Sea-Level Rise Adaptation Financing at the Local Level in Florida

Thomas Ruppert, Esq. and Alex Stewart

September 2015

Contents

I. Introduction .................................................................................................................................................. 2

II. Ad Valorem Taxes and Municipal Service Taxing Units ............................................................................. 4
    A. Authority ................................................................................................................................................... 4
    B. Potential Legal Issues/ Legal Challenges ................................................................................................... 5
    C. Strengths and Weaknesses ....................................................................................................................... 5
    D. Summary of Appropriateness for Use in SLR Adaptations................................................................. 6

III. Special Assessments and Municipal Service Benefit Units (MSBU) .............................................................. 6
    A. Authority ................................................................................................................................................... 6
    B. Potential Legal Issues/Legal Challenges .................................................................................................... 7
    C. Strengths and Weaknesses ....................................................................................................................... 8
    D. Summary of Appropriateness for Use in SLR Adaptations................................................................... 9

IV. Local Option Tourist Development Tax ....................................................................................................... 10
    A. Authority ................................................................................................................................................. 10
    B. Potential Legal Issues/Legal Challenges ................................................................................................. 10
    C. Strengths and Weaknesses ..................................................................................................................... 10
    D. Summary of Appropriateness for Use in SLR Adaptations................................................................... 11

V. Stormwater and Drainage Fees................................................................................................................... 12
    A. Authority ................................................................................................................................................. 12
    B. Potential Legal Issues and Challenges .................................................................................................... 12
    C. Strengths and Weaknesses ...................................................................................................................... 13
    D. Summary of Appropriateness for Use in SLR Adaptations................................................................. 14

1 This work represents a draft of work funded in part by a grant from the Houston Endowment for inclusion in a larger report by the Harte Research Institute for Gulf of Mexico Studies at Texas A&M University – Corpus Christi on sea-level rise to be released in 2016. As such, all rights to this work are reserved to the Houston Endowment, and this early work is made available by permission. Recommended citation: HOUSTON ENDOWMENT, THOMAS RUPPERT & ALEX STEWART, SEA-LEVEL RISE ADAPTATION FINANCING AT THE LOCAL LEVEL IN FLORIDA (Sept. 2015).

Special thanks to attorneys Erin Deady, President, Erin L. Deady, P.A. and Jeff DeCarlo and Chad Friedman of Weiss Serota Helfman Cole & Bierman, P.L. for input on this project.

2 Florida Sea Grant Coastal Planning Specialist, 1365 Memorial Dr., Ungar 230-B, Coral Gables, FL 33146.

3 J.D. Candidate (2L), Stetson University School of Law.
I. Introduction

As sea-level rise (SLR) and climate change (CC) become part of the lexicon of local governments, many have begun assessing their vulnerability to these phenomenon.4 Some local governments have moved beyond just initial assessments and are working to implement policies and strategies aimed at making them more resilient to the challenges of SLR and CC. This white paper focuses specifically on SLR, though some of the challenges associated with SLR may be exacerbated by CC. An obvious example of this presents itself in drainage: even as SLR may decrease the effectiveness of existing gravity-based stormwater drainage systems, increased intensity of rainfall events due to CC may place higher demands on an already stressed system.

As local governments seek to adapt to SLR, frequently people default to the assumption that we will focus on designing and building engineered solutions that “protect” virtually all existing public and private development.5 Financial considerations likely will eventually limit this approach in some areas since protection

---


strategies such as sea walls, extensive stormwater pumping systems, and elevating infrastructure may cost more than some local governments can spend. However, no one doubts that local governments, with strong political support from their constituents, will seek to protect the community and private and public assets for as long as possible. To accomplish this will require funding, potentially massive amounts of funding.

Just as adapting to SLR bears strong resemblance in many instances to “normal” efforts to make a community more resilient and resistant to flooding, storms, and storm surge, financing adaptation to SLR will often resemble existing financing for various types of current local government activities. This white paper surveys methods local governments might use for financing adaptation to SLR with particular attention to four areas for each financing tool discussed: 1. The legal authority, 2. Examples of current uses of the financing tool, 3. Potential legal issues or challenges associated with the tool, and 4. The pros and cons of each tool.

Before looking at specific financing mechanisms, a brief discussion of potential policy considerations is in order. Two varying approaches to protecting people and property from SLR and other coastal hazards present themselves. A local government can utilize funding streams that have no direct impact on the properties requiring protection. This arguably has the benefit of preserving the value of the property and spreading the cost around. Another school of thought, however, would suggest that the people and property most vulnerable to SLR and other coastal hazards should bear the bulk—if not all—the extra costs necessary to protect them. Those supporting this approach reason that those that choose to own property in the most vulnerable areas should not be able to push the costs of their choice onto property owners, citizens, or taxpayers that have made decisions to live in less vulnerable places. Some go so far as to argue that this is all about beaches and the rich people that live on the beaches. While in some places this may have an element of truth, it certainly is not the case in all communities. Many very low-lying areas subject to impacts from SLR are not full of wealthy people living in large, expensive homes.

Supporters of charging more to properties that need protection from SLR or other coastal hazards also justify this by asserting that it supports a proper free market signal for the risk of the property. Because maintaining the property requires protection that may be very expensive to supply, that property should pay its fair share of that cost so that potential purchasers of the property can see that the vulnerability of the property is a cost to be considered in their market transaction. In market terminology, this means that the property internalizes the cost of local-government-based protection activities rather than externalizes them.

Many more arguments for and against making hazardous properties pay all their own costs present themselves, but we have just presented a simplified overview of the main contender on each side of the argument. A more nuanced view would have to incorporate many other issues, such as socio-economic class and environmental justice issues. Making vulnerable properties pay their own way for protection could be a death knell for poor or modest communities while being little more than an annoyance for very wealthy property owners. The challenge of incorporating socio-economic and environmental justice issues into SLR


7 See, e.g. Jeremy Martinich, James Neumann, Lindsay Ludwig, & Lesley Jantarasami. Risks of sea level rise to disadvantaged communities in the United States, 18 Mitigation and Adaptation Strategies for Global Change 169 (2013) (finding that areas of higher social vulnerability are much more likely to be abandoned than protected from sea-level rise).
adaptation often bears strong resemblance to the challenges these issues present in reducing and eliminating subsidies in flood insurance under the National Flood Insurance Program.

The remainder of this white paper addresses multiple existing potential sources of revenue sources that local governments could use to pay for the expensive projects and infrastructure that they need to protect areas from rising seas. Because such an endeavor offers limited utility to local governments when done in the abstract and local government financing law is an inherently state issue, this white paper focuses specifically on the state law of Florida in providing examples of potential revenue sources for SLR adaptation.

