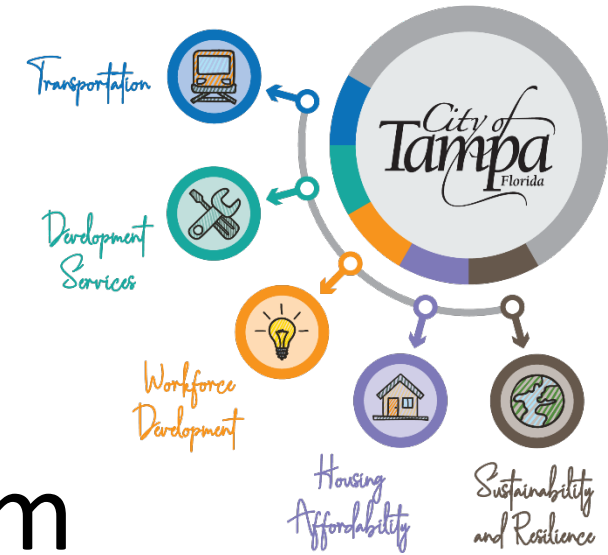


Mayor Jane Castor

Transforming Tampa's Tomorrow



Resilience & Sustainability - From Assessment to Implementation

FSA Winter Conference – Pre-Conference Workshop
November 29, 2023 – 1:00 p.m. – 3:00 p.m.

Whit Remer
Sustainability & Resilience Officer
City of Tampa



- **Building a new resilience program**
- **Green washing of green infrastructure**
- **Pros & Cons of resilience roadmaps, climate plans, stormwater plans, vulnerability assessments**
- **Resilient Florida funding and how it fits with states larger water quality objectives**
- **Opportunities and obstacles of stormwater ponds as parks**



Building a new resilience program

**Pros & Cons of resilience roadmaps, climate plans,
stormwater plans, vulnerability assessments**

RESILIENT TAMPA



RESILIENT TAMPA

A RESILIENCE ROADMAP FOR TAMPA



Shocks and Stresses

Resilient Tampa prioritizes and addresses the city's most urgent shocks and stresses.

Shocks include both natural and human-driven disasters, whereas stresses are the vulnerabilities that afflict Tampa's communities on an everyday basis.



Responsive / effective governance



Sea level rise / flooding



Aging / inadequate infrastructure



Economic inequality



Lack of affordable housing



Inadequate transportation systems



More frequent & extreme storms / extreme heat



Shifting macroeconomic trends

Resilient Tampa Overview

The Strategy includes 4 chapters, organized by scale, and 13 goals.



Stormwater Systems for a Changing Climate

Incorporate integrated stormwater infrastructure solutions into planning and design projects that consider future adverse climate conditions.



SHOCKS AND STRESSES THIS ACTION WILL ADDRESS



Aging / inadequate infrastructure



Responsive / effective governance



Sea level rise / flooding



More frequent & extreme storms / extreme heat



TIMEFRAME

Medium



IMPLEMENTATION PARTNER

City of Tampa Stormwater Department

ACTION
3.1.2

Measure the Value of Clean Energy and Climate Resilience Solutions

Quantify and track the increasing costs of climate change and cost of inaction around climate resilience solutions.



SHOCKS AND STRESSES
THIS ACTION WILL ADDRESS



Sea level rise /
flooding



Responsive / effective
governance



More frequent & extreme
storms / extreme heat



TIMEFRAME Short



IMPLEMENTATION
PARTNER

City of Tampa Sustainability and
Resilience Office

ACTION
3.1.4

Ensure All Municipal Operations Are Powered by 100 Percent Renewable Energy

Transition all municipal operations to renewable energy.

The City has completed hydroelectric generation and energy recovery proof-of-concept studies and is evaluating payback calculations to ensure future implementation of the following projects:

- Hillsborough River Dam Small Hydroelectric Project: Reducing the city’s electric demand on TECO through the implementation of hydroelectric units.
- Interbay Pump Station Energy Recovery Project: Implementing an in-line energy recovery unit at Gandy with an estimated recovery production of 438,000 kilowatt hours.



SHOCKS AND STRESSES
THIS ACTION WILL ADDRESS



Responsive / effective
governance



Sea level rise /
flooding



More frequent & extreme
storms / extreme heat



TIMEFRAME Long



IMPLEMENTATION
PARTNER

City of Tampa Sustainability &
Resilience Office

ACTION

3.2.4

Pilot Nature-Based Solutions Such as Living Shorelines

Harness the productivity of natural systems to improve water quality, provide protection from storms, and add aesthetic value by strategically locating living shorelines.



