



Friday, May 7, 2021

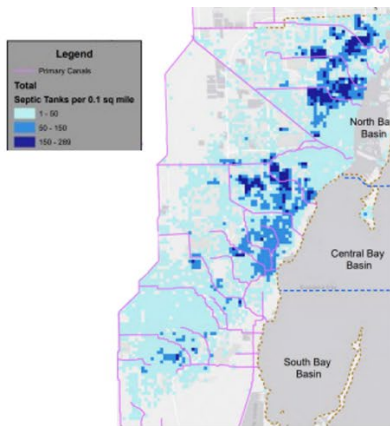
American Rescue Act / Priority Regional Needs in Southeast Florida

Miami-Dade County

Resilience Category

Septic to Sewer Conversions: The proposed project is to expand sewer service to areas that are lacking sanitary sewer infrastructure and are most vulnerable to septic system compromise or failure from rising groundwater. The County has conducted recent studies that indicate there are approximately 9,000 systems currently impacted by groundwater; this number increases to 13,500 systems by 2040 with anticipated sea level rise. As illustrated in the maps below, these systems are located throughout the County, with significant concentrations near canals and rivers that discharge into Biscayne Bay. The compromised and failing systems are suspected of impacting water quality; some systems are impacting the use of certain homes and structures due to plumbing failures. The County proposes to prioritize the conversion of parcels based on the greatest likelihood and impact from septic system failure along with other environmental, social, and economic ranking criteria. The project to expand the sanitary sewer system to connect the most vulnerable parcels will include the installation of wastewater pump stations required to manage the new flow, main lines, plumbing of private parcels, the removal of septic tanks, roadway work, engagement and outreach, and other efforts necessary to achieve connection. Funding for this purpose is critical since the County is unable to use utility revenues to expand the system to non-customers.

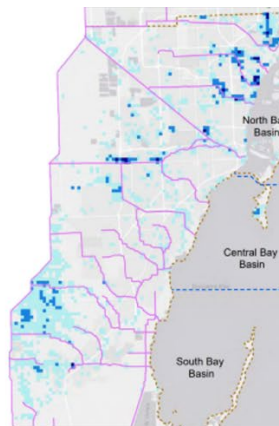
Estimated Cost: To convert 13,500 properties from septic system to sewer service is approximately \$700 Million.



Septic Systems

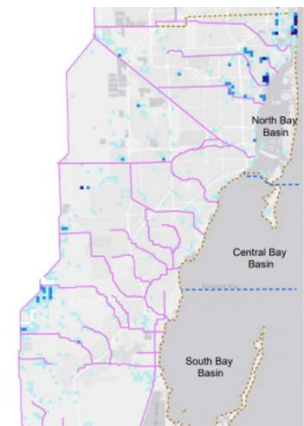
~120,000 Countywide

Approximately 13% of County population served by septic systems



Compromised Septic Systems

Loss of purification



Failing Septic Systems

Partially submerged system

2020: ~ 9,000
2040: ~ 13,500

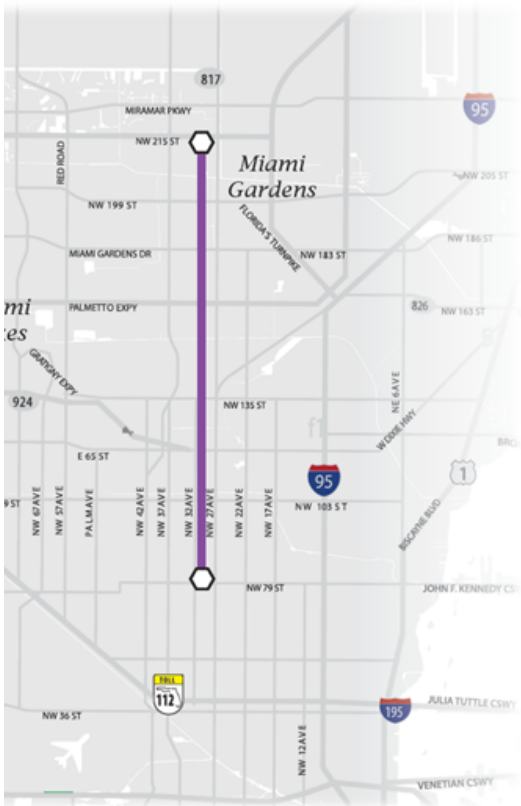
Infrastructure Category

Regional transportation is critical in a regional economy where people and products move across multiple county lines. In our SMART plan for expanding our transit system, we have two projects that could qualify:

- a. The North Corridor rail line that would run up NW 27th Avenue to the Broward line; or
- b. The North-East corridor that would run up the old FEC rail line to the Broward border.