II. Ad Valorem Taxes and Municipal Service Taxing Units

A. Authority

As they are both taxes, both ad valorem taxes and Municipal Services Taxing Units (MSTUs) are treated together in this section. While multiple statutes provide authority for MSTUs, Florida Statute section 125.01 ranks primary above these as it provides the governing body of the county (Board of County Commissioners) the power to “[e]stablish, and subsequently merge or abolish . . . municipal service taxing . . . units for any part or all of the unincorporated area of the county.”8 The governing body may also “[l]eve and collect taxes, both for county purposes and for the providing of municipal services within any municipal service taxing unit . . . ; borrow and expend money; and issue bonds, revenue certificates, and other obligations of indebtedness.”9 The governing body may also “identify a service or program rendered specially for the benefit of the property or residents in unincorporated areas and financed from countywide revenues and petition the board of county commissioners to develop an appropriate mechanism to finance such activity for the ensuing fiscal year, which may be by taxes, special assessments, or service charges levied or imposed solely upon residents or property in the unincorporated area, by the establishment of a municipal service taxing . . . unit pursuant to paragraph (1)(q).”10

MSTUs could generate revenue to address SLR due the existing public policy set forth in Florida Statute section 161.088 (2000), in which the Legislature states that because beach erosion is “a serious menace to the economy and general welfare of the people of this state and has advanced to emergency proportions, it is hereby declared to be a necessary governmental responsibility to properly manage and protect Florida beaches.”11 The Legislature has also declared that “such beach restoration and nourishment projects, as approved pursuant to Florida Statute section 161.161, are in the public interest.”12 Because MSTUs must serve a public purpose, this clear language is favorable in addressing SLR. The State Legislature also calls for both local and state funds to be used “since local beach communities derive the primary benefits from the presence of adequate beaches.”13 The requirement of local funds makes MSTUs plausible sources for SLR adaptation funding.

12 Id.
B. Potential Legal Issues / Legal Challenges

MSTUs are typically limited in how much money they can raise. The Florida Constitution, in article VII, section 9 directs millage rates for ad valorem taxes.

MSTUs were discussed at length in Gallant v. Stephens. In Gallant, the Florida Supreme Court was tasked with reviewing the constitutionality of Florida Statute section 125.01 and the authorization of counties to create MSTUs as a form of ad valorem tax without voter approval. Ultimately, the Court found that the statute in question was constitutional and that counties in Florida do have the authority to create MSTUs as a taxing tool to provide municipal services within the 10 mill limit for municipal purposes without voter approval. This case seems to mean that MSTUs are authorized without voter approval, so long as the funds levied are used for municipal purposes and adhere to millage limits. It also would appear that millage limitations can be overcome so long the proceeds are used in accordance with the exceptions appearing in Article VII, Section 9(b) of the Florida Constitution.

Since a local government can use taxes for essentially any function of the government meant to benefit the citizenry or run the government, few legal issues should arise with ad valorem taxes and MSTUs used for SLR adaptation. The key for local governments will be to ensure that they do not exceed the millage limitations for county and/or municipal services unless they fall under the exceptions laid out in Article VII, Section 9(b) of the Florida Constitution.

One potential legal issue that could arise for a county, though, deals with a situation in which a county decides to use ad valorem taxes or MSTUs levied in municipalities. In such a situation, the county must be able to show that there is a real and substantial benefit to the municipal properties being taxed. Should a county decide to use their taxing authority to raise funds from those in unincorporated areas and municipalities, the county must ensure that those properties being taxed in any municipality also get a real and substantial benefit from the services that the county has provided. This is important should a county attempt to use tax funding for SLR adaptation, though under certain circumstance it would appear possible for a county to show benefits of increased erosion control, drainage improvements, and storm protection for properties in municipalities.

C. Strengths and Weaknesses

The most glaring weakness of ad valorem taxes and MSTUs: they are normally quite restricted in their ability to raise much more funding than what municipalities and counties already levy because of millage limitations. If a municipality or county is already at or near the millage caps, and if there is not an exception met to go above the millage limitation, then attempting to fund SLR adaptation strategies with ad valorem taxes and MSTUs may not be fruitful depending on how much the local government already utilizes this funding mechanism.

Although potentially limited by how much can be levied, ad valorem taxes and MSTU funds levied have an advantage in that they may be spent more broadly and used for many county or municipal purposes. The flexibility afforded by ad valorem taxes is highly desired by local governments as they try to garner funding for all of their needs in tougher and tougher economic times, and due to the language of Florida Statute Chapter 14 Gallant v. Stephens, 358 So.2d 536 (Fla. 1978).

15 Id. at 537.

16 See Alsdorf v. Broward County, 333 So.2d 457,458 (Fla. 1976); see also Fla. Const. Art. 8 §1(h).

17 See, e.g. City of St. Petersburg v. Briley, Wild & Assoc., Inc., 239 So.2d 817 (Fla. 1970).

18 See Florida Constitution, Art. 7, section 9 for millage limits.
161 stating that erosion and beach restoration are in the public interest, these funds seemingly are appropriate for use in dealing with those issues. Still, counties need to keep in mind that if an MSTU is levied on municipal properties, the county must be able to show a “real and substantial benefit from the services that the county has provided.” Note, however, that this “real and substantial benefit” is not limited to being conferred to the taxed properties specifically. Thus, if there is a benefit to public safety and welfare for people in the municipality, that should likely suffice as a “real and substantial benefit.”

Another benefit of ad valorem taxes and MSTUs is there is no requirement that there be any direct, special benefit to the real property from which the tax is levied. This essentially means that a local government may justify the levy in much broader applications by tying it to benefits to real property, citizens, or the county as a whole. Since these funds have broader potential applications, it allows maximum flexibility for local governments looking to address SLR.

One final strength of MSTUs is that there is no need for a referendum for a county to establish an ad valorem tax for any MSTU, with certain exceptions. The importance of this may grow as local governments find themselves with greater demands on the funds that are levied through various mechanisms, because property owners may not vote to approve the levy of assessments or other funding tools when they feel they are already being charged too much for the services being provided. If this does happen, local governments will find the MSTU provides a method of funding that does not require voter approval so long as it meets millage limitations, unless there is an exception provided by law.

D. Summary of Appropriateness for Use in SLR Adaptations

While ad valorem taxes and MSTUs would seem to be appropriate for use in SLR adaptation due to the public purpose of erosion control, beach renourishment, and projects of similar nature, the potential millage limitations coupled with the issue of local governments already being near those millage caps should provide hesitation that MSTUs will be effective at significantly funding SLR adaptation.