SHOCKS AND STRESSES
THIS ACTION WILL
ADDRESS



Sea level rise /
flooding



More frequent & extreme
storms / extreme heat



TIMEFRAME Short



IMPLEMENTATION
PARTNER

City of Tampa Office of
Sustainability and Resilience

ACTION

2.2.2

Expand the Neighborhood Commercial District Program

Partner with local communities to create resident-driven action plans that aim to enhance and preserve the unique quality of neighborhood commercial districts across Tampa.



SHOCKS AND STRESSES
THIS ACTION WILL ADDRESS



Inadequate transportation systems



Lack of affordable housing



Responsive / effective
governance



Shifting macroeconomic trends



TIMEFRAME

Short



IMPLEMENTATION
PARTNER

City of Tampa Planning Department

ACTION
2.2.1

Transform Tampa's Public Realm Through Vision Zero and Complete Streets

Build on Tampa's Vision Zero and Complete Streets policy innovations to create safer, more walkable neighborhoods for all residents across the city.



SHOCKS AND STRESSES
THIS ACTION WILL ADDRESS



Aging / inadequate infrastructure



Inadequate transportation systems



More frequent & extreme storms /
extreme heat



TIMEFRAME Long



IMPLEMENTATION
PARTNER

City of Tampa
Mobility Department

ACTION
4.1.3

Support the Long-Term Recovery of Industries Most Impacted by COVID-19

Leverage lessons learned from the City's COVID-19 economic response and recovery efforts to help Tampa businesses hardest hit by the pandemic.



SHOCKS AND STRESSES
THIS ACTION WILL ADDRESS



Responsive / effective governance



Shifting macroeconomic trends



TIMEFRAME Medium



IMPLEMENTATION
PARTNER

City of Tampa Economic
Opportunity Department



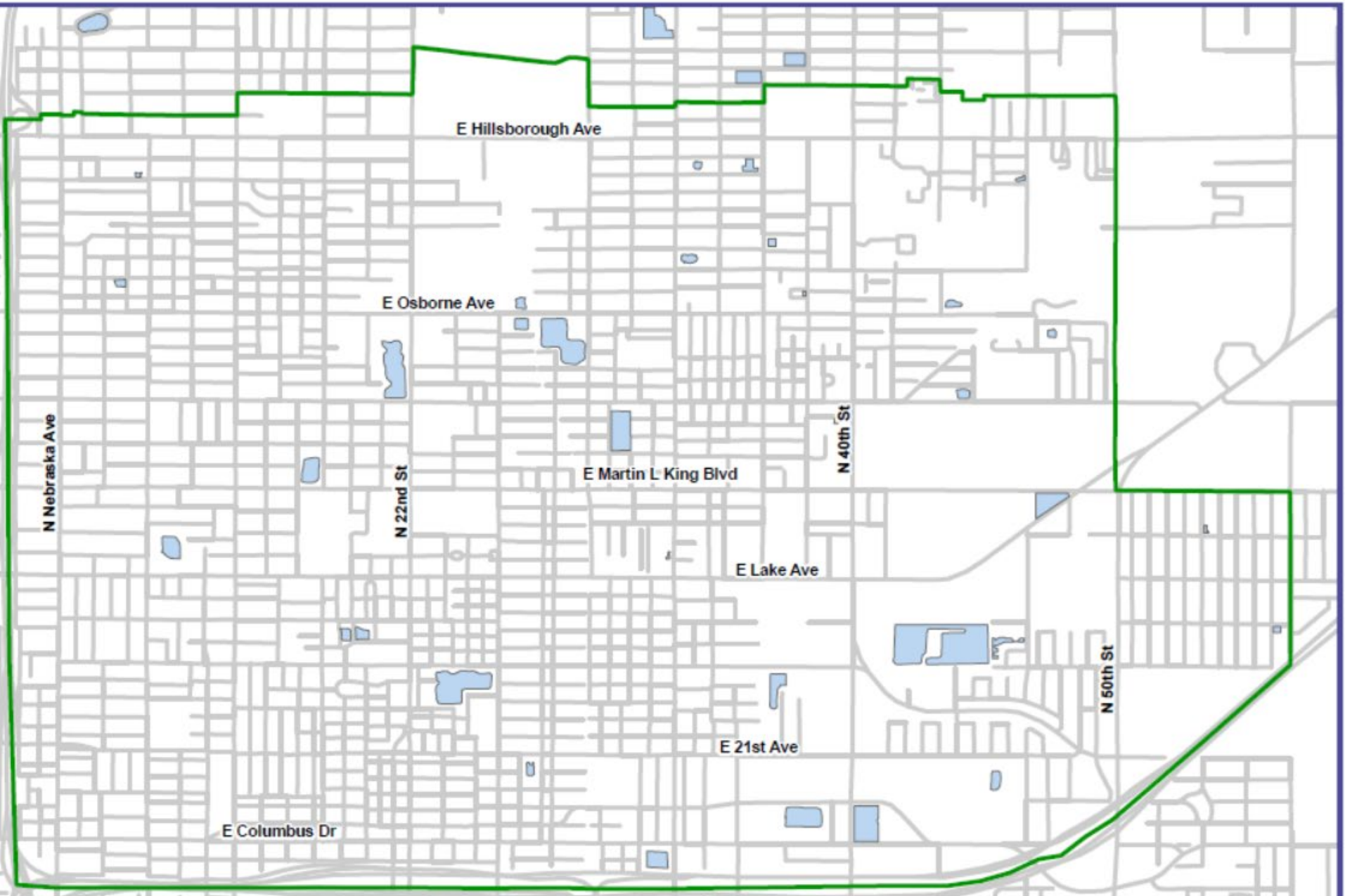
Opportunities and obstacles of stormwater ponds as parks





