

Resilience Community Listening Session

February 13, 2024

WE ARE ST. PETE

INTRODUCTION

*Managing Director of Communications
and Community Engagement, City of St. Petersburg*

Alizza Punzalan-Randle

*Executive Vice President,
Johns Hopkins All Children's Foundation*

Jenine Rabin

WELCOME

Mayor Kenneth T. Welch

REMARKS

*City Council Member & Vice Chair of the
Tampa Bay Regional Resiliency Coalition*

Brandi Gabbard

PRESENTATION

Public Works Administrator, City of St. Petersburg

Claude Tankersley



Why does flooding happen in St. Pete?

Two Types of flooding – Inland and Coastal Flooding

Inland Flooding

- Intense rainfall over a short period
 - Fresh water
 - Short-term street flooding
 - Rain comes down faster than drainage pipes can carry it away
- Less likely to cause damage to buildings because of short-term nature and shallow depth
- Can occur anywhere in the City, regardless of neighborhood elevation or distance from coast



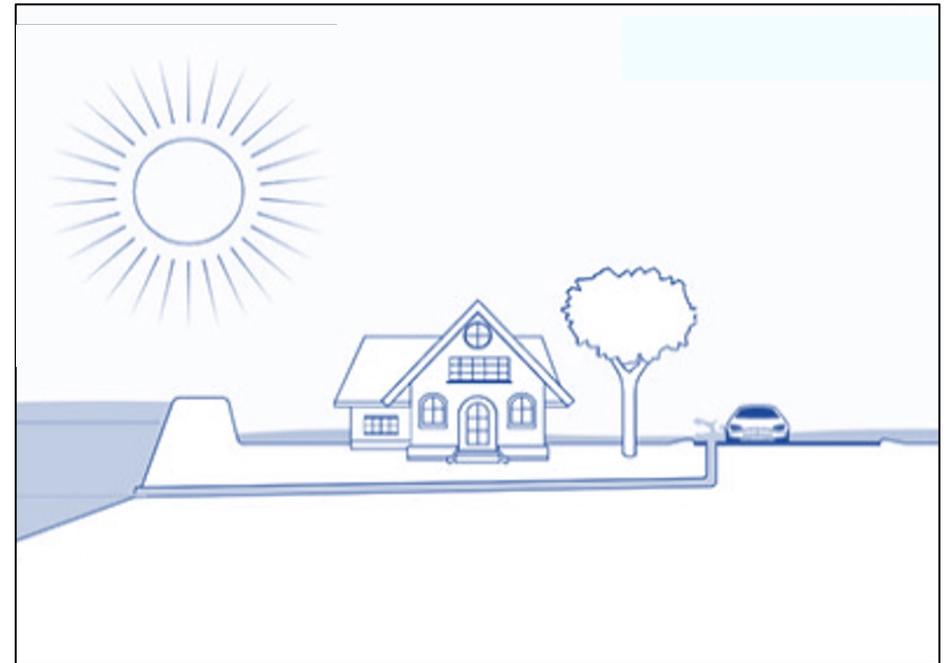


Why Does Flooding Occur in St. Pete?

Two Types – Inland and Coastal Flooding

Coastal Flooding

- Tidal flooding of low-lying coastal land
 - Salt water
 - King tides (sunny-day flooding)
 - High tides with rain or onshore winds
 - Storm surge
- More likely to cause damage to buildings
- Becoming more frequent with sea level rise (SLR)





Inland and Coastal Flooding

Examples:



Inland Flooding From Rainfall
Localized and Isolated



Coastal Flooding from High Tide
Widespread and Connected



Mitigation Strategies for City Drainage System

Inland and Coastal Flooding

Inland Flooding

- Short-term storage (*such as retention ponds*)
- Larger pipes
- Additional inlets, pipes and outfalls (*bypass systems*)
- Pump stations



Macoma Stormwater Pump Station
Riviera Bay

Coastal Flooding

- Backflow preventers
- Larger pipes
- Additional pipes and outfalls (*bypass systems*)
- Pump stations
- Tide gates



110th Ave N and Oak St NE



Prioritizing Flood Reduction Projects

A Data-Driven Process

Stormwater and Flood Mitigation Projects Prioritized by:

- Areas with repetitive flood damage to homes
- Coastal flooding (*salt water is more damaging than rainwater*)
- Regional benefit vs. localized benefit
- Street flooding from rain (*fresh water*) with no damage to structures

Limitations:

- Available funding
- Gaps in data (*example: flooding to home not reported to City*)



What has the City done recently?