III. Special Assessments and Municipal Service Benefit Units (MSBU)

A. Authority

Municipalities and counties have statutory authority to levy special assessments. The governing body is given considerable discretion when determining county improvement projects and their costs. Florida Statute section 170.201 states that “the governing body of a municipality may levy and collect special assessments to fund capital improvements and municipal services, including, but not limited to, fire protection, emergency medical services, garbage disposal, sewer improvement, street improvement, and parking facilities” (emphasis added). Costs may be determined either by “the front or square footage of each parcel of land,” or “an alternative methodology, so long as the amount of the assessment for each parcel of land is not in excess of the proportional benefits as compared to other assessments on other parcels of land.” Special assessments

---

19 See Alsdorf v. Broward County, 333 So.2d 457, 458 (Fla. 1976); see also Fla. Const. Art. 8 §1(h).


21 There would be a referendum required if the funds were to be used for bond financing, see Part IV, infra, or if the funds were going to be raised above the millage cap limitations.


are a “revenue source used to construct and maintain capital facilities and to fund certain services.”24 A valid special assessment requires that “the property assessed must derive a direct, special benefit from the service provided and that the assessment must be fairly and reasonably apportioned among properties that receive the special benefit.”25 In order to show that a property receives a direct and special benefit “there should be a logical relationship between the provided service and the benefit to [that] real property.”26

Of important note in Florida to local governments are municipal services benefit units, or MSBUs. These are statutorily created tools that may be utilized to raise funds for various capital improvements and municipal services,27 including beach erosion control, street and sidewalk construction and upkeep, and “other essential facilities and municipal services,”28 so long as it meets the requirements of a special assessment.

B. Potential Legal Issues/Legal Challenges

“Special assessments may be levied only for the purposes enumerated in this section and shall be levied only on benefited real property at a rate of assessment based on the special benefit accruing to such property from such improvements when the improvements funded by the special assessment provide a benefit which is different in type or degree from benefits provided to the community as a whole.”29 Enumerated uses include roads, sidewalks, lighting, landscaping, signage or other amenities; swales, sanitary sewers, storm sewers, canals, drains, water bodies, marshlands; water supply; relocation of utilities; parks/recreation facilities; seawalls; drainage and reclamation of land; parking; mass transit; and navigation.30

An issue that may arise when a special assessment or MSBU is utilized for the purpose of funding adaptation to SLR is whether the service and capital facilities being provided by the levies are actually special assessments, or whether they are taxes. There is a fine line between a local government funding a general government service and a government service that specially benefits properties, and this fine line may distinguish whether the levy is a tax or a special assessment. To see the distinction it is easiest to use an example: law enforcement.31 It has been held in Florida that law enforcement is essential to the public welfare, and counties and municipalities must fund these services for their citizenry.32 However, law enforcement services are meant to provide a


25 Donnelly v. Marion County, 851 So.2d 256, 259 (Fla. 5th DCA 2003) (citing City of North Lauderdale v. SMM Props, Inc., 825 So.2d 343 (Fla. 2002)); Workman Enters., Inc. v. Hernando County, 790 So.2d 598 (Fla. 5th DCA 2001).

26 Morris v. City of Cape Coral, 163 So. 3d 1174, 2015 Fla. LEXIS 987, 40 Fla. L. Weekly S 237 (Fla. 2015) (“In evaluating whether a special benefit is conferred to property by the services for which the assessment is imposed, the test is not whether the services confer a “unique” benefit or are different in type or degree from the benefit provided to the community as a whole; rather, the test is whether there is a ‘logical relationship’ between the services provided and the benefit to real property.” Citing Lake County v. Water Oak Mgmt. Corp., 695 So. 2d 667 (Fla. 1997)). Florida Legislature’s Office of Economic and Demographic Research, Local Gov’t Financial Information Handbook 2011-“Special Assessments”, http://edr.state.fl.us/content/local-government/reports/lgfih11.pdf, Page 15.


32 See Whisnant v. Stringfellow, 50 So.2d 885 (Fla. 1951); see also Lake County v. Water Oak Management Corp., 695 So.2d 667, 669 (Fla. 1997).
benefit to the community as a whole, so a local government will fund those services through ad valorem taxation. In other words, it would be inappropriate for a local government to attempt to use a special assessment to fund law enforcement services because there would be no logical connection to a direct, special benefit provided to the real property being assessed. This is different from an example that came up in Water Oak Management.\textsuperscript{33} In that case, the Florida Supreme Court had to decide whether fire protection services could be funded by a county’s special assessment levies.\textsuperscript{34} Ultimately, the court held that “although fire protection services are generally available to the community as a whole, the greatest benefit of those services is to owners of real property” when they upheld the county’s contention that fire protection services do have a logical relationship to the special benefits provided to the properties served.\textsuperscript{35} What this entails for local governments is that they must be able to show that the services provided are not just general services that afford no special benefit to the real property being assessed, but are actually providing a special benefit to real property. So long as the local government entity makes sure that the assessment focuses on real property in benefits provided,\textsuperscript{36} and follows the two-prong test provided above, then the special assessment should be held to be valid by Florida courts.

C. Strengths and Weaknesses

The biggest strength of special assessments for SLR adaptation is that since they are not taxes, they are not subject to the millage limitations set forth in the Florida Constitution.\textsuperscript{37} This means that as long as local government complies with the rules for special assessments, the local government will not be hampered by millage limitations on taxes, potentially allowing local governments to raise large sums of money for adaptation activities.

A potentially serious weakness of MSBUs and special assessments is that they cannot be levied on either school boards or on any of Florida’s twenty-eight public colleges without the consent of the school board or Florida college.\textsuperscript{38} Thus, a local government should evaluate how much the statutory exemption from a special assessment for school districts and public colleges would cost prior to deciding whether and how to utilize this tool.

While it initially might seem a weakness of special assessments and MSBUs, the need to demonstrate a direct, special benefit to the real property assessed may actually be a strength. In many cases a special benefit should be easy to demonstrate. For example, if part of a neighborhood with a single access road is frequently inaccessible due to flooding during the highest tides of the year, properties that need the road for access would clearly receive a “special” benefit from a project to elevate or otherwise protect the road.

The need for a relationship between special assessments and benefits to properties should be very carefully considered from multiple perspectives before a local government embarks on assessing properties. One such

\textsuperscript{33} Lake County v. Water Oak Management Corp., 695 So.2d 667 (Fla. 1997).

\textsuperscript{34} Id.

\textsuperscript{35} Id. at 669.

\textsuperscript{36} This is a large reason why services like law enforcement aren’t eligible for special assessment funding—they focus on non-real property benefits, such as benefits to the owners, people in the community, etc... Special assessments must always have that special benefit related to the real property being assessed.

\textsuperscript{37} Fla. Stat. §197.3632 (1)(d) (2015). While this section defines specifically ‘non-ad valorem assessments,’ special assessments are merely a sub-type of non-ad valorem assessments, so the definition still applies.

