

**The Florida Senate**  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

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Prepared By: The Professional Staff of the Committee on Environmental Preservation and Conservation

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BILL: SB 982

INTRODUCER: Senator Mayfield

SUBJECT: Implementation of the Water and Land Conservation Constitutional Amendment

DATE: March 21, 2017

REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Istler	Rogers	EP	<b>Pre-meeting</b>
2.			AEN	
3.			AP	

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**I. Summary:**

SB 982 requires \$30 million to be appropriated from the Land Acquisition Trust Fund annually for projects dedicated to the restoration of the Indian River Lagoon system. From these funds, \$15 million is required to be distributed to the St. Johns River Water Management District (SJRWMD) and the remaining \$15 million to the South Florida Water Management District (SFWMD). The bill authorizes such funds to be used for land management and acquisition and for recreational opportunities and public access improvements connected with the Indian River Lagoon (IRL) system.

**II. Present Situation:**

**The Indian River Lagoon**

The IRL system runs along 156 miles of Florida's east coast, extending from Ponce de Leon Inlet near New Smyrna Beach in Volusia County to Jupiter Inlet in Martin County.<sup>1</sup> The IRL system is composed of three main waterbodies: the Mosquito Lagoon, the Banana River, and the Indian River Lagoon.<sup>2</sup> More than 71 percent of its area and nearly half its length is within Brevard County.<sup>3</sup> The IRL system is an estuary in which freshwater from uplands and tributaries meets and mixes with saltwater from the ocean to create an estuarine environment.<sup>4</sup>

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<sup>1</sup> Indian River Lagoon Council (IRLC), *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Mar. 15, 2017).

<sup>2</sup> *Id.*

<sup>3</sup> Tetra Tech, Inc. & Closewaters, LLC, *Save Our Lagoon Project Plan for Brevard County, Florida*, 1 (July 2016) [hereinafter referred to as *Save Our Lagoon*], available at [http://loveourlagoon.com/BCsave-our-lagoon-project-plan\\_final.pdf](http://loveourlagoon.com/BCsave-our-lagoon-project-plan_final.pdf) (last visited Mar. 15, 2017).

<sup>4</sup> IRLC, *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Mar. 15, 2017).

The IRL is one of the most biologically diverse estuaries in North America and is home to more than 2,000 species of plants, 600 species of fish, 300 species of birds, and 53 endangered or threatened species.<sup>5</sup> The estimated economic value received from the IRL in 2014 was approximately \$7.6 billion, \$1.57 million of which was attributable to recreation and visitor-related activity.<sup>6</sup> Industry groups that are directly influenced by the IRL support nearly 72,000 jobs, collecting wages of more than \$1.2 billion annually.<sup>7</sup>

The balance of the IRL's delicate ecosystem has been disturbed by increased development in the area. Development has led to harmful levels of nutrients and sediments entering the lagoon as a result of stormwater runoff from urban and agricultural areas, wastewater treatment facility discharges, septic systems, and excess fertilizer applications.<sup>8</sup> In the last 5 years, there have been recurring brown tides; unusual mortalities of dolphins, manatees, and shorebirds; and large fish kills due to low dissolved oxygen from decomposing algae.<sup>9</sup> During 2011, a massive phytoplankton algae bloom occurred throughout most of the IRL system, extending from Southern Mosquito Lagoon to just north of Ft. Pierce Inlet.<sup>10</sup> This "2011 Superbloom" lasted for 7 months and resulted in massive loss of seagrass coverage. There is no single answer to why the bloom occurred, but studies have indicated that nitrogen inputs from septic systems in the IRL basin are a major source of nutrients that drive harmful algae blooms.<sup>11</sup>