Flooding Resilience Strategies

- Coastal High Hazard Area amendments require elevating structures
- Improved our Community Rating System (CRS) score to increase discounts on Flood insurance (*25% discount to residents*)
- Annual Repetitive Loss Area Analysis Report (RLAA) for FEMA
- Assist homeowners in applying for FEMA funding assistance
 - 13 homes raised since 1996
 - 19 homeowners assisted with applications since 2020 – results pending



What does the City do for storms?

Emergency Response

Pre-Storm:

- Sandbag distribution
- Clear storm drains, street sweep, lower levels of ponds, etc.
 - *Did you know there are more than 22,000 storm drains in the City?*
- Special needs evacuations
- Variable message boards to warn of high water, other hazards





What does the City do for storms?

Emergency Response



Post-Storm:

- Damage assessment teams document storm-related damage (*important for federal assistance!*)
- Street Teams deployed into neighborhoods to identify immediate needs (*shelter, comfort stations*)
- Expedited permitting, code flexibility
- Debris pickup





What did the City do after recent storms?

Tropical Storm Eta and Hurricane Idalia – Post-Storm

- Rehabilitated existing Stormwater Pump Stations
- Improved backup power generators to pump stations
- Sought FEMA Hazard Mitigation Grant funding for additional backflow preventers and upgrades to existing ones
- Deployed temporary pump stations to drain rainwater during no-name storms when backflow preventers were closed against the high tide
- Damage assessments, comfort stations, FEMA assistance, expedited permitting, code flexibility for RVs and Pods



What is the City doing right now?

Stormwater System Improvements

- **\$16.8 million** in capital improvement projects in 2024
- **\$20 million** grants awarded to City through Resilient Florida for existing multi-year projects
- **\$500,000** to replace 14 older-model backflow preventers in 2024
- **Year-round street sweeping** removes debris before it gets into pipes
- **System cleaning** on an as-needed basis
- **Inspect critical inlets** regularly and before storms (“hot grates”)



How is the City planning for the future?

Planning Initiatives

- **Stormwater Master Plan** (*to be published this year*) recommends \$760 million in future projects across the City to address extreme wet weather events
- Resilient Florida **Climate Vulnerability Analysis** will expand upon the City's 2017 study and evaluate threats to our physical infrastructure
- **Seawall Vulnerability Analysis** of all city-owned seawalls and identify improvements to protect against coastal flooding and sea-level rise
- Kicking off **Flood Resiliency Action Plan** guided by the Tampa Bay Regional Planning Council's (TBRPC's) Regional Resiliency Action Plan