\textsuperscript{38} Fla. Stat. §1013.51(2) (2015). This includes the twenty-eight institutions in the Florida College System (formerly the Community College System), not the twelve public universities in the Florida State University System.
consideration is whether there is a temporal aspect to the relationship between a special benefit and the assessment? For example, if a local government were to specially assess a group of properties for an infrastructure improvement that specially benefited their land, and the local government decided that a special assessment of ‘x’ amount over a period of twenty-five years would cover the costs, the local government could potentially be in a conundrum should the benefit of the infrastructure improvement only last fifteen years resulting in no special benefit being bestowed upon the properties for the final ten years. If there is no special benefit being given to the real property during the last ten years of the assessment period, might courts rule that the assessment is no longer valid? At this point this example is purely hypothetical, and courts may rule in the given example that there is no requirement that the benefit be constant for the term of the assessment. Regardless of how the potential issue would be decided, it is important for local governments considering using special assessments or MSBUs to fund SLR adaptation to take into account all the rules associated with what constitutes a special assessment, use the funds according to statutory direction, and try to plan so that that the benefits to property funded by an assessment last at least as long as any assessment to fund such benefits.

Similarly, local governments must carefully ensure that assessment for each specially benefited property is proportional to the benefit to that property. Historically the two primary methods for ensuring this relationship is to use either the front-footage of each property or the surface area of each property as a method to ensure a relationship between the amount of benefit and the amount assessed to individual properties. In the context of planning for SLR, it may be that new ways of assessing property based on special benefits could be developed. For example, just as a stormwater MSBU might operate on the basis of the impermeable area of included properties, if a pumped drainage system benefits an entire area but has more benefit to the lowest-lying properties, it might be possible to incorporate elevation as one of the elements that helps apportion assessments among properties.

Another consideration is how involved the process can be for local governments. Depending on how the special assessment funds are used, the level of involvement and processes can be a deterrent for a local government needing a simple solution. It may help local governments to prospectively develop clear and concise methods and guidelines for implementation of special assessments before they are ultimately needed as this can make it easier and quicker for local government to act once a situation requiring special assessment funding arises.

**D. Summary of Appropriateness for Use in SLR Adaptations**

MSBUs present an appropriate funding mechanism for SLR so long as the property assessed derives a direct, special benefit from the service provided and the assessment is fairly and reasonably apportioned among properties that receive the benefit. If these thresholds can be met, then MSBUs and special assessments offer flexibility to local governments in addressing funding issues for SLR adaptation.

---

40 Cf. e.g. City of Boca Raton v. State, 595 So.2d 25, 31 (1992).
IV. Local Option Tourist Development Tax

A. Authority

In Florida, one of the main economic drivers is the tourism industry. To capitalize on this, the Legislature has ensured that counties have a way to increase revenues, through tourism taxes, from those non-permanent residents that utilize state resources while they boost local economies. The “Local Option Tourist Development Act” authorizes a county to impose a tax on short-term rentals (less than 6 months) of living quarters or accommodations within the county. Under Florida Statute section 125.0104, tourist development tax proceeds are allowed to be used only for the purposes enumerated in that statute. Of particular importance for our purposes is the allowance of the tourist development tax “[t]o finance beach park facilities or beach improvement, maintenance, renourishment, restoration, and erosion control . . . .”

B. Potential Legal Issues/Legal Challenges

The statute authorizing the tourist development tax spells out numerous parameters that must be followed. So long as the statutory requirements are followed and the funds are only used for the purposes enumerated in the statutory language, legal challenges should not arise.

The case that has the most significance to environmental issues and the tourist development tax is *Lozier v. Collier County*. In that case, the Florida Supreme Court found that tourist tax revenues could be used to pay off bonds that were previously issued by Collier County for beach renourishment and erosion control projects. This may be important for a county that has already issued bonds to fund projects dealing with beaches and erosion control, since they are allowed to use tourist tax revenues to pay off those bonds instead of applying the tourist tax revenues directly to the projects themselves. This would mean that a county is able to more quickly pay off the bond debt that it may accrue when dealing with SLR and impacts on beaches and erosion.

C. Strengths and Weaknesses

The most apparent strength of this funding is that it naturally seems to align with the SLR adaptation actions of beach nourishment and beach erosion control since these appear in the statutory language. In fact, tourism development funding is already sometimes a source of part of the local portion of funding in beach nourishment projects in Florida. Nonetheless, use of the tourism development tax as a significant source of funding for adaptation to SLR faces several challenges.

---

43 Fla. Stat. §125.0104 (2015) provides the statutory authority whereby counties may institute tourism taxes.
44 Id.
47 Lozier v. Collier County, 682 So.2d 551 (Fla. 1996).
48 Id. at 553.
49 See, e.g. Julie Murphy, Funding shored up for beach, dune projects in Flagler, The Daytona Beach News-Journal (noting that “Flagler County will fund its portion of the design work [for beach nourishment] with bed-tax money that comes through the Tourist Development Council.”), available at [http://www.news-journalonline.com/article/20140525/NEWS/140529633/-1/BUSINESS05017p=2&tnpgg](http://www.news-journalonline.com/article/20140525/NEWS/140529633/-1/BUSINESS05017p=2&tnpgg). Also, in Sarasota County, the “Tourist Development Tax” is a 5% tax on overnight rentals less than 6 months. Thirty-four percent (34%) is for beach improvement, cleanup, renourishment, maintenance, preservation, restoration, and erosion control. Ten percent (10%) is for sports stadiums and ancillary facilities; 10% for Aquatic Nature Center and ancillary facilities;
First, the purposes for which the funding can be used is relatively narrow, as defined by statute. Only “beach nourishment, maintenance, preservation, restoration, erosion control” appear as real forms of SLR adaptation. In addition, since the tourism industry is so large in Florida, there may be strong pressure for the funds from the tax to go into advertisement and major capital expenditures for stadiums, convention centers, etc. as authorized by the statute.50

Second, the income stream from the tourist development tax is limited as the tax is limited to between 2-6% on short-term rental transactions,51 with the tax potentially available for beach maintenance, erosion, and related beach activities limited to a 2-3% tax, depending on the county. In addition, Florida Statute section 125.0104 (5) specifies the ways that tourism taxes may be spent by a county.52 Depending on the level of tax being created by the tourism tax, it would seem that counties will be faced with significant expenditure decisions and may face pressure from industry to spend the funds on advertising and capital expenditures for tourism attractions instead of beach infrastructure relating to preparing for SLR. While the beach maintenance portion of tourist tax funding aligns with SLR adaptation in a natural way, the question remains whether SLR adaptation can become enough of a priority among counties to garner much needed funds from this type of taxation.

An inherent weakness for the tourist development tax is that it statutorily requires a referendum.53 While this isn’t a major hurdle for most counties due to the nature of the tax being on short-term rentals, it still leaves the power of this tax in the hands on the citizens and takes certainty away from local government elected leaders when they seek to plan out definite funding streams for various projects.

