds were set up as either self-liquidating or private activity bonds. Regardless, even if the entity were considered to be “lending credit,” the purpose of the project would likely be deemed to serve a paramount public purpose. Specifically, the language found in Fla. Stat. §373.715, discussed more in depth later in this paper, states Tampa Bay Water may finance and refinance water treatment, production, or transmission facilities, and such facilities serve a “paramount public purpose” by providing water to the citizens of the State. Additionally, Article II, Section 7 of the Florida Constitution holds it shall be the “policy of the state to conserve and protect its natural resources and scenic beauty,” and “adequate provision shall be made by law for the conservation and protection of natural resources.”\textsuperscript{xviii}
Looking to other water supply statutes additionally boasts the importance of conservation of water resources in Florida. One such example is found in Fla. Stat. 373.703, which lays out the powers and duties of the governing board of a water management district, and requires such a board engage in planning with and provide assistance to regional water supply authorities in meeting water supply needs “in such manner as will give priority to encouraging conservation and reducing adverse environmental effects of improper or excessive withdrawals of water.” Additionally, beginning in 2001, the Florida Department of Environmental Protection, in conjunction with key water supply partners in Florida, developed a written agreement entitled the “Joint Statement of Commitment for the Development and Implementation of a Statewide Comprehensive Water Conservation Program for Public Water Supply.” The Joint Statement contains numerous principles related to joint collaboration to promote and enhance conservation efforts in the state, and to assist individual utilities in their water efficiency efforts. Additionally, the signatories to the Joint Statement formulated a work plan that included tasks such as developing standardized definitions and performance measures, establishing a clearinghouse for water conservation, and developing and implementing a standardized water conservation planning process for utilities. Although the Joint Statement is not statutory in nature, it exemplifies how the water supply partners in Florida and Florida’s Department of Environmental Protection are carrying out the legislative intent that they comply with goals of water conservation and preservation.

Regional Water Supply Authorities – Florida Statutes §373.713

In addition to the constitutional provisions that apply to debt financing of distributed infrastructure projects, there are several statutory provisions that come into play. To begin, Florida Statutes §373.713 allows for the creation of regional water supply authorities through interlocal agreements between counties, municipalities, or special districts, under the Florida Interlocal Cooperation Act of 1969. Such entities may be created for the purpose of developing, recovering, storing and supplying water for county or municipal purposes, and must be created in geographic territories, and in such a manner that excessive and improper withdrawals of water from concentrated areas will be reduced.

In addition to other powers granted such entities, §373.713(2) grants regional water authorities the power to issue revenue bonds, in accordance with the Revenue Bond Act of 1953 (“Bond Act”), to be payable solely from funds derived from the sale of water by the authority to any county or municipality. Such bonds may be issued to finance the cost of “acquiring properties and facilities for the production and transmission of water by the authority to any county or municipality.” Additionally, Fla. Stat. §373.713(2)(d) prohibits a regional water supply authority from engaging in local distribution.

Tampa Bay Water is a regional water supply authority, created under this statutory framework. In evaluating whether its enabling legislation is conducive to allowing Tampa Bay Water to use its debt financing powers to fund distributed infrastructure, a review of the aforementioned provisions reveals potential limitations.

First, the statutory definition for what such bonds may be issued for does not include precise language related to distributed infrastructure projects. Classifying improvements, devices, and technologies that enhance a utility system as “properties and facilities for the production and transmission of water” could potentially create a legal challenge. The most plausible argument for supporting distributed infrastructure projects under this definition would be to frame the support as the purchase of capacity from the
customers that implement the measures, discussed in more detail in the “Recommendations” section below.

Second, the requirement revenue bonds be paid solely from funds derived from the sale of water by the authority to any county or municipality appears to mandate that any bonds issued by the authority be paid through usage fees received from the member governments. In other words, the debt service payments related to these bonds would need to be rolled into the revenue requirements Tampa Bay Water uses to set volumetric water prices each year. This requirement does not prohibit Tampa Bay Water from debt funding distributed assets, but simply requires that the cost recovery mechanism for paying off the debt is consistent with how Tampa Bay Water currently funds centralized supply projects. The statutory language does not contemplate a separate payment arrangement, whereby the authority could issue bonds for distributed infrastructure projects, and loan the proceeds either directly to the customers or to participating member governments to be paid back in a separate payment.

Finally, the actual bonding authority, as discussed below, which arises from the Revenue Bond Act, is limited to only “self-liquidating projects,” which is defined as requiring in the judgment of the governing body, that revenues and earnings of the project and other special funds pledged, will be sufficient to pay the cost of maintaining, repairing, and operating the project and to pay the principal and interest of the revenue bonds which were issued for the project. As long as the benefits of the distributed infrastructure investment in terms of recovered water supply capacity are wrapped into the overall Tampa Bay Water revenue requirements, then the self-liquidating requirement can be met, in the same manner as it is with more centralized projects.

West Coast Regional Water Supply Authority – Florida Statutes §373.715

The analysis of the legal framework doesn’t stop there. Within the same chapter that covers regional water supply authorities in general, there is a section specifically addressing the West Coast Regional Water Supply Authority. Fla. Stat. §373.715 authorizes the West Coast Regional Water Supply Authority to implement change in its governance, and to change its name, while also providing a list of terms permitted to be included in the entity’s interlocal agreement.

With respect to bonding authority, §373.715(1)(b)6. provides Tampa Bay Water may use the powers provided in the Florida Industrial Development Financing Act (part II, chapter 159) for financing and refinancing “water treatment, production, or transmission facilities,” and provides such facilities serve a “paramount public purpose” by providing water to the citizens of the State. As applied to the use of bonds to finance distributed infrastructure projects, the difficulty in this statute lies in the limited definition of projects for which the bonds may be used. Guaranteeing distributed infrastructure equipment, such as a high efficiency toilet, or a soil moisture sensor for irrigation systems, could be treated as a water treatment, production, or transmission facility would likely require the definition be expanded to include such equipment.

As was already discussed above, the “paramount public purpose” language provided in the statute not only declares specific water facilities such as water treatment, production, or transmission facilities serve a paramount public purpose, but also contextually emphasizes the importance of the general provision of water to citizens of the State. This is helpful for ensuring funding of distributed infrastructure projects is also deemed to constitute a paramount public purpose.
Of additional import to the discussion of distributed infrastructure financing, Fla. Stat. 373.715(d) requires Tampa Bay Water to charge a uniform per gallon wholesale rate to member governments for the wholesale supply of potable water. The statute further requires all capital, operation, maintenance, and administrative costs for existing facilities and acquired facilities, authority master water plan facilities, and other future projects to be allocated to member governments based on water usage at the uniform per gallon wholesale rate. This appears to mandate that the costs of any future regionally funded distributed infrastructure projects be paid back through member usage fees only.