\$49 million > \$206m



\$23 million > \$550-1b



Legend
East Tampa 
Stormwater Ponds 

Stormwater Ponds in East Tampa CRA

City of Tampa
TSS - Stormwater Engineering



3623 E Powhattan at 37th



E Powhatan Ave

N 36th St

N 37th St

Deleuil Ave

Large Dry Pond without Fence

EXAMPLE 1: POWHATTAN

Pond at Powhatan Avenue (East Tampa)



EXAMPLE 1: POWHATAN



EXAMPLE 2: WILLIAMS PARK CENTER



**Address: N 44th Street +
East Chelsea Street**



EXAMPLE 3: ROSE MEMORIAL PARK

Osborne Pond / Clarence Fort Freedom Trail Community Trail (East Tampa)

- 3.8 acre pond/ half mile walking trail
- Eight fitness stations for adults and seniors spaced along the route at four locations.
- Three boardwalk segments that give visitors a chance to walk to the water's edge
More than 110 trees
- Trail connects with adjacent sidewalks on Osborne, North 29th Street, North 30th Street and East Cayuga Street. Approximately \$500,000 in Community Investment Tax dollars
- Opened in 2014
- Named for Civil Rights' Leader Clarence Fort: [Tampa Bay Times story](#)





EXAMPLE 4: OSBORNE POND



EXAMPLE 5: COMMUNITY LAKE



Herbert Carrington Sr. Community Lake, adjacent to the Fair Oaks Park Community Center / East Tampa