D. Summary of Appropriateness for Use in SLR Adaptations

This funding mechanism offers an option for the beach management portions of SLR adaptation. Depending on the county, this tax can raise substantial amounts of funds. Any county seeking to use this tax for SLR adaptation will need to follow the statutory guidelines and to prioritize that portion of the funds available for beach nourishment and related activities as possible.

33.5% for advertising and promotion; 10% for cultural and fine arts; and 2.5% for tourism activities and attractions. Sarasota County Post-Disaster Redevelopment Plan, table 10.1, p. 87 (undated), available at https://www.scgov.net/PDRP/Documents/PDRP.pdf.

50 http://www.orlandoweekly.com/orlando/how-the-tourism-industry-and-politicians-keep-floridas-tax-money-from-being-spent-where-we-need-it-most/Content?oid=2244501. While this article appears to have an agenda/bias, it is true that tourism taxes can’t be used for lifeguards on the very beaches that draw tourists here; instead, that money is spent on major capital projects. See also http://articles.orlandosentinel.com/2013-04-23/business/os-bed-tax-for-lifeguards-20130422_1_hotel-taxes-tourism-industry-beach-patrol and http://dor.myflorida.com/dor/taxes/local_option.html#tourist_impact.

51 Florida Statute section 125.0104 sets the parameters for the “basic” tourist development tax as well as additional 1% increments that may be added under other scenarios, up to an aggregate maximum of 6%.


V. Stormwater & Drainage Fees

A. Authority

Florida law provides broad authority over drainage to local governments\(^{54}\) and even requires local governments to establish stormwater management programs as part of their land development regulations.\(^{55}\) Florida law recognizes that local governments share stormwater management responsibilities with the water management districts and the Department of Environmental Protection through development of compatible stormwater plans.\(^{56}\) In addition to any other legally available funding mechanism they might have, local governments have three additional options created by the Legislature.\(^{57}\) Local governments may “[c]reate one or more stormwater utilities and adopt stormwater utility fees sufficient to plan, construct, operate, and maintain stormwater management systems,”\(^{58}\) “[e]stablish and set aside, as a continuing source of revenue, other funds sufficient to plan, construct, operate, and maintain stormwater management systems set out in the local program,”\(^{59}\) or create one or more stormwater management system benefit areas.\(^{60}\)

B. Potential Legal Issues and Challenges

Since counties and municipalities have options as to how they will fund their stormwater management systems, it is important that they think through possible issues that may arise with each one.

Should a municipality decide to establish a Stormwater Management System Benefit Area per the process in section 403.0893(3), the local government should be certain to comply with all of the information for special assessments in section III. Special Assessments and Municipal Service Benefit Units supra. In addition, the local government should ensure that if there are various land uses, property types, or differing stormwater uses or benefits, that these fluctuations are accounted for within the program, likely via subareas.\(^{61}\)

If instead of these two methods a municipality decides to create a stormwater utility that charges fees, it should set a differential fee that relates use of the service to the property. However, such fees need not correspond exactly to the use of the service by the property. Local governments typically base the stormwater utility fee on the square footage of impervious cover on a developed parcel of land within the utility area.\(^{62}\) For example, a local government may assess fees for commercial property based upon the parcel’s actual square

\(^{54}\) See, e.g. Fla. Stat. §170.01(1)(a) & (b) (2015) (“Any municipality of this state may, by its governing authority...provide for the...guttering, and draining of streets, boulevards, and alleys...[o]rder the construction, reconstruction, repair, renovation, excavation, grading, stabilization, and upgrading of greenbelts, swales, culverts, sanitary sewers, storm sewers, outfalls, canals, primary, secondary, and tertiary drains, water bodies, marshlands, and natural areas, all or part of a comprehensive stormwater management system, including the necessary appurtenances and structures thereto and including, but not limited to, dams, weirs, and pumps.”).


\(^{61}\) Fla. Stat. § 403.0893 (3) (2015); Also see Pinellas Apartment Ass’n, Inc. v. City of St. Petersburg, 294 So.2d 676 677 (Fla. 2nd DCA 1974), wherein it was stated that factors considered in the setting of utility rates by municipalities might include: “cost of service, the purpose for which the service or the product is received, the quantity or the amount received, the different character of the service furnished, the time of its use or any other matter which presents a substantial difference as a ground of distinction.”

\(^{62}\) City of Gainesville v. State, 863 So. 2d 138 (Fla. 2003).
footage of impervious surface but have a different rate structure for residential properties due to the high administrative cost of developing an individualized rate based on analysis of all residential properties in the service area. Thus, local governments usually reserve for commercial properties the more expensive process of calculating varied fees and use either a flat rate for residential properties or use an “equivalent residential unit” or other averaged measure to charge residential properties. Charging all residential properties equally despite the need for a fee to be commensurate with use of the service led to such practices being challenged as an illegal tax. Courts have upheld the use of “equivalent residential units” and other similarly uniform charges since stormwater, unlike potable water and electricity, is not susceptible to exact measurement.

C. Strengths and Weaknesses

An interesting strength of stormwater management plans in coastal regions is that “[t]he department and the Department of Economic Opportunity, in cooperation with local governments in the coastal zone, shall develop a model stormwater management program that could be adopted by local governments [and] shall contain dedicated funding options, including a stormwater utility fee system based upon an equitable unit cost approach. Funding options shall be designed to generate capital to retrofit existing stormwater management systems, build new treatment systems, operate facilities, and maintain and service debt.” What this means is that local governments would not be venturing into uncharted waters when deciding which method of funding stormwater systems is best because there are governmental agencies that will help walk them through the process and will have models available for the local government to compare and adopt if necessary.

Another strength is that the fees raised by stormwater utilities can be set quite high, as the bar is “enough to meet the system’s capital requirements, as well as to defray operating expenses.” Essentially what this means is that a local government may be able to use these funds to raise capital for future outlays, meaning that coastal communities could start raising funds now that might not be needed until adaptation strategies for stormwater and drainage have been finalized in the future. This may be exceedingly important as municipalities run into limits on what they may charge with other potential funding mechanisms, because these fees may still be considered ‘just and equitable’ so long as the municipality can point to the funds being needed to meet the system’s capital and operating requirements.