The SJRWMD and local governments have been proactive in implementing projects to address water quality issues in the IRL. Brevard County established the Save Our Indian River Lagoon Project Plan. The plan outlines local projects planned to meet water quality targets and improve the health, productivity, aesthetic appeal, and economic value of the lagoon.<sup>12</sup> In 2016, the county passed a referendum, approved by 62.4 percent of the voting population, to authorize the issuance of a half-cent infrastructure sales tax to pay for a portion of the plan.<sup>13</sup> The sales tax is estimated to generate \$32 million per year.<sup>14</sup>

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<sup>5</sup> *Id.*

<sup>6</sup> East Central Florida Regional Planning Council and the Treasure Coast Regional Planning Council, *Indian River Lagoon Economic Valuation Update*, vi (Aug. 26, 2016), available at [http://tcrpc.org/special\\_projects/IRL\\_Econ\\_Valu/FinalReportIRL08\\_26\\_2016.pdf](http://tcrpc.org/special_projects/IRL_Econ_Valu/FinalReportIRL08_26_2016.pdf) (last visited Mar. 10, 2017).

<sup>7</sup> *Save Our Lagoon* at ix.

<sup>8</sup> *Id.* at vi.

<sup>9</sup> *Id.* at 1.

<sup>10</sup> Indian River Lagoon Consortium, *Indian River Lagoon 2011 Superbloom Plan of Investigation*, 2 (June 2012), available at [http://www.sjrwmd.com/indianriverlagoon/technicaldocumentation/pdfs/2011superbloom\\_investigationplan\\_June\\_2012.pdf](http://www.sjrwmd.com/indianriverlagoon/technicaldocumentation/pdfs/2011superbloom_investigationplan_June_2012.pdf) (last visited Mar. 8, 2017).

<sup>11</sup> See Brian E. Lapointe, Laura W. Herren, David D. Debortoli, Margaret A. Vogel, *Evidence of sewage-driven eutrophication and harmful algae blooms in Florida's Indian River Lagoon*, (Jan. 28, 2015), available at <http://static.politico.com/27/4c/d449d31440529b9d75d8ac3bb461/2015-study-of-indian-river-lagoon-algae.%202015.pdf> (last visited Mar. 15, 2017).

<sup>12</sup> *Save Our Lagoon* at vi.

<sup>13</sup> Brevard County Supervisor of Elections, *2016 General Election Official Results*, <http://enr.electionsfl.org/BRE/1616/Summary/> (last visited Mar. 9, 2017); see Brevard County Ordinance 2016-15, *Placing a Referendum on November 8, 2016 Ballot for One-Half Cent Infrastructure Sales Tax to Fund Implementation of the Save our Lagoon Project Plan* (August 23, 2016), available at <http://www.brevardfl.gov/docs/default-source/countymanager/save-our-lagoon-referendum-election-2016-ordinance-august-23-2016.pdf?sfvrsn=2> (last visited Mar. 15, 2017).

<sup>14</sup> *Save Our Lagoon* at 60.

It is estimated to cost \$4.6 billion to accomplish the required nutrient load reductions in all four BMAPs that cover the IRL region.<sup>15</sup> With efforts extended over a 20-year period, it would require an annual investment of \$230 million to sustain an IRL-based economy.<sup>16</sup> The annual cost compared to the IRL's estimated total economic output of \$7.6 billion provides a return on investment of 33:1, which can be expected to increase as the IRL improves in health and productivity.<sup>17</sup>

### *Onsite sewage and disposal systems*

In Florida, development in some areas is dependent on septic systems due to the cost and time it takes to install central sewer systems. Less than one percent of septic systems in Florida are actively managed.<sup>18</sup> The remainder of systems are generally serviced only when they fail, often leading to costly repairs that could have been avoided with routine maintenance.<sup>19</sup> In Florida, approximately 30-40 percent of the nitrogen levels are reduced in a system that is installed 24 inches or more from groundwater.<sup>20</sup> This still leaves a significant amount of nitrogen to percolate into the groundwater, which makes nitrogen from septic systems a potential contaminant in groundwater.<sup>21</sup> Nitrogen sensitivity of Florida watersheds varies greatly, and includes areas of extremely high sensitivity to nitrogen loading and other areas where nitrogen loading from septic systems may be less critical.<sup>22</sup>

