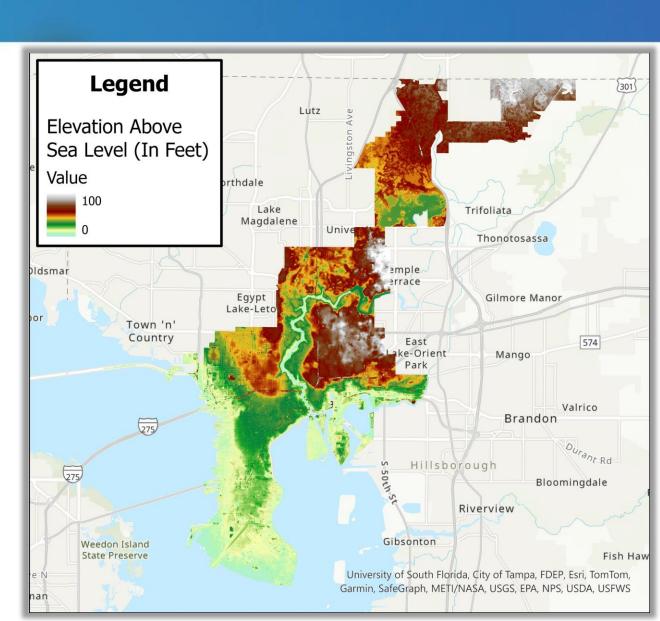
FLOOD RESILIENCE COMMUNITY MEETING



Our Challenges: Topography

- Tampa is a low-lying, coastal city
- Storm surge flooding will always be an issue, especially along the Peninsula.
- The City is made up of 46 basins (bowls) across the city.
- Our goal is to reduce street flooding from rain in these basins through our pipes, ponds and stormwater pumps.
- We can improve...we **CANNOT** prevent.



Our Focus: Maintenance & Improvement 2025 at a Glance:



Pipes:

Maintained **226,577** linear feet Removed **237.72** tons of debris Repaired **176** cave-ins Maintained **2,980** structures



Ditches:

Maintained **18,835** linear feet Removed **2,096** tons of debris



Removed **18+** tons of debris **262** herbicide treatments Repaired **4,119** feet of fence



Our Focus: Maintenance & Improvement 2025 at a Glance:

- Street Sweeping:
 Swept 11,026 curb miles
 Removed 2,566 tons of debris
- Miscellaneous Activities:
 54 washouts repaired
 35 headwalls repaired
 102 structures repaired
 TV inspected 10,219 feet of pipe
 Fixed 800 feet of curb



Pump Stations:

Preventative maintenance performed on **13** stormwater pump stations.



We're taking additional proactive steps this year.







AFTEF

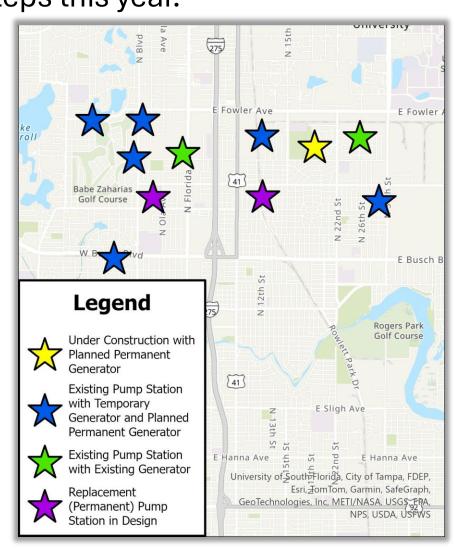
Beefed Up Maintenance

- In-house crews are working six-days-aweek on maintenance
- Additional manpower and resources called in through contractors like FloTech and Kimmins.

We're taking additional proactive steps this year.

Generators

- We're installing temporary back-up generators at pump stations that need them (6 shown, 8 total).
- We're buying permanent back-up generators which will be operational within two to three years and active-performance monitoring protocols in place.
- \$11m in funding is already in place for permanent backup generators.



We're taking additional proactive steps this year.

Transfer Power

 New this year, we will manually and proactively switch over to generator power before a storm.



Rapid Response Team

We're establishing a
 pump station response
 team tasked with arriving
 immediately after a
 storm to ensure all
 pumps are functioning,
 refueled, and in
 continuous operation.

We're taking additional proactive steps this year.