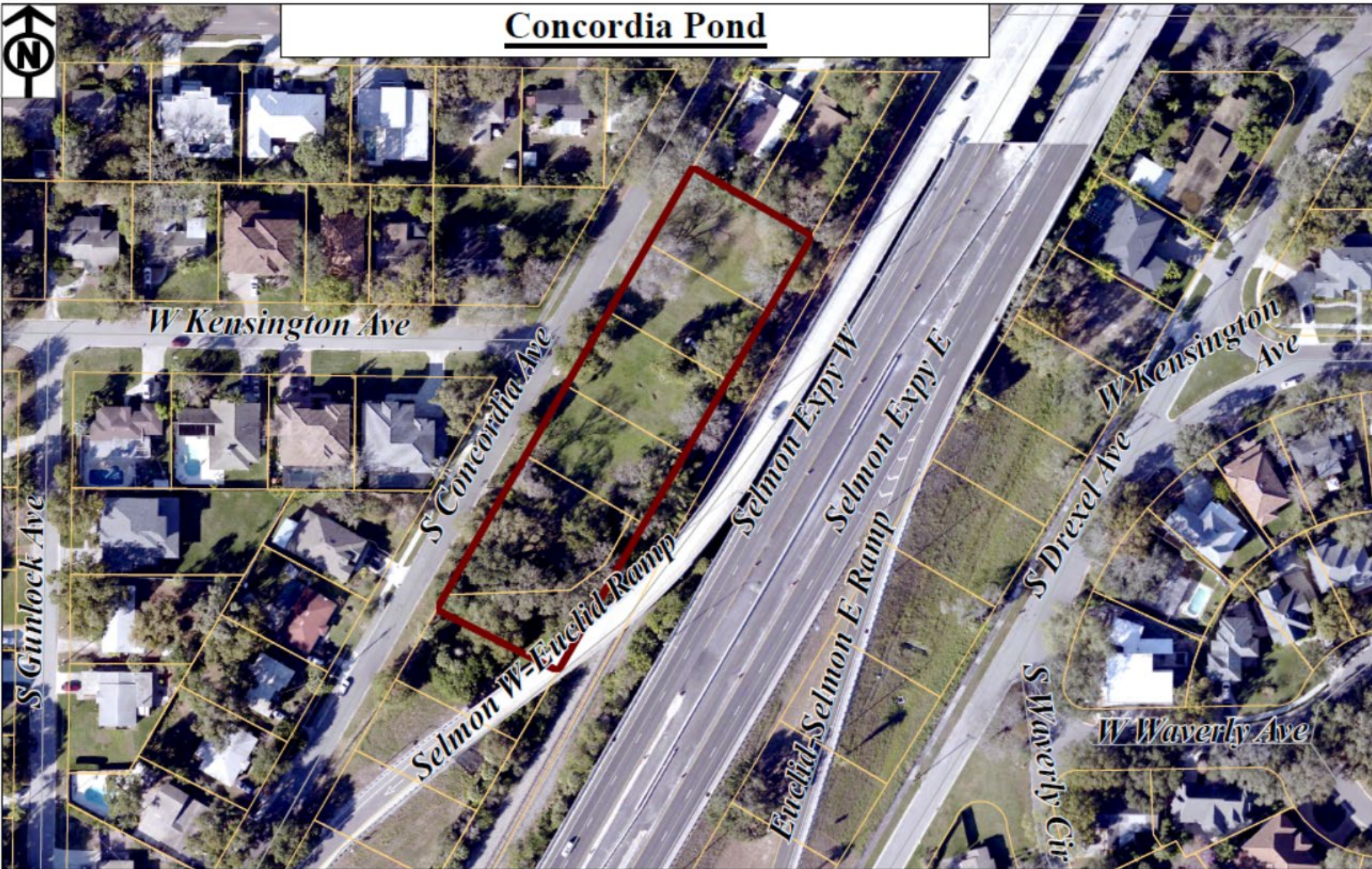


Address: 26th + 26th in East Tampa



EXAMPLE 5: 26th Basin

Concordia Pond



EXAMPLE 6: CONCORDIA



Concordia Pond (South Tampa)

- Four parcels were acquired to construct a drainage pond to provide additional drainage system capacity before discharge to box culvert in adjacent CSX corridor
- During heavy rain events, several parcels at the corner of Concordia + Kensington experience flooding due to outdated drainage system
- Adjacent to a CSX line
- Estimated Cost: \$125k
- [Community Input via Change.org](#)
- *Address: 3508 S Concordia Avenue, Tampa*

EXAMPLE 7: SOUTH MANHATTAN



Address: 4615 South Manhattan Avenue, Tampa (South Tampa)



4615 South Manhattan Avenue, Tampa (South Tampa)



Looking North



Looking South

EXAMPLE 7: SOUTH MANHATTAN

Concept Plan

Currently the closed basin has a patchwork of detention ponds--single purpose infrastructural spaces--disconnected from the surrounding neighborhood. The vision for this project is to transforming the existing detention ponds into an interconnected stormwater park system. This stormwater park utilizes the street right-of-way, detention ponds, and the sink itself to improve stormwater storage capacity, water quality, and recreation for the surrounding neighborhood.