In 1990, the Legislature enacted the Indian River Lagoon System and Basin Act, in part, to protect the IRL system from the improper use of septic systems.<sup>23</sup> The act required the SJRWMD and the SFWMD to identify areas where improper septic tank use poses a threat to the water quality of the IRL system.<sup>24</sup> There are six counties that have septic systems that contribute to the health of the IRL including Volusia, Brevard, Indian River, St. Lucie, Martin, and Palm Beach counties.

In Brevard County alone, there are approximately 82,000 permitted septic systems, of which nearly 59,500 pollute groundwater that migrates to the IRL.<sup>25</sup> The Save Our Lagoon Plan includes septic system upgrades and removals at a total cost of approximately \$64 million.<sup>26</sup> The estimated total cost to convert all septic tanks in the county to central sewage treatment is \$1.19 billion.<sup>27</sup>

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<sup>15</sup> East Central Florida Regional Planning Council and the Treasure Coast Regional Planning Council, *Indian River Lagoon Economic Valuation Update*, x (Aug. 26, 2016).

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> Florida Department of Health (FDOH), *Report on Range of Costs to Implement a Mandatory Statewide 5-Year Septic Tank Inspection Program*, 1 (Oct. 1, 2008), available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/research/documents/rrac/2008-11-06.pdf> (last visited Mar. 15, 2017).

<sup>19</sup> *Id.*

<sup>20</sup> *Id.* at 18.

<sup>21</sup> University of Florida Institute of Food and Agricultural Sciences (IFAS), *Onsite Sewage Treatment and Disposal Systems: Nitrogen*, 3 (Feb. 2014), available at <http://edis.ifas.ufl.edu/pdf/SS/SS55000.pdf> (last visited Mar. 8, 2017).

<sup>22</sup> FDOH, *Florida Onsite Sewage Nitrogen Reduction Strategies Study Final Report*, 14 (Dec. 31, 2015).

<sup>23</sup> See ch. 90-262, Laws of Fla.

<sup>24</sup> Chapter 90-262, s. 4, Laws of Fla.

<sup>25</sup> *Save our Lagoon* at 5.

<sup>26</sup> *Id.* at viii.

<sup>27</sup> *Id.* at 5.

### ***Muck accumulation***

Muck is a fine-grained organic rich sediment that is made up primarily of clay, sand, and decaying plant material. Thick layers of muck build up at the bottom of waterbodies and increase turbidity, inhibit seagrass growth, promote oxygen depletion in sediments and the water above, store and release nutrients, cover the natural bottom, and destroy healthy communities of benthic organisms.<sup>28</sup> Additionally, when muck is suspended within the water column due to wind or human activities, such as boating, these suspended solids limit light availability and further suppress seagrass growth.<sup>29</sup>

Muck is not natural to the bottom of the lagoon, but it now covers an estimated 15,900 acres of the lagoon bottom in Brevard County, and tends to accumulate in deeper waters, sometimes in layers more than 6 feet thick.<sup>30</sup> Muck is transported into the lagoon through freshwater runoff, which carries with it soil from erosion and organic debris from sod, grass clippings, leaves, and other vegetation.<sup>31</sup> Muck also accumulates potential pollutants and stores and releases nutrients into the water, which can feed algae blooms.<sup>32</sup> The annual release of nutrients from decaying muck is almost as much as the annual external loading delivered by stormwater and groundwater baseflow combined.<sup>33</sup>

Muck removal projects are very expensive and entail dredging muck from the bottom of the waterbody.<sup>34</sup> Muck removal projects have more immediate effects on water quality than external reduction projects, because the nutrient load is reduced as soon as the muck is dredged or flushed from the system.<sup>35</sup> The dredged material is then usually stored temporarily at the site to dry out and can be used for beneficial purposes, if deemed safe and cost-effective, or is transported to a landfill property for disposal.<sup>36</sup> There are a few muck removal projects currently underway in Turkey Creek, the Eau Gallie River, and Cocoa Beach.<sup>37</sup> The estimated total cost for all muck removal projects is \$198.1 million.<sup>38</sup>

In 2016, the Legislature appropriated \$21.5 million to Brevard County for the removal of muck from the IRL.<sup>39</sup> Of the appropriation, \$1.5 million is required to be given to the Indian River

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<sup>28</sup> *Save Our Lagoon* at 39.