Florida Interlocal Cooperation Act of 1969 – Florida Statutes §163.01

Because Tampa Bay Water is a regional water supply authority, created through interlocal agreement, both Fla. Stat. §373.713, discussed above, and Fla. Stat. §163.01, the Florida Interlocal Cooperation Act of 1969 (the “Cooperation Act”) apply. However, because §163.01 governs all interlocal agreements, it is not written with language uniquely for water authorities, such as the language found in §373.713. The purpose of the Cooperation Act is to allow local government units to cooperate with other localities to provide services and facilities in a manner that addresses the geographic, economic, population, and other factors influencing the needs and development of local communities.

Fla. Stat. §163.01(7)(a) states that an interlocal agreement may provide for the creation of a separate legal or administrative entity to administer or execute the agreement. A separate legal or administrative entity is granted additional power to make and enter into contracts, and to incur debts, liabilities, or obligations, which do not constitute the debts, liabilities, or obligations of any of the parties to the agreement.

With respect to bonding powers, Fla. Stat. §163.01(7)(d) expressly grants any separate legal entity created under the Cooperation Act, all powers in connection with the authorization, issuance, and sale of bonds for the purpose of financing or refinancing any “capital projects,” which term is not defined in the statute. Regardless, such bonding authority arises out of the Revenue Bond Act, which has its own limitations, discussed in more detail below.

It should be noted that Fla. Stat. §163.01(7)(g) provides authority for a separate legal entity to issue bonds for the creation of wastewater facilities, water or alternative water supply facilities, and water reuse facilities; however, the interlocal agreement of Tampa Bay Water expressly states that §163.01(7)(g) shall not apply to Tampa Bay Water. Therefore, the bonding authority analysis arising from chapter 163 comes only from the aforementioned sections.

Revenue Bond Act of 1953 – Florida Statutes §159, Part I

As has already been alluded to, direct bonding authority for Tampa Bay Water arises, in part, from the Revenue Bond Act of 1953 (“Revenue Bond Act”) (Fla. Stat. §159, Part I), which is referenced by the enabling legislation for both regional water supply authorities and interlocal agreements, as well as Tampa Bay Water’s current interlocal agreement. The Revenue Bond Act grants the governing body of any “unit” in the state, the power to acquire by purchase or to construct, and to improve, repair, reconstruct, own, operate and maintain any self-liquidating project. The Revenue Bond Act further grants the governing body of any “unit” the power to issue revenue bonds, payable from earnings and any other special pledged funds, to pay the cost of a project or improvement thereof. The Revenue Bond Act not
only provides bonding authority to Tampa Bay Water, but also to its member governments, should they seek to bond finance their own local distributed infrastructure projects.

The Revenue Bond Act defines “project” as including all property, rights, easements, and franchises deemed necessary or convenient for the construction or acquisition or the operation of waterworks systems and sewer systems. Both waterworks systems and sewer systems are defined relatively broadly, and could potentially include something like a distributed infrastructure project. Specifically, a waterworks system is defined to include water supply systems, water distribution systems, and any integral part thereof. A sewer system is defined to include sewage disposal systems, including wastewater reuse systems, or sanitary sewer systems and any integral part thereof. The Revenue Bond Act further defines “cost of a project” as the cost of acquiring or constructing such project, and the cost of improvements, and shall include the cost of all labor and materials, lands, property, rights, easements, and franchises acquired, which are deemed necessary for such acquisition or construction.

How both the distributed infrastructure project and the cost-recovery mechanism utilized to repay such project are characterized would affect the level to which this requirement could prohibit such projects from being bond financed. For the purposes of financing a distributed infrastructure project or program, this self-liquidating requirement should not pose problems as long as the cost recovery mechanism takes it into account. The Florida Supreme Court has held any bond issue supporting other than a self-liquidating project would be invalid on its face. However, as long as the benefits of the distributed infrastructure investment in terms of recovered water supply capacity are wrapped into the overall Tampa Bay Water revenue requirements, then the self-liquidating requirement can be met, in the same manner as it is with more centralized projects. It is worth noting Tampa Bay Water has used revenues to fund other types of conservation initiatives, albeit not through direct implementation, for years.

Another potential barrier in the Revenue Bond Act comes from the definitions of the projects to be financed. Although waterworks systems and sewer systems are defined much more broadly than the project definitions arising out of the previously discussed statutory authority, the lack of an explicit distributed infrastructure description in the definition could still pose a potential limitation depending on the actual project.

Finally, it is worth noting it is unclear from the language in the Revenue Bond Act, whether Tampa Bay Water, or one of its member governments, would have to retain ownership over any distributed infrastructure project. As it is written, the Revenue Bond Act grants to specified entities the power to acquire by purchase or to construct and own, operate and maintain self-liquidating projects. Additionally, the cost of a project is defined as costs of acquiring or constructing a project. Although the terminology clearly denotes ownership, it is unclear whether it requires it. There is no explicit language requiring ownership of the self-liquidating projects, nor is there explicit language excluding bonding authority for privately owned projects.

**Florida Industrial Development Financing Act – Florida Statutes §159, Part II**

In addition to the Revenue Bond Act, Tampa Bay Water’s interlocal agreement, discussed below, as well as Fla. Stat. §373.715, provide Tampa Bay Water with bonding authority arising out of the Florida Industrial Development Financing Act (“Financing Act”) (Fla. Stat. §159, Part II). The Financing Act is found within the
same chapter as the Revenue Bond Act, but was put in place to enhance and expand agriculture, tourism, urban development, historic preservation, education, and the healthcare industry to improve the competitive position of the state. For this reason, water utilities are not included in the definition of projects covered under the language of the Financing Act. Rather, Fla. Stat. 373.715(1)(b)6. provides that the authority may use the powers provided in the Financing Act for “financing and refinancing water treatment, production, or transmission facilities, including, but not limited to, desalination facilities,” and states all such water treatment, production, or transmission facilities are considered a “manufacturing plant” for purposes of §159.27(5) and serve a paramount public purpose by providing water to citizens of the state.

The Financing Act grants bonding authority to local agencies, which include not only Tampa Bay Water, but also the individual member governments. Therefore, the Financing Act serves as another means of bonding authority for individual member governments, if they are interested in investigating bond financing of distributed infrastructure projects on a local level. Specifically, the Financing Act grants the power to issue revenue bonds of the local agency for the purpose of providing funds to pay all or any part of the cost of any project, and to issue revenue refunding bonds. Additionally, local agencies are granted the power to make and execute financing agreements, contracts, deeds, or other instruments necessary or convenient in the exercise of its powers and functions under the Financing Act.

Although unlike the Revenue Bond Act discussed above, the Financing Act does not require the projects financed be “self-liquidating,” the definition of what constitutes a “project” is limited to only water treatment, production, or transmission facilities. As has been the case in the discussion of previous statutes, such a limited and traditional definition could potentially pose challenges for an entity trying to finance distributed infrastructure projects.