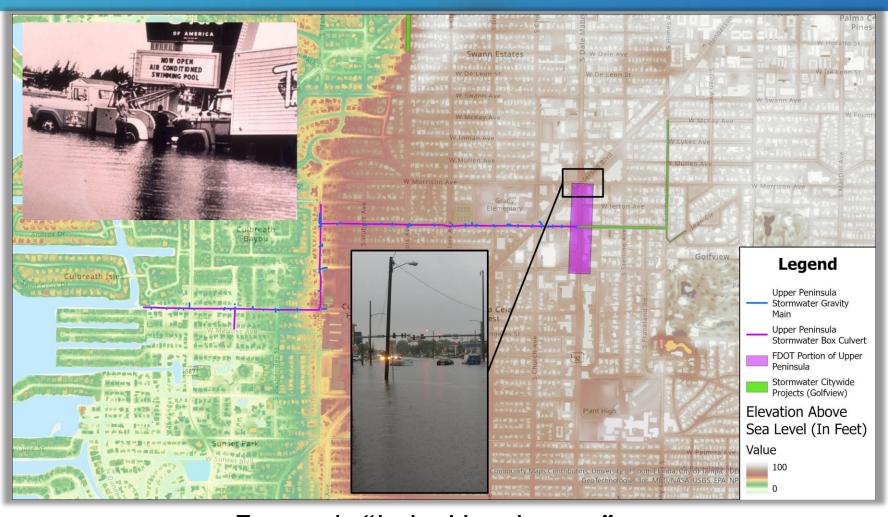




Micro Projects

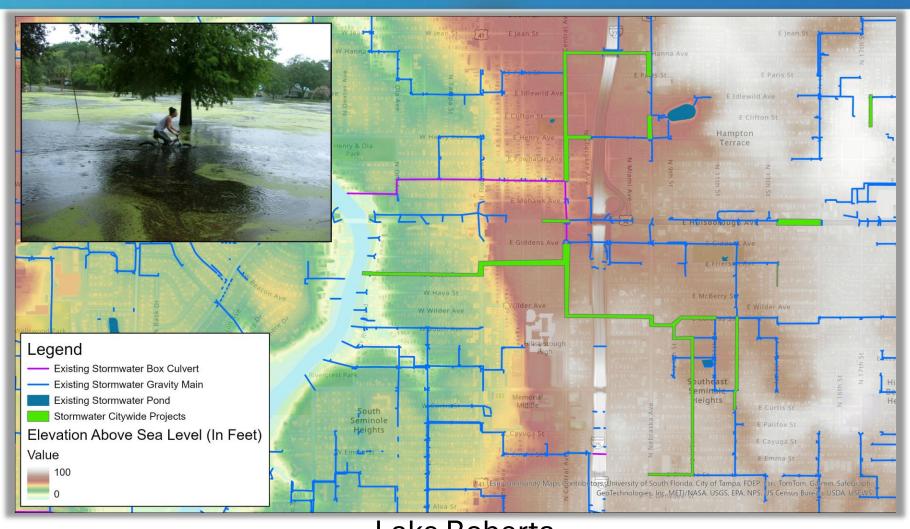
- We're working on several smaller but effective stormwater upgrades in places like Palma Ceia Pines and Parkland Estates aimed at improving stormwater flow.
- Improvements included: resurfacing, widening inlets, adding stormwater grates, additional piping, and more.

Success Stories



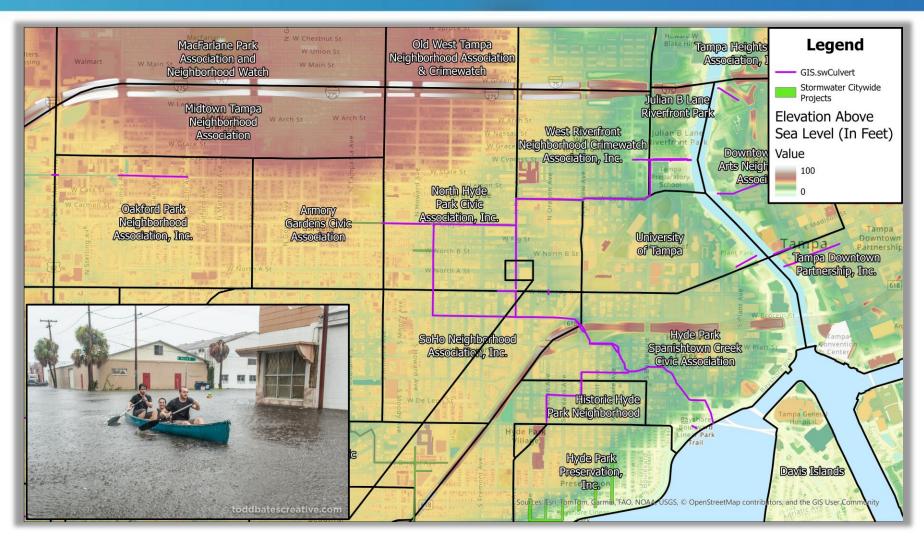
Formerly "Lake Henderson" (Henderson / Dale Mabry)