It is important to keep in mind that there is a difference between the options provided by Florida Statute section 403.0893 and the strengths they provide. Of note, under option one—setting up a stormwater utility—the municipality would not need to show any direct or special benefits to the property in order to charge the

63 Id.
64 Article VII, section 1 of the Florida Constitution preempts local government authority to impose taxes other than those allowed by general law.
65 See, e.g. City of Gainesville v. Fla. Dept. of Transp., 778 So.2d 519, 525 (1st DCA 2001). See also, Morris v. City of Cape Coral, 163 So. 3d 1174, ( Fla. 2015) (quoting Boca Raton v. State, 595 So. 2d 25 (Fla. 1992) that “No system of appraising benefits or assessing costs has yet been devised that is not open to some criticism. None have attained the ideal position of exact equality, but, if assessing boards would bear in mind that benefits actually accruing to the property improved in addition to those received by the community at large must control both as to the benefits prorated and the limit of assessments for cost of improvement, the system employed would be as near the ideal as it is humanly possible to make it.”).
67 Id. at 319.
68 Id. at 320.
69 Fla. Stat. § 180.13 (2) states that the municipality “may establish just and equitable rates or charges to be paid to the municipality for the use of the utility by each person, firm or corporation whose premises are served thereby . . .”.
70 Id. at 319.
fee. This would not seem to be the case if option two or three--stormwater management system benefit areas or ‘other funding options’ such as special assessments—were chosen because with those it is likely that the local government would need to show that there was a direct benefit to the property being charged, and the amount of money reasonably in proportion to the benefit received. Due to this, it might be simpler for a local government to set up a utility under Florida Statute section 403.0893 (1).

There are weaknesses with this type of funding as well. The most glaring of these is that these funds will be quite limited in broad adaptability applications. Since it is important that these fees be tied to the capital and operating requirements of stormwater and drainage systems statutorily mandated, these funds will need to be tied to these systems. While these systems will undoubtedly be impacted by SLR, the impact level will vary greatly so that relying primarily on these funds will not be feasible if a municipality is to be able to raise funding for other areas of adaptation, such as roadway infrastructure.

Even if a local government wants to use a stormwater utility and stormwater utility fee structure exclusively to address adaptation of the stormwater system, another weakness of the fee is that agencies of the state that fail to pay a valid user fee for a stormwater system may assert sovereign immunity in any court action to collect the fees owed to the stormwater utility if the agency did not have a contract with the utility.\(^71\)

\[\text{D. Summary of Appropriateness for Use in SLR Adaptations}\]

While the various options within stormwater and drainage fees may vary the appropriateness of this funding mechanism, it is likely that this is not a source for major SLR adaption funding broadly speaking. While this funding mechanism may be an important aspect that local governments use to address certain impacts of SLR, the funding mechanism is simply too limited to be of use in broad SLR adaptation strategies.

\[\text{VI. Bonds}\]

\[\text{A. Authority}\]

For Counties: Florida Statutes §125.01(r) states that counties may “issue bonds, revenue certificates, and other obligations of indebtedness, which power shall be exercised in such manner, and subject to such limitations, as may be provided by general law.” There are many types of bonds that may be issued by a county, such as ad valorem, general obligation, water system/district, sewage system/district, revenue, improvement, and refunding. While all of these bonds would require an ordinance or resolution as part of the issuance, ad valorem bonds and general obligation bonds also impose the special burden of having a referendum.\(^72\) This requirement arises since property taxes are not directly tied to bonds and indebtedness unless the electorate states they approve those measures through a referendum with regards to ad valorem bonds. This is similar for general obligation bonds since the county would be pledging their full faith and credit as collateral for the bonds such that the electors should have a vote in whether creditors have recourse against their government’s credit and general fund.

Bond law for municipalities functions similarly. Florida Statutes Chapter 166 contains information regarding municipal borrowing through the bond process. Municipalities have the authority to issue bonds “to finance

\(^{71}\) City of Gainesville v. State of Florida, 920 So.2d 53 (Fla. 1st DCA 2005). See also City of Key West v. Fla. Keys Cmty. College, 81 So. 3d 494 (Fla. 3d DCA, 2012) (noting that the Florida Keys Community College enjoyed sovereign immunity from suit by the City of Key West for payment of the City’s stormwater fee).

the undertaking of any capital or other project . . . and may pledge the funds, credit, property, and taxing power of the municipality for the payment of such debts and bonds.”\textsuperscript{73} There are many types of bonds that municipalities are allowed to enter into: general obligation bonds, ad valorem bonds, revenue bonds, improvement bonds, and refunding bonds.\textsuperscript{74} Municipal bonds “shall be authorized by resolution or ordinance of the governing body and, if required by the State Constitution, by affirmative vote of the electors of the municipality.”\textsuperscript{75} This means that generally the governing body of the municipality has the authority and power to issue a bond by resolution or ordinance, unless a vote of the electorate is required such as when the municipality is issuing an ad valorem bond or is pledging the full faith and credit of the municipality for the payment of the debt.\textsuperscript{76}

B. Potential Legal Issues/Legal Challenges

Bond issuances are potentially subject to challenge if the issuance is not of a type clearly established by prior use and precedent or there are any procedures that do not follow legal requirements. In case of any doubt on these issues by local government, such as might be the case in using a bond issuance to fund SLR adaptation, a local government might choose to validate the bond issuance, as per the process in Florida Statutes Ch. 75, to ensure that they have the right and authority to issue those bonds and ensure there is no attack on the authority to issue the bonds, which could undermine the value of the bonds.\textsuperscript{77}

If a county or municipality initiates a proceeding to have a court validate the bond issuance, a property owner or interested party may intervene to challenge the bond issuance. As the Florida Supreme Court has held, “A petition for validation of governmental securities brings into question the right and authority of the taxing unit to issue the bonds, together with all proceedings taken in connection with their issue.”\textsuperscript{78} Even if the court should validate the bond, a challenger may still appeal that decision, but such appeal is directly to the Florida Supreme Court and takes place on an expedited schedule so that bond issuances are not unduly delayed.\textsuperscript{79}

One other potential concern that arises with bonds is the purposes for which they may be used. While statutes list out various uses, from constructing highways and public buildings to funding the outstanding indebtedness of the local government, a local government should have a strong argument that home rule powers allow the bonds. For counties, “[t]he provisions of this section shall be liberally construed in order to effectively carry out the purpose of this section and to secure for the counties the broad exercise of home rule powers authorized by the State Constitution.”\textsuperscript{80} Essentially, so long as a local government can point to a public purpose for a capital project, then they should have a strong argument that home rule powers enable them to bond for that purpose since it is necessary to carry out the government.