Additionally, it is worth noting under a broad interpretation of the Financing Act, or with targeted legislative clarifications, it is conceivable the Financing Act could allow Tampa Bay Water, or its member governments, to engage the services of a third party to implement and manage a portfolio of distributed assets throughout their service area. This would have the effect of creating a virtual water supply facility that would provide the same benefits, in terms of creation of supply, as building a more traditional new supply project.

1998 Interlocal Agreement for Tampa Bay Water

In addition to Florida constitutional and statutory authority, the actual interlocal agreement between Tampa Bay Water and their members contains relevant provisions to the powers and limitations of Tampa Bay Water. As was already referenced in the discussion of the relevant statutory authority, the agreement is regulated in part by the statutes, but also provides additional authority on the specific limits on the entity’s bonding powers.

Tampa Bay Water’s current interlocal agreement was put in place in 1998, and pursuant to the dictates of Fla. Stat. §373.715 reorganizes the West Coast Regional Water Supply Authority. Such reorganization was implemented to address the parties’ desire to eliminate rate differentials, varying entitlements, and other divergent interests, which were resulting from the entity’s previous organizational structure. The agreement provides for a uniform rate for all member governments. Specifically, the agreement states “the cost of the quality water and all services to be provided by the Authority shall be paid for by the
Member Governments, based on a uniform rate for the sale of quality water, adjusted for special treatment requirements.\textsuperscript{xli} Additionally, the agreement requires that the member governments shall be responsible for any additional treatment they may individually elect, and for distribution to the member governments’ retail and wholesale customers.\textsuperscript{xlii}

Turning to the question of how the agreement affects Tampa Bay Water’s ability to finance distributed infrastructure, Section 2.02(A) of the agreement governs the general powers of the Water Supply Authority. Specifically, the entity is granted the power to make and execute contracts or other instruments necessary or convenient to the exercise of its powers, and the power to contract with private or public entities or persons to develop, purchase or sell water, subject to the preferential rights of the member governments.\textsuperscript{xliii} Under the same provision, Tampa Bay Water is specifically excluded from selling water to any customer of a member government.\textsuperscript{xliii} Additionally, and most relevant to this paper, Tampa Bay Water is given the power to issue obligations under the revenue Revenue Bond Act of 1953 (Fla. Stat. §159, Part I), the Florida Industrial Financing Act (Fla. Stat. §159, Part II), and under Section 4.09 of the agreement.\textsuperscript{xliv} The first two bonding authorities come from statutes previously discussed, and the agreement does not provide any limitations on such statutory authority, as it appears in those statutes. However, Section 4.09 of the agreement grants Tampa Bay Water the power to issue obligations for the principal purpose of loaning the proceeds to a public or private entity, which shall finance or refinance the acquisition and construction of water treatment, production or transmission facilities. Finally, Section 2.02(A) provides Tampa Bay Water with the power to apply for and accept grants, loans, and subsidies from any government entity for the construction, operation and maintenance of water supply facilities.\textsuperscript{xlv}

As was the case in Fla. Stat. §373.715, discussed above, Section 3.04 of the agreement requires Tampa Bay Water shall establish a single uniform rate for the sale of water to member governments, subject only to two exceptions: (1) if Tampa Bay Water delivers water that does not meet the standards for quality water, the rate charged for such water shall be reduced to reflect the member government’s actual direct cost to perform the additional treatment needed; and (2) if a member government requests Tampa Bay Water provide any other treatment beyond what is necessary to meet quality water standards, Tampa Bay Water, in its sole discretion, may increase the rate for that member government to reflect the actual cost to provide the additional treatment.\textsuperscript{xlvi}

As has already been discussed with similar language found in Fla. Stat. §373.715, the agreement creates an unclear financial framework for the funding of distributed infrastructure. Specifically, the agreement provides the cost of water \textit{and all services} provided by Tampa Bay Water shall be paid for by member governments. Such a requirement calls into question what constitutes “all services.” Since water conservation efforts through distributed infrastructure are being done to meet Tampa Bay Water planning requirements and to, in effect, create capacity that can benefit the entire service area, it is highly plausible implementation of a distributed infrastructure program would be considered a service. If Tampa Bay Water seeks to implement such a program, then it would seem the cost of the program would have to be repaid through member rates, which are required to be uniform.
III. CURRENT LIMITATIONS

As has been discussed, there are numerous statutory, constitutional, and administrative provisions that come into play in looking at Tampa Bay Water’s ability to use debt financing for distributed infrastructure programs. In an effort to hone in on the actual barriers present in the legal framework, it is helpful to categorize the limitations already discussed.

Limited Definitions for What Projects May Be Funded with Bonds

Probably the biggest limitation in the current legislation is found within the definitions for what can be financed by bonds. The Revenue Bond Act of 1953 has two such barriers. First, the only projects provided for under the Act must be “self-liquidating.” As was previously discussed, meeting this requirement would likely involve ensuring that benefits of the distributed infrastructure investment in terms of recovered water supply capacity are wrapped into the overall Tampa Bay Water revenue requirements. Second, the projects are limited to those that fit under the definition of either a “waterworks system” or a “sewer system.” Arguably, such definitions are broader than some found in the other statutes, but are still geared toward traditional infrastructure. A waterworks system is defined to include water supply systems, water distribution systems and any integral part thereof. A sewer system is defined to include sewage disposal systems, including wastewater reuse systems, or sanitary sewer systems and any integral part thereof. Because the definitions are somewhat open ended with the inclusion of the “any integral part” catchall phrase, a broader range of projects could potentially be lumped in; however, as was already stated, the definitions are geared toward conventional water supply and distribution infrastructure.

Similarly, in the Regional Water Supply Authorities statute, §373.713, Florida Statutes, authorities are granted bonding authority for “acquiring properties and facilities for the production and transmission of water by the authority to any county or municipality,” an incredibly limited definition. The definition is further limited by the fact that the Regional Water Supply Authorities statute grants bonding authority under the Revenue Bond Act, discussed above, which would add the “self-liquidating” requirement already discussed.

Moving on to Fla. Stat. §373.715, which applies to Tampa Bay Water specifically, the bonding authority under that section arises from the Florida Industrial Development Financing Act, §159, Part II, Florida Statutes. However, as was previously discussed, the Industrial Financing Act does not address bonding powers related to water specifically, and therefore, the language in §373.715(1)(b)6. provides the only limited definition for which the bonding powers found in §159, Part II can be used. Such definition includes “water treatment, production, or transmission facilities, including, but not limited to, desalination facilities.” The challenge, then, becomes successfully characterizing distributed infrastructure projects as facilities that treat, produce, or transmit water.