<sup>29</sup> *Id.*

<sup>30</sup> Florida SeaGrant, *Muck Removal in the Save Our Indian River Lagoon Project Plan, Brevard County*, <http://www.brevardfl.gov/docs/default-source/natural-resources-documents/muck-fact-sheet.pdf?sfvrsn=1> (last visited Mar. 10, 2017).

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> *Save Our Lagoon* at 40.

<sup>34</sup> *See id.* at 39-41.

<sup>35</sup> *Id.* at 39.

<sup>36</sup> IFAS, *Muck Removal in the Save Our Lagoon Indian River Lagoon Project Plan, Brevard County*, <http://www.brevardfl.gov/docs/default-source/natural-resources-documents/muck-fact-sheet.pdf?sfvrsn=1> (last visited Mar. 15, 2017); *see also* St. Johns River Water Management District, *Eau Gallie Muck Dredging Project Frequently Asked Questions*, (Feb. 2, 2017), available at <http://www.sjrwmd.com/EGRET/pdfs/Eau-Gallie-muck-dredging-project-FAQ.pdf> (last visited Mar. 15, 2017).

<sup>37</sup> *Id.*

<sup>38</sup> *Save Our Lagoon* at 58.

<sup>39</sup> Chapter 2016-66, Laws of Fla.

Lagoon Research Institute for the purpose of a scientific assessment to determine the environmental benefits of the project.<sup>40</sup> The long-term success of muck removal is dependent upon continued reductions in land-based sources of pollutants to prevent the continued build-up of muck in the lagoon.<sup>41</sup>

### ***Stormwater runoff***

The drainage systems of the east coast of Florida were constructed to support agriculture and urban development. These systems have increased the volume of inflows into the IRL, while also changing the timing of flows and increasing nutrient loads conveyed to the IRL.<sup>42</sup> Canal diversions to the IRL increase nutrient, sediment, and freshwater loading to the IRL and decrease flows to the St. Johns River.<sup>43</sup> Stormwater runoff contributes a significant portion of total nitrogen and total phosphorus to the lagoon each year.<sup>44</sup>

In Brevard County, there are more than 1,500 stormwater outfalls to the IRL.<sup>45</sup> Brevard County in 1990 implemented a stormwater utility assessment, which established an annual assessment rate of \$36 per year per equivalent residential unit (ERU), which was increased to \$64/ERU in 2016.<sup>46</sup> The collections raised in 2016 due this assessment is estimated at \$6 million.<sup>47</sup> Of the funding raised, a portion is available for capital improvement programs or other stormwater BMPs and is split between water quality improvement programs and flood control and mitigation programs.<sup>48</sup> In addition, funding is spent on annual program operating expenses, such as the National Pollutant Discharge Elimination System permit compliance activities (street sweeping, trap and box cleaning, and aquatic weed harvesting), and outfall/ditch treatments.<sup>49</sup>

Large-scale stormwater capture and treatment projects are intended to store and treat stormwater runoff before it enters the IRL. For example, the C-10 Water Management Area is a project that diverts water from the IRL system to the St. Johns River through a system of pump stations.<sup>50</sup> The project is estimated to provide a total nitrogen reduction of 29,300 pounds with an estimated capital cost of \$22.3 million.<sup>51</sup> Another example is the Nova Canal Watershed Alternative Water supply project to divert water away from the IRL to an integrated water resource system that fully utilizes stormwater, surface water, and reclaimed water.<sup>52</sup> The project is estimated to provide a total nitrogen reduction of 33,000 pounds with an estimated capital cost between \$22.1 million and \$35.9 million.<sup>53</sup>

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<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> *IRL Stormwater Feasibility Analysis* at 4-1.