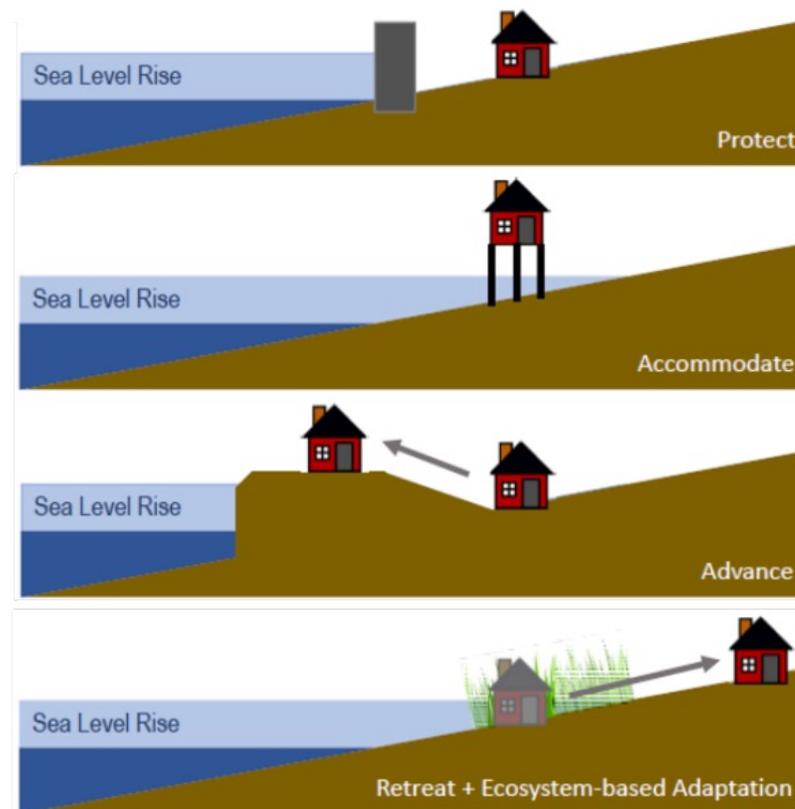


Long-Term Sea Level Rise (SLR) Mitigation

Generational Strategies

Generational strategies to address sea-level rise include:

- **Protect** with seawalls, levees and other hardened structures;
- **Accommodate** by elevating structures;
- **Advance** by building a buffer out into the bay or gulf; or
- **Retreat** by moving away from the coast and reintroducing natural systems



Source: *Natural Resources Defense Council*, 2019



Homeowner Strategies

Floodproof your property

- Know the finished floor elevation and the Base Flood Elevation (BFE) for your home
- Direct water away from structures – make sure your yard slopes away from the building
- Purchase flood insurance (*even if it's not required by your lender*)
- Floodproof walls and openings below the BFE
- Protect HVAC systems and electrical wiring and fixtures

Visit [FEMA.gov](https://www.fema.gov) for more information



What can you do to help?

We are in this together as a community

- Let us know if you experience a flooding event
 - It informs us where we need to focus our plans
- Adopt-A-Drain program coming in 2024:
 - Keep local storm drains clear and help clear them before storms
 - Notify the City when you see blocked or damaged storm drains
 - Did you know there are over 22,000 storm drains in the City?
- Protect your private seawall
 - Did you know 85% of seawalls in the City are privately owned?
- Reduce your impervious footprint

PRESENTATION

FEMA

National Flood Insurance Program

St. Pete Resilience Community Listening Session

James Mascellino, FEMA Region 4



FEMA



FEMA



MOST HOMEOWNERS INSURANCE DOES NOT COVER FLOOD DAMAGE.

But with flood insurance, you're covered.



FEMA



Of more than 3,000 counties in the United States, 99% experienced a flood event from 1996 to 2022. Flood insurance can protect your home from damage during a flooding event, so you can recover faster.

Even if you don't live near water, your home can still be at risk of flooding from changing conditions such as construction projects, surface erosion or natural events. **An average of 40% of National Flood Insurance Program (NFIP) claims come from outside high-risk flood areas.**

Federal disaster assistance requires a presidential disaster declaration and comes in the form of a low-interest disaster loan that must be repaid with interest. Only flood insurance will cover the cost of damage to your property and belongings after a flood event.

Get a quote to see how you can protect the life you've built.

Find an insurance provider who can help at floodsmart.gov/find. For more information on flood insurance, contact FEMA Mapping and Insurance eXchange (FMIX) at **877-336-2627** or email FEMA-FMIX@fema.dhs.gov.



With flood insurance from the NFIP, you're covered. Flood insurance can cover up to:

- **\$250,000** for your residential property
- **\$100,000** for your personal belongings*
- **\$500,000** for your commercial property
- **\$500,000** for your commercial property contents

**Available to homeowners and renters*

FEMA NFIP National Status

Insurance Policies 4,678,587

Total Coverage \$1,277,944,653,800

Paid out since 1978 \$79,582,659,774

FEMA Region IV Florida NFIP Status

Insurance Policies 1,710,860

Total Coverage \$450,842,696,000

Paid out since 1978 \$11,037,497,161

FEMA St. Petersburg Florida NFIP Status

Insurance Policies	38,072
Total Coverage	\$9,320,290,000
Paid out since 1978	\$129,311,732

Hurricane Idalia in St. Petersburg Status

- **655 Claims to Date**
- **Total Payout to Date- \$48,764,105**
- **Average Claim Payout- \$79,680**

FEMA Individual Assistance Status

- **\$41,000 Maximum Grant**
- **Average Grant < \$5,000**

James Mascellino
Floodplain Management Specialist
FEMA Region 4
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FEMA

Listening Session

*Moderated by City of St. Petersburg
Chief Equity Officer, Carl Lavender, Jr.*

Thank You!

*Give us your input at
stpete.org/listeningsession*