Finally, in the Florida Interlocal Cooperation Act of 1969, §163.01, Florida Statutes, legal entities created under the act are granted bonding authority to fund “capital projects,” a term not defined in the statute; however, the statutory language of the act further states reiterates that the bonding authority arises from the Revenue Bond Act of 1953, already discussed, which includes the “self-liquidating” requirement.
In essence, none of the old statutory definitions were designed for something as novel and innovative as distributed infrastructure. In fact, the only project definition which appears to contemplate something such as a small piece of equipment provided to customers on a mass scale to reduce demand or increase supply through incremental contributions at the point of use, is the definition found in the new Utility Cost Containment Bond Act, §163.09, Florida Statutes, discussed below. Such definition appears to contemplate green infrastructure and distributed infrastructure as necessary components of the water production, transmission, and distribution processes.

Paying Bonds Through Uniform Member Rates

A second limitation, which arises from an analysis of the current legal framework, is the requirement bonds be paid back through uniform rates paid by the member governments. Fla. Stat. §373.713 provides that a regional water supply authority may issue bonds to be payable solely from funds derived from the sale of water by the authority to any county or municipality. Fla. Stat. §373.715, legislation specifically directed to Tampa Bay Water, requires all capital, operation, maintenance, and administrative costs for existing facilities and acquired facilities, authority master water plan facilities and other future projects be allocated to member governments based on water usage at the uniform per gallon wholesale rate. The Revenue Bond Act provides power to issue bonds, payable from earnings and other special pledged funds. And the Interlocal Agreement for Tampa Bay Water specifies the cost of quality water and all services provided by Tampa Bay Water shall be paid for by member governments, based on a uniform rate for the sale of quality water.

This requirement could raise potential challenges. Implementation of a program paid back through the uniform rate may cause rates to go up in the short term. Additionally, not all member governments may be interested in implementing the distributed asset program, but would still be on the hook for paying the higher rate. Although these seem like challenges when looking at the distributed asset program as a service provided to individual customers or to an individual member government, when treated as a supply investment to benefit the entire Tampa Bay Water service area, such challenges fall away. Regardless of the small-scale benefit of a distributed asset to an individual customer through a member or some other sort of implementation mechanism, the actual project being funded and repaid for by Tampa Bay Water benefits the entire system of customers. If the distributed assets are treated the same as any other traditional supply facility, then the use of a uniform rate to cover the costs of such measures makes sense.

Additionally, it is worth mentioning that the requirement for how bonds can be repaid is a potential limitation on what types of cost recovery mechanisms Tampa Bay Water could utilize to pay back the bonds. However, it appears the legislature, in its recent enactment of the Utility Cost Containment Bond Act, discussed in detail below, has attempted to create an exception to this limitation. The Utility Cost Containment Bond Act specifically provides for a separate utility project charge to be included on customers’ bills to cover the bonds used to fund the project. Although it is unclear how exactly such an act will play out as it begins to get utilized, it certainly creates a separate financing mechanism that does not require the borrowing entity (in Tampa Bay Water’s case, the member government) to pay for the bond proceeds with its member usage rates.
Recommended Modifications

Current Statutory Definitions for What Projects May Be Funded with Bonds

- **Regional Water Supply Authorities §373.713**
  - bonds may be issued to finance the cost of “acquiring properties and facilities for the production and transmission of water by the authority to any county or municipality.”

- **Assistance to West Coast Regional Water Supply Authority §373.715**
  - grants bonding powers for financing and refinancing “water treatment, production, or transmission facilities, including, but not limited to, desalinization facilities”

- **Florida Interlocal Cooperation Act of 1969 §163.01**
  - grants any separate legal entity all powers in connection with the authorization, issuance, and sale of bonds for the purpose of financing or refinancing any “capital projects”

- **Revenue Bond Act of 1953 §159, Part I**
  - grants bonding authority for self-liquidating projects, including all property, rights, easements, and franchises deemed necessary or convenient for construction or acquisition or operation of waterworks systems and sewer systems

- **Florida Industrial Development Financing Act §159, Part II**
  - powers arise out of Fls. Stat. §373.715(1)(b)6, and include only “financing and refinancing of water treatment, production, or transmission facilities, including, but not limited to, desalinization facilities”
Potential Modifications to Current Statutory Definitions to Allow for Clearer Bonding Authority for Distributed Infrastructure

### Regional Water Supply Authorities
**§373.713**
- Bonds may be issued to finance the cost of acquiring properties, *equipment*, and facilities for the production, transmission, and *management* of water by the authority to any county or municipality.

### Assistance to West Coast Regional Water Supply Authority
**§373.715**
- Grants bonding powers for financing and refinancing water treatment, *management*, production, or transmission facilities, including, but not limited to, desalination facilities.

### Florida Interlocal Cooperation Act of 1969
**§163.01**
- Include a statutory definition of “capital projects,” which includes water management or conservation projects.

### Revenue Bond Act of 1953
**§159, Part I**
- Grants bonding authority for self-liquidating projects, including all property, rights, *equipment*, easements, and franchises deemed necessary or convenient for construction, acquisition, operation, or *management* of waterworks systems and sewer systems.

### Florida Industrial Development Financing Act
**§159, Part II**
- Financing and refinancing of water treatment, *management*, production, or transmission facilities, including, but not limited to, desalination facilities.

As is indicated by the italicized and bolded suggested additions to the statutory definitions above, Tampa Bay Water, and its member governments, would benefit from including “water management” equipment or projects to the list of projects for which they may use bonding authority. In addition, a statutory definition could be added defining “water management” as including conservation services, related to water efficiency or water capacity recapture. Alternatively, a statutory definition could be amended to just directly provide that bonds may be issued for “increasing available supply through the investment of distributed assets.”
It should also be noted Tampa Bay Water, or any of its member governments, only need one clear statutory route to bond finance distributed infrastructure projects. It is not necessary to amend all of the above-mentioned provisions; rather, because Tampa Bay Water and individual local government entities have been given a few paths to financing infrastructure and other water supply projects, then it should not matter that all the paths provide slightly different definitions or authority. As has already been discussed, the potential limitations in the existing legal framework are limitations based on narrow definitions and how costs associated with any projects should be repaid. There are not any express prohibitions on bond financing of distributed infrastructure in the statutes covered in this paper. Therefore, if Tampa Bay Water, or in applicable circumstances, one of its member governments, chooses the statutory path most suited to the projects they are hoping to fund, then the utility can seek to modify the statutory language for that particular statute only, and they should be free to issue the bonds under such authority.

**The Utility Cost Containment Bond Act**

A potential modification taken from Florida’s own legislation...