Success Stories



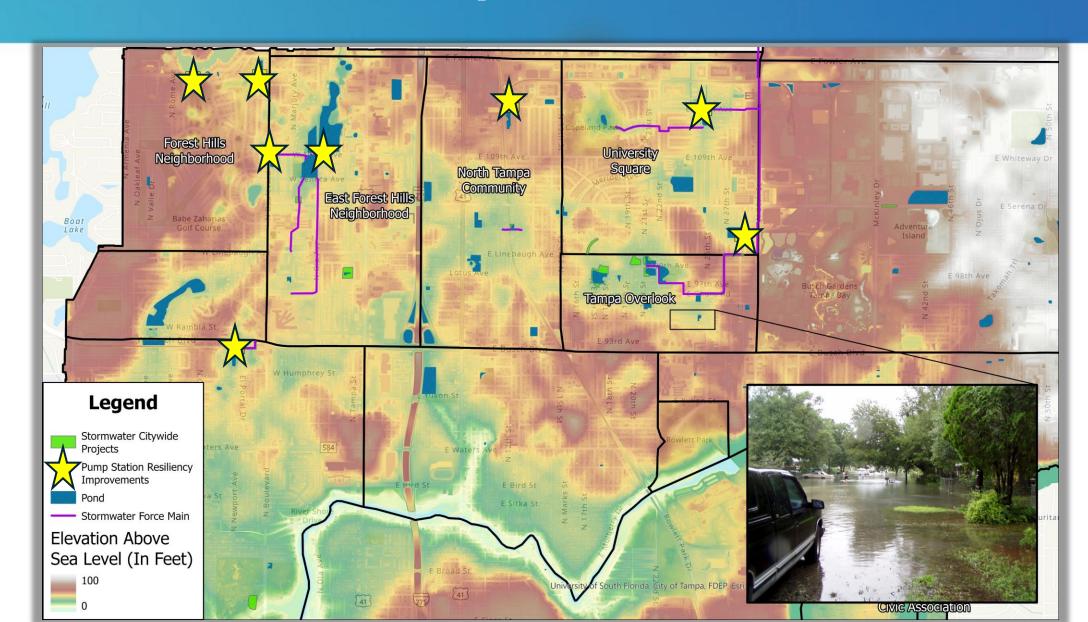
Lake Roberta
Southeast Seminole Heights

Success Stories



Cypress Street Outfall

Zoom In: N.Tampa CB / Forest Hills



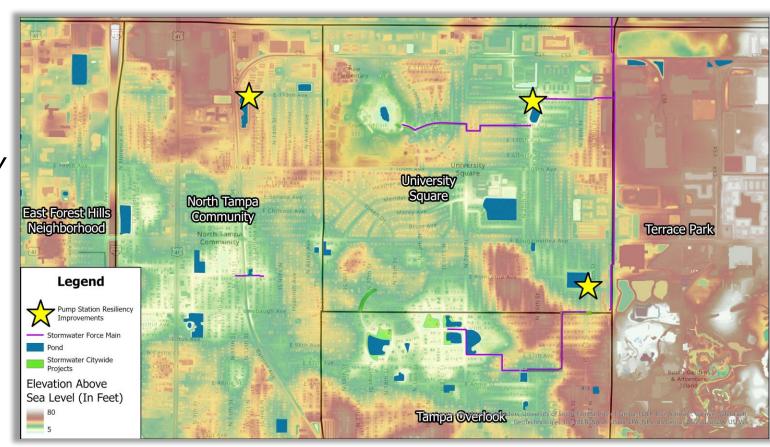
Zoom In: North Tampa Closed Basin

Stormwater Infrastructure:

- Stormwater ponds
- Three pump stations
- Force mains
- Back-up generators on stand-by

Challenges:

- Topography: low, bowl-like
- Lack of outfalls
- Impacted by flood water outside of City boundaries.



Out of Our Control: Weather Intensity

- **ALL** stormwater systems have limits and are **NOT** designed to "flood-proof" neighborhoods from big, intense rainstorms or Hurricanes. ...
- 2025 Tampa Vulnerability Assessment: "In the coming decades, Tampa will experience the combined effects of gradual sea-level rise, extreme rainfall, and storm surge."
- Much of our system is older, and in some cases inadequate.
- New infrastructure projects are always limited to available space and funding.