<sup>43</sup> *Id.* at 1-1.

<sup>44</sup> See *Save Our Lagoon* at 10, for specific nutrient loadings from different sources in each sub-lagoon.

<sup>45</sup> *Save Our Lagoon* at 32.

<sup>46</sup> *Id.* at 2.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> *IRL Stormwater Feasibility Analysis* at 6-37.

<sup>51</sup> *Id.* at 6-48, 49.

<sup>52</sup> *Id.* at 6-47.

<sup>53</sup> *Id.* at 6-48, 49.

## Land Acquisition Trust Fund

Documentary stamp tax revenues are collected under ch. 201, F.S., which requires an excise tax to be levied on two classes of documents: deeds and other documents related to real property, which are taxed at the rate of \$0.70 per \$100; and certificates of indebtedness, promissory notes, wage assignments, and retail charge account agreements, which are taxed at \$0.35 per \$100.<sup>54</sup>

In 2014, Florida voters approved “Amendment One,” a constitutional amendment to provide a dedicated funding source for water and land conservation and restoration. The amendment required that starting on July 1, 2015, and for 20 years thereafter, 33 percent of net revenues derived from the documentary stamp taxes be deposited into the Land Acquisition Trust Fund (LATF). Section 28, Article X of the State Constitution requires that funds in the LATF be expended only for the following purposes:

As provided by law, to finance or refinance: the acquisition and improvement of land, water areas, and related property interests, including conservation easements, and resources for conservation lands including wetlands, forests, and fish and wildlife habitat; wildlife management areas; lands that protect water resources and drinking water sources, including lands protecting the water quality and quantity of rivers, lakes, streams, springsheds, and lands providing recharge for groundwater and aquifer systems; lands in the Everglades Agricultural Area and the Everglades Protection Area, as defined in Article II, Section 7(b); beaches and shores; outdoor recreation lands, including recreational trails, parks, and urban open space; rural landscapes; working farms and ranches; historic or geologic sites; together with management, restoration of natural systems, and the enhancement of public access or recreational enjoyment of conservation lands.<sup>55</sup>

To implement s. 28, Article X of the State Constitution, the Legislature in the 2015 Special Session A passed ch. 2015-229, Laws of Florida.<sup>56</sup> This act, in part, amended the following sections of law:

- Section 201.15, F.S., to conform to the constitutional requirement that the LATF receive at least 33 percent of net revenues derived from documentary stamp taxes; and
- Section 375.041, F.S., to designate the LATF within the Department of Environmental Protection as the trust fund to serve as the constitutionally mandated depository for a percentage of the tax revenues.<sup>57</sup>

In 2016, the Legislature passed ch. 2016-201, Laws of Florida, referred to as “Legacy Florida.”<sup>58</sup> Legacy Florida amended s. 375.041, F.S., to require specified minimum distributions from the LATF. Under s. 375.041, F.S., funds deposited into the LATF must be distributed in the following order and amounts:

- First, obligations relating to debt service, specifically:
  - First to payments relating to debt service on Florida Forever bonds and Everglades restoration bonds; and

<sup>54</sup> See ss. 201.02 and 201.08, F.S.

<sup>55</sup> FLA. CONST. art. X, s. 28.

<sup>56</sup> Chapter 2015-229, Laws of Fla.

<sup>57</sup> Chapter 2015-229, s. 9, s. 50, Laws of Fla.

<sup>58</sup> Chapter 2016-201, Laws of Fla.