Effective July 1, 2016, during the authorship of this paper, Florida implemented a new law, the Utility Cost Containment Bond Act, found in Fla. Stat. §163.09. Based on the House of Representatives staff analysis of the underlying bill, the intent of the Act is to create a new financing mechanism available for legal entities created under Fla. Stat. §163.01 to allow them to finance or refinance on behalf of a municipality, county, special district, public corporation, regional water authority, or other governmental authority (including the authority itself), projects related to water or wastewater service.

While it is unclear whether this Act could create a new funding option for Tampa Bay Water to fund distributed infrastructure projects, it is worth highlighting the project definition found within the Act. Unlike the project definitions found in the previously mentioned statutes, the Utility Cost Containment Bond Act defines utility projects to include the “acquisition, construction, installation, retrofitting, rebuilding, or other addition to or improvement of any equipment, device, structure, process, facility, technology, rights, or property located within or outside this state which is used in connection with the operations of a publicly owned utility.” Such a definition is much broader than the traditional infrastructure related definitions found in most of the other legislation under which Tampa Bay Water currently operates and seems to contemplate conservation or green infrastructure measures, through its inclusion of certain open-ended terms geared toward modifying or bettering the utility process (i.e. the “installation” of “devices” used “in connection with the operations of a publicly owned utility” would be covered under this definition). Thus, it is clearly the intent of the legislature today to provide legal entities, such as Tampa Bay Water, with a means for bond financing utility projects spanning a much broader base than just traditional infrastructure, and to do so on terms beneficial for everyone in the process from the water supply authority, to the customer at the faucet. For that reason, it is certainly worth investigating modifying the aforementioned statutory definitions to be more like the one found in the Utility Cost Containment Bond Act.
IV. LESSONS FROM OTHER STATES AND OTHER SECTORS

Judicial Interpretation of Conservation Measures as Producing Supply

Treatment of conservation measures as a reallocation of supply was done by the City of Tacoma, Washington, and was analyzed in *City of Tacoma v. Taxpayers of City of Tacoma*, 108 Wash.2d 679 (Wash. 1987). In that case, the electric utility operated by the City of Tacoma paid for installation of conservation devices in commercial and residential structures, and the ordinance was challenged on the grounds that the conservation measures were not authorized by statute, and further, that the program violated the state constitutional gift clause. The Supreme Court of Washington held Tacoma had implicit statutory authority to operate the conservation program, and further held the program did not violate the state’s gift clause. Specifically, the Court held although the individual powers granted to the city with respect to providing power and light did not include conservation explicitly, “in the world of electric utility professionals, an investment in conservation is considered the equivalent of purchasing electricity or of purchasing an electric generating facility.” The Court further held that a bond program where money is given to electric users for conservation measures is not a gift of public money. Rather, the Court held that the money is donated in exchange for conservation measures and is based on the cost of such measures in an amount equal to 29.2 cents times the estimated first year’s kilowatt-hour savings. Therefore, the bonds are used to repurchase unused electricity. The Court additionally stated that the fact the consideration could not be determined for over a year in advance did not render the program a loan of public funds or a gift of public money, given a consideration still would pass to the public utility.

Although the Washington case dealt with electricity, and was a municipality operating under Washington state laws, the conceptual analysis could be applied to Tampa Bay Water’s application of its bonding authority. Specifically, the fact conservation measures or distributed infrastructure projects are not explicitly listed as projects that can be funded with Tampa Bay Water’s revenue bonds, does not necessarily mean such projects wouldn’t be permissible when treated as mechanisms to be used in repurchasing previously allocated water. Just like in the world of electric utility professionals, in the world of water utility professionals, an investment in distributed infrastructure conservation projects is the equivalent of purchasing water or investing in a new water supply facility.

**PACE financing (Fla. Stat. §163.08)**

Property Assessed Clean Energy (“PACE”) financing has changed the world of government financing of conservation measures by providing a method for governments to utilize bonds to pay in full for such measures on an individual homeowner’s private property and then to pay back those costs through a property assessment added to the tax bill over an extended period of time.

Although Florida’s version of PACE was created to address clean energy issues, many entities around the country have been including distributed infrastructure improvements for water efficiency as a means of reducing energy use. Some states, like Georgia, have gone so far as to explicitly include water efficiency improvements in their PACE enabling legislation. Georgia allows certain local governmental entities to finance improvements on properties in order to “reduce the energy or water consumption.” In states where the language does not explicitly include water related conservation measures, many entities have still interpreted such definitions to include water conservation measures that also reduce energy use.
Florida’s PACE legislation is found in Fla. Stat. §163.08, which provides that a local government, including a “separate legal entity” created pursuant to Fla. Stat. §163.01(7), may levy non-ad valorem assessments to fund qualifying improvements. Such improvements include an energy conservation and efficiency improvement, which is “a measure to reduce consumption through conservation or a more efficient use of electricity, natural gas, propane, or other forms of energy on the property.” Additional qualifying improvements include a renewable energy improvement or a wind resistance improvement. Although it does not currently include water efficiency measures explicitly, it does define energy conservation and efficiency improvement as a measure to reduce consumption through conservation or a more efficient use of energy. Many water efficiency projects also reduce energy consumption, and therefore, could arguably be included under the present definition.

PACE financing for energy improvements is undoubtedly on the rise. According to PACENation’s quarterly update for the last quarter of 2015, the commercial PACE market exceeded all previous quarters, and “drove 2015 to be PACE’s biggest year yet.” Specifically, the report states in that quarter, 45 commercial projects were funded with PACE, which amounted to $37 million in total financing.

Florida is currently the biggest PACE state in the Southeast with five active PACE programs, both regional and statewide. The most noteworthy of the current programs is the Florida PACE Funding Agency because of its role as a statewide PACE funding provider and because of its role in being the first Florida PACE program to obtain judicial approval for $2 billion of bonding authority to be used to implement PACE across the state. The Florida PACE Funding Agency was developed through interlocal agreement by Kissimmee and Flagler Counties, and other local governments may subscribe to the agency through interlocal agreement. As of June 2016, the interlocal agreement included 25 local governments, including both residential and commercial PACE projects, and utilized a single capital provider for financing.

One lesson of particular significance to be taken from the PACE process in Florida is the utilization of Florida’s bond validation process to protect an entity’s bonding ability from legal challenges. In Florida, governmental entities planning to issue debt have the option of validating bonds in the circuit court in the county where the entity is located. Such a process is voluntary, but has the potential to result in having a court validate the authority of the entity to issue the bonds, and, if not appealed, to forever prevent the validity of the bond issuance from being called into question in any court or by any person.

The Florida PACE Funding Agency was formed in 2011, and that same year, the agency filed a complaint under Fla. Stat. §75.02, seeking judicial approval to issue as much as 2 billion dollars in bonds for funding the PACE program. The amount of bonds was based on a conservative estimate of the amount of money needed to retrofit the existing buildings in Florida, which were presumed to be likely to need such upgrades. The bond validation proceeding resulted in the bonds being validated, was not appealed, and is a final, binding, determination effective statewide. Subsequent to the Florida PACE Funding Agency’s bond validation, five other groups or organizations filed bond validation complaints, and all five were validated. Four of the determinations were then appealed and resulted in a final Florida Supreme Court determination that included several rulings, the most important of which included approval of PACE financing generally.