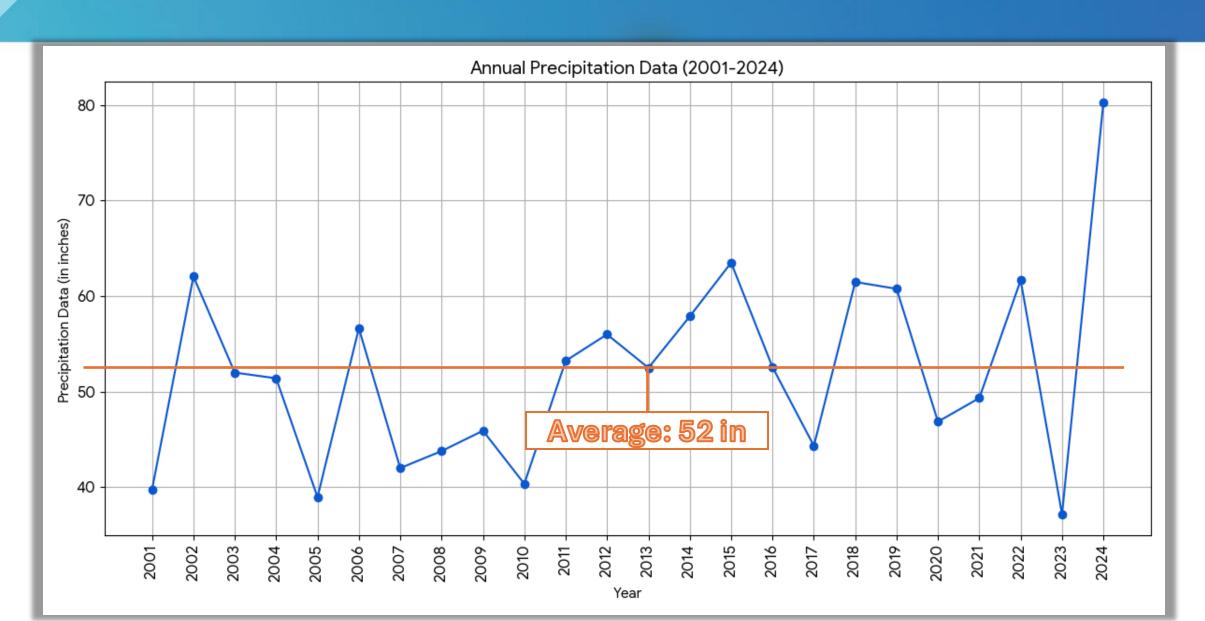


Out of Our Control: Weather Intensity

- **Generally**, our stormwater system is constructed to industry standards meant to reduce flooding from *typical* summer storms.
- Example: 2-in. of rain in 30 min.
 Typically, SHOULD NOT cause flooding. (5-year storm)
- Rainfall totals to the right of the yellow likely WILL cause flooding.
- Example: 2.35-in. of rain in 20 min. (200-year storm occurred 6/2)

	OK			Potential for Flooding			
ARI (years):	1	2	5	10	25	100	200
							1.12
5-min:	0.549	0.614	0.717	0.799	0.905	1.05	
10-min:	0.803	0.899	1.05	1.17	1.32	1.54	1.64
15-min:	0.979	1.1	1.28	1.43	1.62	1.88	2.01
20-min:	1.14	1.28	1.50	1.67	1.90	2.20	2.35
25-min:	1.31	1.47	1.72	1.92	2.17	2.52	2.69
30-min:	1.47	1.65	1.94	2.16	2.45	2.85	3.04
60-min:	1.9	2.15	2.56	2.88	3.32	3.96	4.27
2-hr:	2.32	2.65	3.18	3.61	4.19	5.06	5.5
3-hr:	2.53	2.89	3.49	3.99	4.71	5.85	6.44
6-hr:	2.93	3.29	3.95	4.58	5.54	7.27	8.26
12-hr:	3.42	3.72	1.4	5.13	6.38	8.88	10.4
24-hr:	3.9	4.31	5.22	6.2	7.88	11.2	13.3
2-day:	4.4	5.11	6.5	7.86	10	14.1	16.5
3-day:	4.9	5.61	7.02	8.42	10.7	15	17.6
4-day:	5.35	6	7.35	8.73	11	15.4	18
7-day:	6.44	7.05	8.35	9.69	12	16.4	19
10-day:	7.36	8.06	9.46	10.9	13.2	17.5	20.1
20-day:	10	11.2	13.3	15	17.6	21.9	24.3
30-day:	12.5	14	16.6	18.8	21.7	26.2	28.5
45-day:	15.8	17.8	20.9	23.5	26.9	31.9	34.3
60-day:	18.8	21	24.5	27.4	31.2	36.9	39.6