SMART Plan North Corridor

Land Use Scenario & Visioning Planning North Corridor Study Milestones



- **Study Advisory Committee (SAC)** include stakeholder representatives from each municipality and agencies. The SAC met five times during the course of the study and their feedback has been invaluable in the progress of this study. The meetings were held on:
 - ✓ Meeting #1 – October 24, 2017
 - ✓ Meeting #2 – February 8, 2018
 - ✓ Meeting #3 – June 28, 2018
 - ✓ Meeting #4 – January 23, 2019
 - ✓ Meeting #5 – June 25, 2019
- **Two Series of Charrettes** were held along the corridor. At each charrette, community members were invited to participate in interactive exercises. The charrettes were held on:
 - ✓ November 4, 2017
 - ✓ November 8, 2017
 - ✓ February 23, 2019
 - ✓ February 27, 2019
- **Study Documentation**
 - ✓ Charrette materials available at bottom of page
 - ✓ Land Use Final Draft Report (October 2019)
 - ✓ Economic Mobility Final Draft Report (Fall 2019)

Estimated cost: At least \$1.2 billion

The North corridor has been a top priority for many years but is the most difficult to finance under the traditional FTA process.

Land Use Scenario & Visioning Planning Northeast Corridor Study Milestones



- **Study Advisory Committee (SAC)** includes stakeholder representatives from each municipality and agencies. The SAC has met four times since the commencement of this study, and their feedback has been invaluable in the progress of this study. Additional meetings will be conducted as the study moves forward. The meetings were held on:
 - ✓ Meeting #1 – December 4, 2017
 - ✓ Meeting #2 – June 7, 2018
 - ✓ Meeting #3 – October 29, 2018
 - ✓ Meeting #4 – May 30, 2019
- **Charrettes** were held along the corridor. At each charrette, community members were invited to participate in interactive exercises. The charrettes were held on:
 - ✓ February 1, 2018
 - ✓ February 10, 2018
 - ✓ November 8, 2018
 - ✓ November 14, 2018
- **Study Documentation**
 - ✓ Charrette materials available at the bottom of this page
 - ✓ Land Use Final Draft Report (2020)
 - ✓ Economic Mobility Final Draft Report (2020)

Estimated cost:

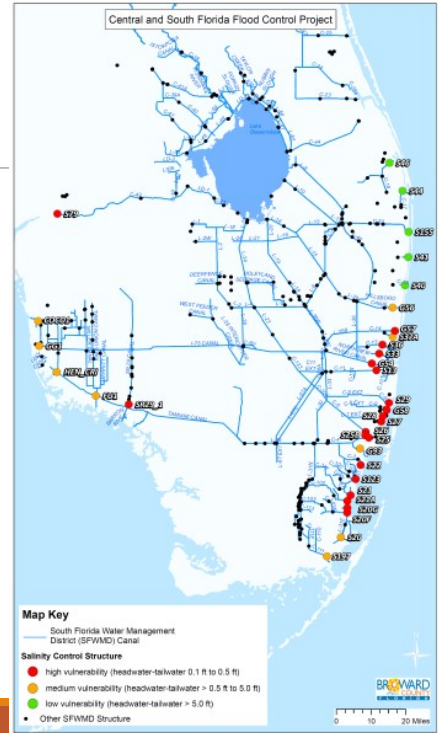
Broward County

Resilience Category

Central & Southern Florida Flood Resiliency Study: Supported by SFRPC / TCRPC, SFWMD, Miami-Dade, Palm Beach

Overview of the C&SF Project

- Designed more than 70 years ago to serve multiple civil works purposes, and includes about 1,000 miles of levees, 720 miles of canals, and almost 200 water control structures.
- Anticipated to service 2 Million residents, today the system services a region of 11 million (2017) and is expected to grow to 15 million in the next 30 years.
- System operated for collective purpose of flood control; water supply; mitigation for saltwater intrusion; natural system water deliveries (Everglades National Park, fish and wildlife resources).
- Changes in the physical environment, especially increased rainfall intensity and rising seas, substantially strain the existing system, both in terms of stormwater conveyance and discharge capabilities.
- Serving as the backbone to Everglades Restoration, update of project to account for these and future conditions is not only core to urban resilience, but Everglades Restoration strategy .