There are many lessons to be taken from the legal process that has resulted in permissible bond financing of distributed assets through PACE. The process started with the creation of explicit statutory authority to cover precisely the intended conservation measures the financing would be aimed at. Local governments then formed groups under Florida law, through interlocal agreements, or contracted with existing private
companies in order to implement the PACE programs. Finally, to ensure bond financing was a guaranteed possibility to fund the PACE programs, Florida’s judicial approval process was utilized, and now such legal decisions stand as a guarantee no legal challenges can prevent interested entities from utilizing debt financing to fund distributed assets under PACE.

Other Entities Utilizing Bond Financing of Distributed Assets

Although there are many entities around the country implementing distributed asset projects in their water or wastewater utility jurisdictions, most all such programs are being done on a small scale through cash financing. Two entities using bond financing for distributed infrastructure projects on a large scale are the Southern Nevada Water Authority and the Los Angeles Department of Water and Power (LADWP). Both entities offer rebate programs for removing water-inefficient grass and replacing it with drought resistant landscaping. Interestingly, although both entities utilize bond financing for the programs, they take a different approach to how they go about protecting the investment.

LADWP applies the “regulatory asset” framework found in GASB 62 discussed below. The program is managed by SoCal WaterSmart agency and the Metropolitan Water District of Southern California, and it requires a residential customer agree to keep the area turf-free for 5 years, and a commercial customer agree to keep the area turf-free for 15 years. There is no obligation on a new owner, if the property changes hands. LADWP treats this program as part of its regulatory operations, records the costs as an asset, and implements rates to recover such costs.

Southern Nevada Water Authority, on the other hand, requires a conservation easement to accompany any turf conversion. In explaining the ability of Southern Nevada Water Authority to use bond financing, Kent Sovocool, a senior conservation research analyst with the utility, stated:

“The current version of the program is somewhat unique in that it relies on bond funds, and for these we actually have a requirement to maintain the landscape in perpetuity, thus the easement. Our bond counsel determined we can use bond funds but we have to encumber the landscape areas of the conversion, somewhat analogous to how you would encumber a water treatment plant when you use bond funds to make a capital improvement. For this it means maintaining a conversion area of a property in certain non-water using capacities. So our easement runs with the land in perpetuity regardless of ownership changes; it can however be modified or even waived by returning the funds and paying fees and interest.”

This use of the conservation easements thus protects the investment of the bond funds being expended on the turf, and also is the justification for Southern Nevada Water Authority’s alleging the program is in compliance with GASB rules.

Similar to Nevada or Los Angeles, the City of Philadelphia offers another helpful example of a distributed program, aimed at “green infrastructure,” which also utilizes bond financing. Specifically, in an effort to deal with Combined Sewer Overflow and to comply with water-quality standards laid out in the Clean Water Act, Philadelphia has been in the process of committing to the use of green infrastructure as opposed to grey infrastructure. In 2008, Philadelphia implemented a program called Greenworks Philadelphia, which is a comprehensive sustainability program aimed at creating more green space and
more pedestrian or biker transportation options through major greenways. Because the Greenworks program and the creation of green infrastructure for stormwater are complementary, Philadelphia has been able to incorporate green infrastructure measures into the greenway projects related to the Greenworks program to allow for some financing for stormwater control projects to be packaged into bonds used to finance the Greenworks program.

Additionally, because Philadelphia otherwise funds its program using water and sewer revenues and tax-exempt revenue bonds, the city has come up against similar issues faced by other utilities attempting to debt finance distributed assets. However, Philadelphia is in a particularly good legal position to implement the program and to utilize bond financing to fund the program. Under Philadelphia’s Bond Act (First Class City Bond Act) and Bond Ordinance related to general water and wastewater, distributed green infrastructure projects, including those on private property, fit under the definitions of “projects” or “systems” which may be bond financed, so long as the city retains a property interest in the infrastructure. Philadelphia’s Bond Ordinance and Bond Act offer examples of more open definitions, which could include the potential for distributed assets on private property. In the Bond Act, “project” is defined to include “rights or lease hold estates in land…which the city is authorized to own, construct, acquire, improve, lease as lessor or as lessee, operate, maintain or support.” Further, the project must be part of the overall “system,” which per Philadelphia’s Bond Ordinance, is defined to include:

...ALL LANDS, EASEMENTS, LICENSES, AND RIGHTS OF WAY OF THE CITY AND ALL OTHER WORKS, PROPERTY, OR STRUCTURES OF THE CITY AND CONTRACT RIGHTS AND OTHER TANGIBLE AND INTANGIBLE ASSETS OF THE CITY NOW OR HEREAFTER OWNED OR USED IN CONNECTION WITH OR RELATED TO SAID SYSTEM.

In addition to its broad bonding authority, Philadelphia has legal authority to use its water and stormwater rates to finance the green infrastructure or to incentivize customers to create green infrastructure with their own funds. Finally, Philadelphia has authority to enter into public-private partnerships in order to implement the green infrastructure projects on private property.

Although Philadelphia’s use of distributed assets on both public and private property are aimed at stormwater controls to comply with the Clean Water Act, the city’s financing of such assets, and particular legal authority, is helpful to look at when determining whether such financing strategies are replicable by an entity such as Tampa Bay Water, or by its member governments.
V. ACCOUNTING ISSUES

Compliance with GAAP

Of additional importance in Tampa Bay Water’s analysis of what its possibilities are for financing distributed asset projects, is the consideration of how implementation of such programs can comply with Generally Accepted Accounting Principles (GAAP). The main area of concern for implementation of distributed assets on private property would be Tampa Bay Water’s ability to maintain “control of the asset.” The statements of the Government Accounting Standards Board (GASB) appear to require a utility be in control of the asset being financed; however, this requirement has been interpreted to allow for different types of control. For example, the Southern Nevada Water Authority, discussed above in more detail, implements a turf buyback program, but utilizes conservation easements to maintain “control of the assets.” The conservation easements are created and enforced through contractual relationships with the customers.

Alternatively, GASB Statement No. 62 (GASB 62), paragraphs 476 to 500, provides another framework for controlling an asset, known as the “regulatory asset” framework. Specifically, GASB 62 requires an entity to meet certain criteria to utilize the regulatory asset framework:

1. The entity’s rates for regulated services must be established by an independent, third-party regulator or by its own governing board;
2. The regulated rates must be designed to recover the specific regulated business-type activity’s costs of providing the regulated services; and
3. The rates must be set at levels that will recover the costs and can be charged to and collected from customers.