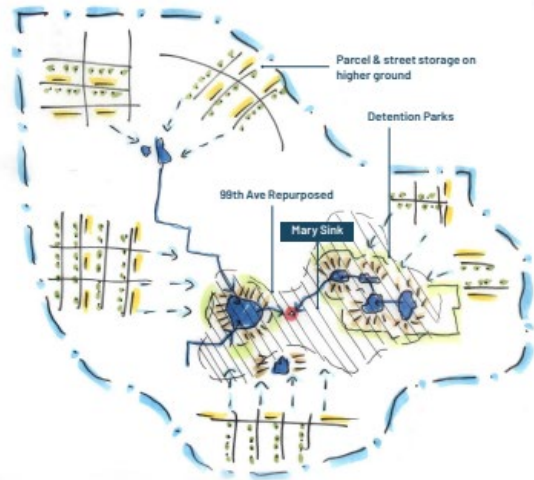
NORTH TAMPA CLOSED BASIN CONCEPTS



STORE WATER WHERE IT FALLS

In addition to making space for water where it floods, storing water and building green infrastructure on the surrounding higher ground helps slow water where it falls before it floods homes and cars.

By following the drainage network outward from the sink, additional opportunities for runoff capture, shade, ecological improvement, and neighborhood identity can be found across the urban watershed.