- Then to payments relating to debt service on bonds issued before February 1, 2009, by the South Florida Water Management District and the St. Johns River Water Management District;
- Then, before funds are authorized to be appropriated for other uses:
  - A minimum of the lesser of 25 percent of the funds remaining after the payment of debt service or \$200 million annually for Everglades projects that implement the Comprehensive Everglades Restoration Plan (CERP), the Long-Term Plan,<sup>59</sup> or the Northern Everglades and Estuaries Protection Program (NEEPP), with priority given to Everglades projects that reduce harmful discharges of water from Lake Okeechobee to the St. Lucie or Caloosahatchee estuaries in a timely manner. The following specified distributions are required from these funds:
    - \$32 million through the 2023-2024 Fiscal Year (FY) for the Long-Term Plan;
    - After deducting the \$32 million, the minimum of the lesser of 76.5 percent of the remainder or \$100 million through the 2025-2026 FY for the CERP; and
    - Any remaining funds for Everglades projects under the CERP, the Long-Term Plan, or the NEEPP.
  - A minimum of the lesser of 7.6 percent of the funds remaining after the payment of debt service or \$50 million annually for springs restoration, protection, and management projects; and
  - Five million annually to the SJRWMD for projects dedicated to the restoration of Lake Apopka.<sup>60</sup>
- Then any remaining moneys are authorized to be appropriated for the purposes set forth in s. 28, Art. X, of the State Constitution.<sup>61</sup>

The General Revenue Estimating Conference in December of 2016 estimated that for the 2017-2018 FY a total of \$2.48 billion would be collected in documentary stamp taxes. Thirty-three percent of the net revenues collected or approximately \$814.1 million must be deposited into the LATF as required under s. 28, Article X of the State Constitution.<sup>62</sup>

### III. Effect of Proposed Changes:

SB 982 amends s. 375.041, F.S., to require that \$30 million be appropriated annually for projects dedicated to the restoration of the IRL system. From these funds, \$15 million is required to be distributed to the SJRWMD and the remaining \$15 million to the SFWMD.

The bill authorizes such funds to be used for land management and land acquisition and for increasing recreational opportunities associated with, and improving public access to, areas associated with the IRL system.

<sup>59</sup> Note that the “Long-Term Plan” includes the Restoration Strategies Regional Water Quality Plan.

<sup>60</sup> Section 375.041, F.S.

<sup>61</sup> *Id.*

<sup>62</sup> Office of Economic and Demographic Research, Revenue Estimating Conference, *Documentary Stamp Tax, Executive Summary* (Dec. 12, 2016) available at <http://www.edr.state.fl.us/Content/conferences/docstamp/docstampexecsummary.pdf> (last visited Mar. 15, 2017).

The bill requires the distribution to be reduced by an amount equal to the debt service paid on bonds issued for such restoration purposes after July 1, 2017.

The bill takes effect July 1, 2017.

#### **IV. Constitutional Issues:**

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. Other Constitutional Issues:

Section 28, Article X of the State Constitution requires that 33 percent of net revenues derived from documentary stamp taxes be deposited into the LATF for the acquisition and improvement of land, water areas, and related property interests, together with management, restoration of natural systems, and the enhancement of public access to, or recreational enjoyment of, conservation lands. For the full text of s. 28, Article X of the State Constitution, see the LATF section of this analysis beginning on page 6.

#### **V. Fiscal Impact Statement:**

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The bill has a negative, recurring impact to the LATF of \$30 million.

#### **VI. Technical Deficiencies:**

The “relating to” clause implies that the bill is implementing the water and land conservation constitutional amendment, an amendment that was passed in 2014. The amendment has already been implemented. This bill is requiring a distribution from the LATF, which is the depository of “Amendment 1” moneys. The “relating to” clause should be amended to read “relating to the Land Acquisition Trust Fund.”

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill substantially amends section 375.041 of the Florida Statutes.

**IX. Additional Information:**

**A. Committee Substitute – Statement of Changes:**

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

**B. Amendments:**

None.

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This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

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