If the entity then meets such qualifications, GASB 62 goes on to provide:

“Rate actions of a regulator can provide a business-type activity with reasonable assurance of the existence of an asset. A regulated business-type activity should capitalize all or part of an incurred cost that otherwise would be charged to expense if both of the following criteria are met:

a. It is probable that future revenue in an amount at least equal to the capitalized cost will result from inclusion of that cost in allowable costs for rate-making purposes.
b. Based on available evidence, the future revenue will be provided to permit recovery of the previously incurred cost rather than to provide for expected levels of similar future costs. If the revenue will be provided through an automatic rate-adjustment clause, this criterion requires that the regulator’s intent clearly be to permit recovery of the previously incurred cost.”

In speaking to some accounting experts working with WaterNow, an organization currently investigating these specific issues, it is their opinion the second approach, the regulatory asset framework, could be a possibility for Tampa Bay Water to characterize distributed asset investments as capital that can be funded through bond proceeds. Based on the expert recommendations, and to obtain further confidence in Tampa Bay Water’s ability to utilize this approach, if they so choose, a technical inquiry could be conducted to inquire of GASB whether a hypothetical entity, with the characteristics of Tampa Bay Water, could implement a distributed asset program and be in compliance under GASB 62.
VI. TAX CONCERNS

Debt financing of distributed assets raises two tax concerns that do not arise when financing centralized publically owned assets. The first tax concern relates to the possibility the private benefit that accrues to a customer may be considered taxable income. Currently, the IRS considers water rebates to be taxable income. Politicians and organizations in several states have been requesting the IRS issue a revenue ruling to clarify the rebates not be taxable because they are “fundamentally a reduction of the purchase price of the water conservation or green infrastructure installation,” and further note the IRS does not treat energy rebates the same. What this could mean for Tampa Bay Water is that they may have to identify the benefits from distributed infrastructure projects to customers and if the benefits exceed a certain level, may have to develop an administrative system for providing the customers with documentation regarding the value. The customers may then be responsible for reporting the benefits received to the IRS.

A second tax concern arises when bonds are used to fund the installation of distributed assets on private properties. Governmental entities that use debt for eligible public facilities are able to issue tax-exempt bonds and other tax-exempt debt instruments. However, when a public entity invests in a private project, it often loses the ability to issue tax-exempt bonds. If more than 10 percent of the bond proceeds are used for private property, or if more than 10% of the debt service on the bonds is paid or secured by private security or payments, then the overall bond issue will not retain its tax-exempt status. Maintaining the tax-exempt status is important, because interest rates for taxable debt can be 25 to 30% higher than for tax-exempt debt. PACE bonds have traditionally been issued as taxable debt even though there is a public benefit to the investment, because the improvements are done on private property. However, recently, an organization in Washington D.C. closed “a tax exempt PACE note at less than 4% for 20 year debt, representing perhaps the first tax-exempt PACE financing.” Organizations around the country are further investigating how to create more favorable financing options for entities issuing PACE funding. For Tampa Bay Water, if a distributed asset program is combined with more traditional centralized infrastructure investments under one larger bond issue, and the percentages referenced above are not surpassed (the program is under $15 million or 10%), the bond should remain tax-exempt.
VII. FINDINGS AND CONCLUSIONS

In many ways, Tampa Bay Water is ideally structured to promote the use of distributed conservation assets. The primary goal of distributed assets is to create supply through the recapture of previously allocated supply and this matches well with Tampa Bay Water’s mission. Current statutes, and the interlocal agreement, however, impact the methods, which could be used to implement a distributed assets program. There are, therefore, a couple of initiatives that could help Tampa Bay Water accomplish its goals, if it were to pursue this option for funding.

First, as has already been discussed, the clearest route to ensuring the legality of bond financing distributed assets would be to amend the current statutory language found in whatever financing statute Tampa Bay Water, or one of its member governments, seeks to use. Such language should be amended to provide for specific authority to bond finance distributed asset projects through the clarification of and minor additions to existing language. Additionally, based on feedback received from Tampa Bay Water, the uniform volumetric rate has worked well as the only cost recovery mechanism used for past projects, and would be an acceptable means to use going forward.

Second, it appears there are several places in current state legislation, and in the state constitution, where water conservation and water supply are held up as serving a paramount public purpose. Although there is no case directly addressing whether distributed asset programs would serve a paramount public purpose, and therefore, not be precluded by the constitutional gift clause, based on the current case law and the analysis that has emerged from such case law, such programs are certainly not explicitly precluded by the gift clause. However, to make it absolutely clear, language in the statutes addressed in this paper could also be amended to include the specific finding that “conservation of water supply through distributed asset programs serves a paramount public purpose.”

Third, Tampa Bay Water could investigate modifying the current PACE statute to include distributed assets specifically related to water efficiency as permissible projects, and also to allow for other sources of revenue besides just property assessments to be used to back the debt. As was discussed above, the progress of PACE financing has been remarkable, and the judicial validation process now protects the interest of entities, such as Tampa Bay Water, in bond financing such programs.

Finally, with respect to tax and accounting issues, based on the research that has thus far been done, it appears the existing accounting/reporting framework could address these types of investments in distributed infrastructure, and such financing would likely be approved by GASB. Further, any tax implications would be dependent on the specific numbers associated with any distributed infrastructure program Tampa Bay Water might seek to fund (how much of bond will be spent on these projects, how much will go to investments on private property, how much of a monetary benefit will customers receive, etc.). Therefore, it is recommended if Tampa Bay Water or any of its members seek to utilize bonds to finance a distributed infrastructure project, the tax issues be investigated further before moving forward.
EXPERTS CONSULTED

1. Fred Bloetscher – Associate Professor at Florida Atlantic University in Department of Civil, Environmental, and Geomatics Engineering
   a. Research includes water and wastewater technology, sustainable water resource planning and management, and utility management and finance

2. Mark Lawson, P.A. – Board-Certified attorney in City, County and Local Government Law
   a. Practice focuses on matters of public finance and the development of special revenue programs to deliver essential services and capital infrastructure.
   b. Expertise in PACE financing in Florida.

3. Rowan Schmidt – Program Director for Finance and Investment Strategies with Earth Economics
   a. Leads Earth Economics’ 21st Century Utility Program, a national effort alongside major water utilities and other public agencies to advance benefit-cost analysis, accounting, asset management, and funding mechanisms for natural capital investments.

4. Cynthia Koehler – Environmental attorney and water policy expert working on federal and state water issues and legislation
   a. Currently working on a white paper for WaterNow on this same issue which is focusing on range of legal considerations for funding distributed infrastructure.

5. Ed Harrington – Former General Manager at San Francisco Public Utilities Commission, and formerly on the board of Financial Accounting Foundation (FAF), which oversees the Financial Accounting Standards Board (FASB), and Governmental Accounting Standards Board (GASB).
   a. Currently working with WaterNow as an advisor on the distributed assets project. Also works as an advisor for Earth Economics.