In \textit{Miami Beach Redevelopment Agency}, the Florida Supreme Court ruled on a case where one of the issues dealt with whether the proposed bonds at issue were payable from ad valorem taxation, which would mean

\begin{thebibliography}{9}
\bibitem{73} Fla. Stat. §166.111 (2015).
\bibitem{74} Fla. Stat. §166.101 (2015).
\bibitem{75} Fla. Stat. §166.121 (2015).
\bibitem{76} Fla. Const. Art. 7, Sect. 12 and Art. 7, Sect. 11.
\bibitem{77} City of Oldsmar v. State, 790 So.2d 1042, 1049 (2001) ("By invoking the protective provisions of chapter 75, a governmental entity can ensure the marketability of the proposed bonds or certificates of indebtedness by thereafter foreclosing an attack on their validity.").
\bibitem{78} Speer v. Olson, 367 So.2d 207,210 (Fla. 1978).
\bibitem{79} City of Oldsmar v. State, 790 So.2d 1042 (2001).
\bibitem{80} Fla. Stat. §125.01 (3)(b) (2015).
\end{thebibliography}
there was a requirement of a vote of the electorates. While the State argued that since ad valorem taxes would be funneled into the repayment fund then there should be a vote required for the bonds, the Agency argued that the bonds avoided the referendum requirement because there was no pledge of the county and city ad valorem tax power and there merely a promise to pay the bonds from general operating revenue which might include ad valorem tax funds. The Court, after a lengthy analysis, held “[w]hat is critical to the constitutionality of the bonds is that, after the sale of bonds, a bondholder would have no right, if the redevelopment trust fund were insufficient to meet the bond obligations and the available resources of the county or city were insufficient to allow for the promised contributions, to compel by judicial action the levy of ad valorem taxation” and therefore the issuance of the bonds without referendum was valid. This case is very important in that it shows the distinction between a direct pledge of ad valorem taxing power to secure a bond and merely contributing ad valorem tax revenues to pay a bond. The key for a local government looking to avoid a referendum is to not pledge their ad valorem taxing power, as that would require a referendum because the public would need to have a say since the bondholder would be able to compel the levy of ad valorem taxation, potentially even above millage caps through mandamus. The simplest way to do this would be to expressly have written in bond bids of the local government that the government’s ad valorem taxation powers will not be able to be compelled by the bondholder, but that instead the bond is secured by general revenues of the government entity.

C. Strengths and Weaknesses

One of the biggest weaknesses of bonds, both for counties and municipalities, is that there may be a referendum required. While not all bonds require a referendum, there are two specific types that do: ad valorem bonds and general obligation bonds pledged with faith and credit. Ad valorem bonds require there to be a referendum since ad valorem taxes are going toward the debt. General obligation bonds require there to be a referendum as well, since the pledging of faith and credit of the local government as collateral opens up to the creditor the ability to compel the government to raise taxes and obtain funds to pay off the indebtedness, potentially even above millage limits. This is in direct contrast to something like a revenue bond that doesn’t pledge faith and credit, but is merely payable from the revenue stream produced, and therefore doesn’t require a referendum vote for the government to issue the bond.

One of the strengths of bonds is that they are fairly broad in what they can be used for, so long as it is a capital or other projects serving a public purpose. This is quite important for local governments looking for ways to raise significant funds for SLR adaptation, since as has already been addressed earlier, SLR adaption likely falls into the category of “public purpose.”

81 State v. Miami Beach Redevelopment Agency, 392 So.2d 875, 893 ( Fla. 1980).
82 Id. at 894.
83 Id. at 898-899.
84 Id. See also Miccosukee Tribe of Indians of Florida v. South Florida Water Management Dist., 48 So.3d 811 (Fla. 2010); Strand v. Escambia County, 992 So.2d 150 (Fla. 2008); State ex rel. Gillespie v. Vickers, 148 So. 526 (Fla. 1933).
86 Fla. Stat. §200.181(1) and (3) (2015).
D. Summary of Appropriateness for Use in SLR Adaptations

Bonding is appropriate for use in SLR adaptation strategies and projects. Since these projects are in the public interest, there should not be an issue with bonds being used for these purposes. In addition, the broadness of application afforded by various types of bonds is useful for local governments trying to adapt to SLR. The key for local governments will be to choose the bond type carefully, keeping in mind their duty to manage public funds wisely.

VII. Special Districts

A. Authority

There are two general types of special district that are utilized in Florida: dependent and independent special districts (DSD and ISD). Each has various requirements and processes associated with it, so it is best to view them separately for the purposes of this section. Dependent special districts are those that meet at least one of the following: the governing body of the DSD is identical to that of county or municipality, all members of the governing body are appointed by the governing body of the county or municipality, during the governing body’s members terms they are subject to removal at will by governing body of the county or municipality, or the DSD has a budget that requires approval through affirmative vote or can be vetoed by the governing body of the county of municipality. Independent special districts are defined as “[those] not a dependent special district as defined . . . [a] district that includes more than one county is an independent special district unless the district lies wholly within the boundaries of a single municipality.” Florida Statutes Chapter 189.012(6) states “‘Special district’ means a unit of local government created for a special purpose, as opposed to a general purpose, which has jurisdiction to operate within a limited geographic boundary and is created by general law, special act, local ordinance, or ‘by the] Governor and Cabinet.’”

Dependent Special Districts

Florida Statutes Chapter 189.02 states that dependent special districts are developed by ordinance of a county or municipality. The procedure and requirements of this ordinance for both dependent and independent special district are laid out in the statute, and include that the district must be within the boundary lines of the respective county or municipality.

Independent Special Districts

Florida Statutes Chapter 189.031 deals with the creation of independent special districts. This chapter gives the authorization for municipalities, counties, and the governor and cabinet to create independent special districts according to the criteria laid out.

Independent Special Districts also have some rules concerning millage levied. The ISD millage “shall not be levied in excess of a millage amount authorized by general law and approved by vote of the elects pursuant to s. 9(b), Art. VII of the State Constitution, except for those [ISD] levying millage for water management purposes as provided in that section and municipal service taxing units as specified in s. 125.01(q) and (r).”

B. Potential Legal Issues/Legal Challenges

In Forsythe, the Florida Supreme Court decided a case dealing with the distinctions of special independent districts and special dependent districts. Longboat Key, a municipality stretching across two separate counties, decided to use an ordinance to create a dependent special district. The special district they created decided to seek court approval to issue $14,000,000 in general obligation bonds, which was challenged by property owners claiming that the district had been mischaracterized because it was actually an independent special district that could only be created by the legislature and not by municipal ordinance or resolution. The Florida Supreme Court held that even though Longboat Key was a special case because of being situated across two counties, the language of Chapter 189 Florida Statutes was clear that any special district spanning multiple counties is an independent special district that must be created by the legislature.

Another Florida Supreme Court case dealing with special districts is Hernando County. There, Hernando County had created three special districts prior to Florida law that mandated all special districts to either be designated as dependent or independent. Once Hernando County designated these districts as dependent, they were challenged that Hernando County’s millage rate was above the statutory limit of 10 mills due to the millage being levied in the three districts. The Florida Supreme Court ultimately held that dependent special districts, since their actions are de facto controlled by a single county or municipal government, are subject to the 10 mill-cap when looking at the overall millage rate of the county or municipality.

C. Strengths and Weaknesses

One key weakness for special districts is that they are still bound by millage limitations and the processes involved for getting around those restrictions. If it is the case that a county or municipality is already using the full amount of the millage cap space allotted them by the legislature, then the millage levied by a special district cannot exceed that cap unless there is a referendum by the electors. This isn’t a bad thing at all, but it does take away the control and sureness of the funding that might come from these special districts.