Resilient Ready Tampa Bay

Summary Report | July 2022



MARY SINK NEAR 88th AVE AND MARY AVE



DAVID E. WEST PARK DETENTION POND OUTLET



ELMER POND AT 80th AVE



DAVID E. WEST PARK



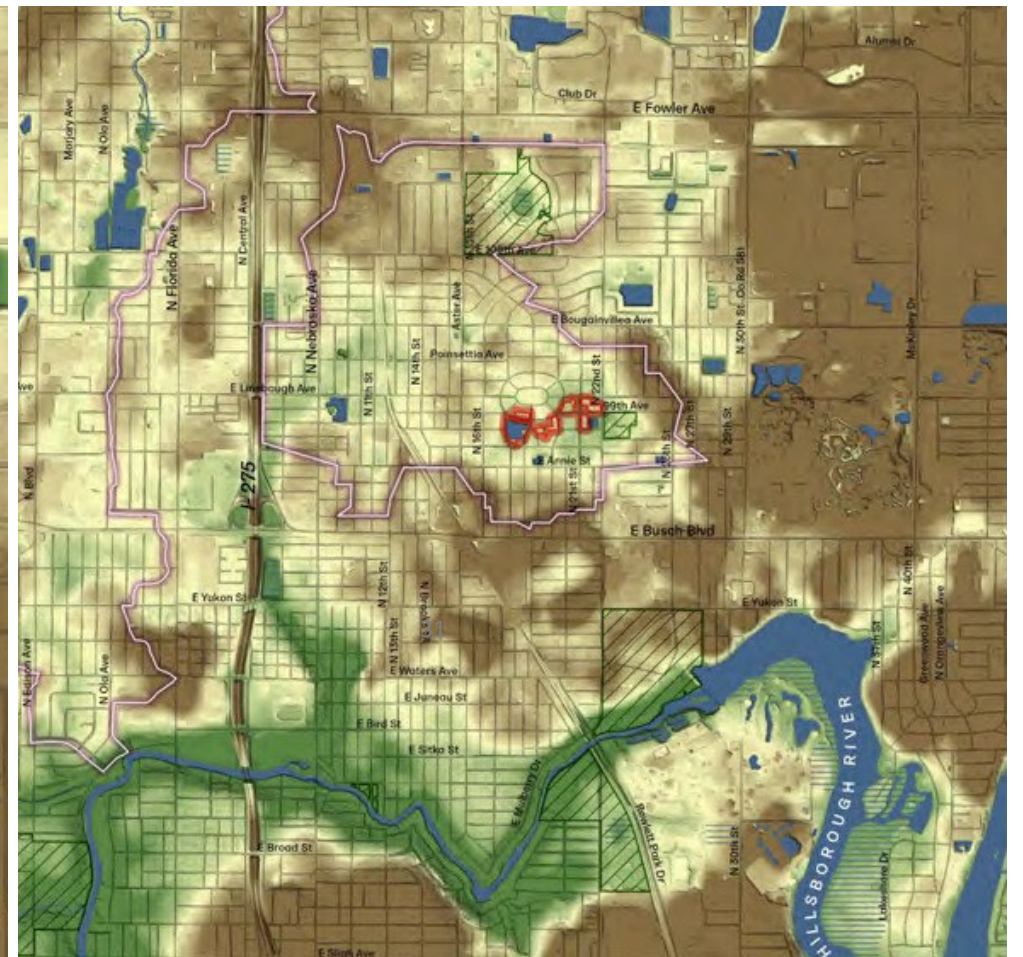
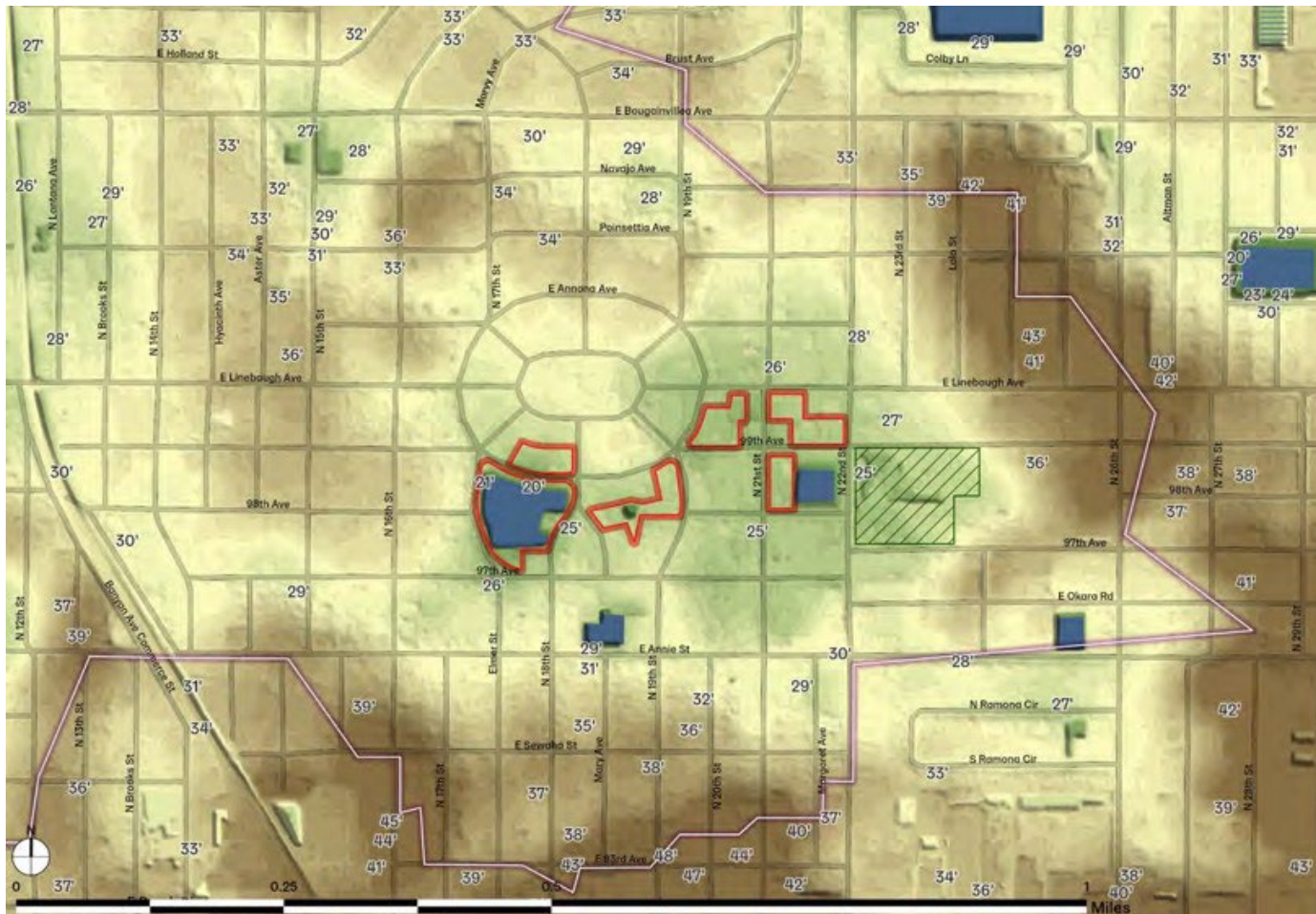
BUYOUT PROPERTIES AT 99th AVE & 21st ST



City of Tampa - Stormwater Engineering Division

STAFF PHOTO
PROPOSED PONDING
PROPERTY LINES
CITY OWNED CLOSED
UNDER CONSIDERATION
AERIAL, COMPLETE CONSTRUCTION

N Tampa Contained Basin, City of Tampa



N Tampa Contained Basin, City of Tampa



N Tampa Contained Basin, City of Tampa



N Tampa Contained Basin, City of Tampa



N Tampa Contained Basin, City of Tampa



Violet Cury Nature Preserve



Al Lopez Park



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Questions