6. Judith Welch Wegner – Burton Craige Professor of Law at University of North Carolina School of Law.

7. L. Thomas Giblin – President and Shareholder of Nabors Giblin & Nickerson P.A.
   a. Present bond counsel for Tampa Bay Water, and C was previously bond counsel at the time of the adoption of Tampa Bay Water’s interlocal agreement (1998).

8. Christina Sackett – Chief Financial Officer of Tampa Bay Water.


    a. Serves as a financial advisor to Tampa Bay Water.

    a. Serves as a financial advisor to Tampa Bay Water.
ENDNOTES


ii Tampa Bay Water was a recreation and reorganization of the previous entity, the West Coast Regional Water Supply Authority.


iv Id. at 33.


vii Tampa Bay Water defines its “Master Water Plan” in its interlocal agreement to include expansion, conservation, diversification, and preservation of water supply. Additionally, the Master Water Supply Contract, signed by Tampa Bay Water and all of its member governments, states that “[t]he Authority and the Member Governments realize that the development of new water supply sources and the implementation of the Master Water Plan are paramount to the Authority’s ability to fulfill its Water Service obligations under this contract and the parties hereby agree to work together toward accomplishing the objectives set forth in the Master Water Plan and the Interlocal Agreement.” Further, the Master Water Supply Contract states that the Member Governments shall have the primary responsibility for implementing water conservation efforts, but that “the Authority may continue to plan and coordinate the conservation efforts of the Member Governments.”

viii Article VII, §10, Fla. Const.

ix Jackson-Shaw Co. v. Jacksonville Aviation Authority, 8 So.3d 1076, 1095 (Fla. 2008) (citing to State v. Hous. Fin. Auth. of Polk County, 376 So.2d 1158, 1160 (Fla. 1979)).

x Id. (citing to State v. Miami Beach Redevelopment Agency, 392 So. 2d 875, 886 (Fla. 1980).

xi Id. at 1095 (citing to State v. Osceola County, 752 So.2d 530, 536 (Fla. 1999).

xii Jackson-Shaw Co., 8 So.3d 1076 at 1095 (citing to Orange County Indus. Dev. Auth. V. State, 427 So.2d 174, 179 (Fla. 1983).

xiii Id. (citing State v. Manatee County Port Auth., 193 So.2d 162 (Fla. 1966).

xiv Donovan v. Okaloosa County, 82 So.3d 801, 809 (Fla. 2012) (citing to State v. Miami Beach Redevelopment Agency, 392 So.2d 875, 885 (Fla. 1990)).

xv Id. (citing to Orange County Industrial Development Authority v. State, 427 So.2d 174 (Fla. 1983)).

xvi Id. (citing to State v. Osceola Cnty., 752 So.2d 530, 536 (Fla. 1999)).

xvii Donovan, 82 So.3d at 810 (citing to State v. Housing Fin. Auth. of Polk Cnty., 376 So.2d 1158, 1160 (Fla. 1979)).

xviii Article II, §7, Fla. Const.


Because Tampa Bay Water does not have retail customers, this would have to include the member governments, who would themselves be implementing the programs with their retail customers.

Tampa Bay Water is a regional water authority that was reorganized and renamed from the previous entity, which was known as the West Coast Regional Water Supply Authority. The statute addressed uses the original entity’s name, but applies to Tampa Bay Water.

Because water facilities are not included in part II of chapter 159, Fla. Stat. §373.715(1)(b)6. provides that all water treatment, production, or transmission facilities are considered a “manufacturing plant” for purposes of Fla. Stat. §159.27(5). Therefore, the financing provisions of part II of chapter 159 can be applied to water treatment, production, or transmission facilities.

Additionally, it is noteworthy that the term “capital projects” is not defined in the statute or anywhere else in the chapter.

Fla. Stat. §373.713(2)(f) (2016) addresses the definition of “unit,” and states that for the purpose of issuing revenue bonds, a regional water supply authority shall be considered a “unit” as defined in the Revenue Bond Act of 1953.

The Florida Industrial Development Financing Act grants bonding authority to “local agencies,” which includes counties and municipalities. Thus, any of Tampa Bay Water’s individual member governments would have the same bonding authority under this Act as Tampa Bay Water.


Id. at 17-18.

Id. at 18.

Tampa Bay Water, “Amended and Restated Interlocal Agreement Reorganizing the West Coast Regional Water Supply Authority,” at 22-23.

Id. at 23; While Tampa Bay Water is clearly precluded from selling water directly to retail customers of the member governments, neither this provision, nor any other portion of the Interlocal Agreement appears to preclude Tampa Bay Water from being able to provide funding to the member governments to be used to fund distributed asset programs directly to retail customers.

Id. at 24.

Id. at 25.

Tampa Bay Water, “Amended and Restated Interlocal Agreement Reorganizing the West Coast Regional Water Supply Authority,” at 41.


Any such investment/treatment would be required to be approved by the Tampa Bay Water Board of Directors (if recommended).
As an example of including conservation measures as “water management,” Fla. Stat. §380.021, which lays out the purpose of “The Florida Environmental Land and Water Management Act of 1972,” provides that, in order to ensure a water management system that will reverse the deterioration of water quality and provide optimum utilization of limited resources, it is necessary to establish land and water management policies to guide and coordinate local decisions relating to growth and development.

1 City of Tacoma v. Taxpayers of City of Tacoma, 108 Wash.2d 679, 692 (Wash 1987).

2 Id. at 703.


5 Deady, Erin L, Property Assessed Clean Energy: Is there Finally a Clear Path to Success? The Florida Bar Journal, Volume 90, No. 6 (June, 2016).

6 Fla. Stat. §75.02 (2016).

7 Fla. Stat. §75.09 (2016).


9 Id. at 13; The Florida Supreme Court pointed out and remanded for correction of issues with certain PACE programs, including disallowing the use of foreclosure to enforce assessments.


13 Id. at 11.

14 Id. at 20.

15 Id. at 15. To retain a property interest, Philadelphia utilizes conservation easements or right of ways for the purpose of maintaining the green infrastructure.


18 Id. at 20.

19 Id.


As is cited in the following referenced article, Kevin Shafer, executive director of Milwaukee’s regional sewer district, said that his agency was recently told that it must issue a Form 1099 reporting miscellaneous income to a property owner if the green infrastructure project is valued above $600. See Meacham, Brent. *IRS Says ‘Green’ Water Infrastructure Is ‘Taxable Income,’ Irking Proponents*, Apr. 15, 2014. Available at https://www.mychamplain.net/forum/irs-says-green-water-infrastructure-taxable-income-irking-proponents.

The 10% limit is capped at $15,000,000 for issues in excess of $150,000,000.