NOAA Rainfall Data: Tampa 2001-2024



Out of Our Control: Weather Intensity

Rainfall totals add up quickly! .5 inches makes a HUGE difference.
 See examples below from NOAA



1 inch per hour



1.5 inches per hour



Source link:

Projects Around Copeland Park

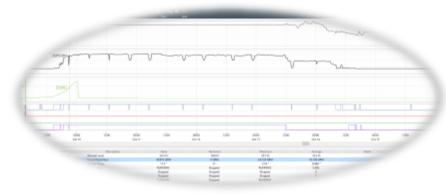




Forest Hills Park Pump Station (in design)

Copeland Park Pump Station (under construction)

N. Tampa Closed Basin Pond Expansion

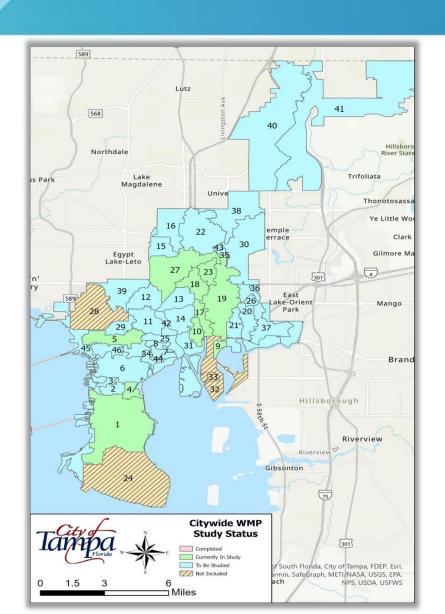






Portable Back-up Generators Ready

NEW Watershed Master Plan



What is it?

- The Citywide Watershed Master Plan (WMP)
 will allow us identify and prioritize future
 stormwater infrastructure projects using the
 latest predictive models and data.
- The WMP will be the foundation for stormwater management for generations to come.

What are the Benefits?

 It will also save residents' money by leading to a reduction in flood insurance premiums through an improved Community Rating
 System (CRS) class.

Stormwater Quarterly Reports

What is it?

- Each quarter the Stormwater team publishes a report documenting ongoing flood relief capital projects, assessment/funding totals, maintenance reports, as well as project photos.
- It is a great way to track our progress.



Stormwater Projects / Program Report

Tampa City Council Update

No. 32 - December 19, 2024

A) Major Capital Improvements

Projects 1-6 are regional multi-year flooding relief projects for the City of Tampa. Each project fact sheet includes a description, location map, and timeline status. Each of these projects is in various stages of development and will continue for several years due to the complexity and comprehensive nature of the project. Project 7 incorporates the miscellaneous neighborhood projects that typically have a six (6) month or less construction timeline and each has its own fact sheet.

- 1. North Tampa Closed Basin Flooding Relief
- 2. Southeast Seminole Heights Flooding Relief
- 3. Lower Peninsula Flooding Relief
- 4. Golf View Flooding Relief
- 5. South Howard Flooding Relief
- 6. Citywide Watershed Master Plan
- 7. Miscellaneous Capital Improvements
- B) Stormwater Capital Improvement Bond Program Report
- C) Stormwater Service Assessment Program \$16,000,000+

Description ANNUARIES For Control Country Under 1974 For Charles For Country 1974 Feb Vol. 2 dec.

To Learn More About Us:

To learn more about the City's Stormwater Division visit:

https://www.tampa.gov/mobility/stormwater

Need assistance?

Call for service:

813-274-3101

24-hrs a day, 365-days a year!

Visit:



How You Can Help

Be a good stormwater steward. Every bit helps!

- Only rain down the drains DO NOT blow leaves or debris.
 (submit photos / video of violators)
- Report drainage issues to us via TampaConnect.com.
- Adding compost to grass on your property can increase soil holding capacity and reduce stormwater runoff.
- Share your feedback on a new Adopt-a-Drain Program.



Consider purchasing FLOOD INSURANCE.

Be Tampa Ready!

HURRICANE SEASON HAS ARRIVED

- Make a plan

 Have a plan in place for you and your family should disaster strike
- Get a kit

 Ensure your disaster supply kit has the essentials you may need
- Stay Informed

 Text TAMPAREADY to 888-777 (Envia TAMPALISTA al 888-777 para español)

 Sign up for Alert Tampa emergency notifications

 Follow @AlertTampa on Twitter

Be #TampaReady // tampa.gov/Hurricane





Take our Community Action Survey

We want to hear from you!

Scan the QR code and take a brief Community Action Survey