A key strength of special districts is that they are geared toward helping property and owners for a specific purpose. This would lend itself directly to application of SLR adaptation strategies of local governments, since “special districts serve a necessary and useful function by providing services to residents and property in the state . . . [and] serve a public purpose” and “special districts [should] cooperate and coordinate their activities

---

95 Forsythe v. Longboat Key Beach Erosion Control Dist., 604 So.2d 452 (Fla. 1992).
96 Id. at 452.
97 Id. at 453.
98 Id. at 455-456.
99 Board of County Com’rs, Hernando County v. Florida Dept. of Community Affairs, 626 So.2d 1330 (Fla. 1993).
100 Id. at 1331.
101 Id. at 1332.
102 Id. at 1332-1333.
with the units of general-purpose local government in which they are located."103 This public purpose fits SLR adaptation, and the cooperation with local governments should allow for increased efficiency, transparency, and good will from the community that is part of special districts.

D. Summary of Appropriateness for Use in SLR Adaptations

Due to the public purpose of SLR adaption, and the Legislature’s intent that special districts be used in furtherance of public purposes by serving a necessary and useful function to provide services to both residents and property, it would seem that special districts are a useful mechanism for local governments in SLR adaptation. The major issue is how much funding can be raised from these special districts, since it would seem their ability to utilize ad valorem taxes is impeded by millage limitations absent a referendum, though it should be possible for these special districts to utilize other taxes and service charges that might make them an attractive offer to local governments dealing with SLR adaptation.

VIII. Other Potential Funding Mechanisms

This paper is not meant to be an exclusive list of means for local governments to finance SLR adaptation; Florida Statutes contain twenty-five chapters under Title XIV—Taxation and Finance. Many of the tax regimes and the revenue sharing are extremely complex, so this paper has focused on some of those revenue streams most important and relevant in the view of the authors. Furthermore, wide variations in the importance of revenue streams appear from county to county and municipality to municipality. But, on average, during fiscal year 2012-13, county governments in Florida received about 32% of their revenues from charges for services and about 30% from taxes104 However, while not treated with the same depth as those above, some other financing options deserve mention as possible sources of revenue for SLR adaptation include:

Local Government Infrastructure Surtax

This option allows for a county to levy a 0.5 or 1.0 percent tax pursuant to an ordinance of a Board of County Commissioners, so long as there is a majority vote of the electors in a referendum.105 The ballot of this referendum must include a general description of the project to be funded by the surtax.106 The funds levied by this tax may be used to “finance, plan, and construct infrastructure” and to “acquire land for . . . protection of natural resources”.107

This option seems like a great resource for local governments to raise funds meant to go towards construction of infrastructure or acquisition of land. Since SLR adaptation will likely entail both of these projects, this surtax seems like a viable financing option.

103 Fla. Stat. §189.011 (2) and (3) (2015).
104 The Florida Legislature, Office of Economic & Demographic Research, Statewide Expenditures and Revenues by Category and/or Fund Type – Counties, Municipalities, and Independent Special Districts (MS Excel spreadsheet), available at http://edr.state.fl.us/Content/local-government/data/revenues-expenditures/index.cfm.
106 Id.
Electric Franchise Fee (or direct revenue from a local-government-owned utility)

Many local governments receive a fee from local electric service providers in exchange for use of rights-of-way. Others may see significant revenue from a utility owned by the local government. These revenues are too diverse in structure, amount, and use to be adequately summarized here and must be considered on a case-by-case basis as sources for potential SLR adaptation.

Communications Services Tax\(^\text{108}\)

State law mandates collection of a communications tax,\(^\text{109}\) part of which is returned to local governments.\(^\text{110}\) State statutes also allow imposition of a local communications tax by local governments.\(^\text{111}\)

Small County Surtax

If dealing with a county that has a population of 50,000 or less as of April 1, 1992, the local government may levy a “discretionary sales surtax of 0.5 percent or 1 percent”.\(^\text{112}\) These funds may be used for operating expenses if there is an extraordinary vote of the Board of County Commissioners; however, if the funds are used for bonds, then the tax must be approved by a majority of electors in a referendum.\(^\text{113}\) Just like the infrastructure tax, there must be a brief general description of the project to be funded by the surtax.\(^\text{114}\)

The proceeds of the surtax may be expended for operational expenses associated with “any infrastructure or for any public purpose authorized in the ordinance under which the surtax is levied” if done by an extraordinary vote of the Board of County Commissioners.\(^\text{115}\) If instead the surtax was approved by referendum, the funds may be used to service “bond indebtedness to finance, plan, and construct infrastructure and to acquire land for . . . conservation or protection of natural resources.”\(^\text{116}\)

Charter County and Regional Transportation System Surtax

If a county meets the requirements, the county may levy a discretionary sales surtax that is subject to approval by majority vote of the electorate in a referendum.\(^\text{117}\) The amount levied may be up to 1.0 percent, and may be used for various uses of road and bridge infrastructure, both construction and maintenance, within the county.\(^\text{118}\) As long as a county were to follow the guidelines laid out in the statutory language, this option

\(^{113}\) Id.
\(^{114}\) Id.
\(^{115}\) Fla. Stat. §212.055 (3)(d).
\(^{116}\) Fla. Stat. §212.055 (4).
\(^{117}\) Fla. Stat. §212.055 (1)(a).
\(^{118}\) Fla. Stat. §212.055 (d)(2-4).
would be good to address maintenance concerns for existing transportation infrastructure being impacted by SLR.

IX. Conclusion

Since climate change and SLR became more common topics in Florida beginning in 2008, local governments have shifted dramatically in their response. Initially denial of the immensity of the problem was common, then giving way to despair about how bad SLR would be, and then arriving at levels of optimism that might themselves not be realistic. Now is the time for local governments to grapple with SLR adaptation strategies, including the economic consequences that are so fundamental to it more pragmatically. In doing so, they must look to funding mechanisms available presently so that SLR adaptation can be integrated into planning and outlook forecasts.

Of the options listed above, no one funding mechanism serves as a silver bullet. All options have both pros and cons; however, there are certain mechanisms that seem to be more appropriate for local government funding of SLR adaptation. MSBUs are seemingly a great way for a county to levy funds from property that is adversely impacted by SLR, since that real property will then be shown to receive a direct and special benefit when the local government creates the MSBU to help alleviate those SLR issues. Bonds are another great way for local governments to fund SLR adaptation since their application is so broad, but care must be shown in choosing how these debt instruments are to be secured. While stormwater fees may be an important aspect of funding, it must be realized that the application will be used narrowly when talking about SLR adaptation in the broadest sense of capital projects. Finally, it would seem that tourist taxes may be a viable option for those on the coast, and since these areas are more likely to see disparate impacts from SLR sooner, these taxes would seem to lend themselves to being used for SLR adaption of coastal areas.