C & SF Project Resilience



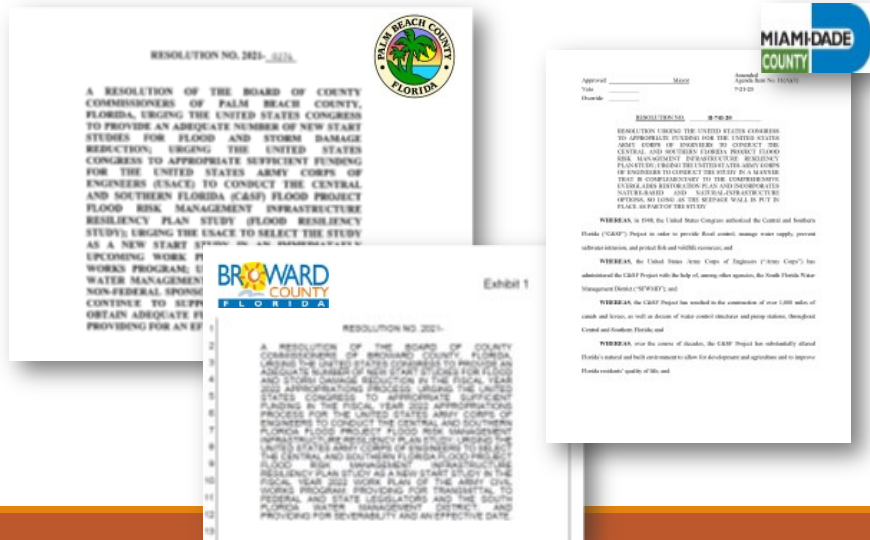
- 2009 analysis by the South Florida Water Management District (SFWMD) identified sea level rise as a significant threat to project operations
- 18 flood control structures identified within six inches of their design capacity
- Implication is that stormwater discharges to tide would be hindered by an additional six inches of sea level rise
- These structures are concentrated in the tri-county area of Palm Beach, Broward and MiamiDade.
- This review was undertaken 11 years ago

C&SF Flood Risk Mgmt. & Resiliency Study

Action Needed:

New Start Designation for 216 Study Leading to Construction

Funding appropriation as part of USACE FY 22 Workplan



Estimated cost: \$20 million

Slides courtesy of Dr. Jurado, Broward County

Infrastructure Category

Estimated Cost of Septic to Sewer Conversion: Hollywood sanitary sewer and septic conversion needs are valued at \$400 Million.

Monroe County

To be determined

South Florida & Treasure Coast Regional Planning Councils

Priority, seven-county regional issue areas identified by the South Florida and Treasure Coast Regional Planning Councils over the last two years are:

- CS&F Project Flood Resilience Study Update
- Water & Wastewater Infrastructure
- Affordable Housing
- Florida's Coral Reef
- Human Biosolids

South Florida Regional Planning Council Staff

Proposal: Create a Risk Reduction Revolving Loan Fund

Background:

As background, a new federally approved STORM Act enacted in January establishes a loan program federally to mitigate flooding risk, but the financial need for mitigation far surpasses the availability of funding in South Florida. A South Florida regional risk reduction revolving loan fund would help fill that gap.

A South Florida Regional Risk Reduction RLF could fund a range of activities proven to reduce flood risk. Projects to be chosen would follow state, county, and municipal code, goals, and guidelines, and could involve a variety of flood mitigation efforts, including elevating or floodproofing homes and businesses; conserving and protecting wetlands, dunes, and other natural areas that can absorb floodwaters; purchasing flood-prone properties; building seawalls to code; and larger-scale projects such as improving stormwater management in neighborhoods and towns.

The fund could be managed under general federal principles of risk reduction and mitigation and tailored to the state and local governments flood risks and priorities. As payments on outstanding loans are returned to the fund, these flood mitigation dollars would “revolve,” becoming available for additional projects. Once established, this program would allow the region to be proactive and prepared. Rather than waiting for congressional appropriations or disaster assistance, communities could make plans and set priorities around a more predictable flow of money to a pipeline of flood mitigation projects. This way, even a modest expenditure can lead to a larger return on investment. It is an enduring commitment to prepare communities before floods strike. Council Staff Christina Miskis, Senior Planner (cmiskis@sfrpc.com)