

Wastewater / Stormwater Task Force

Initial Action Plan

Tuesday, February 7, 2017

Task Force Composition

Steering Committee

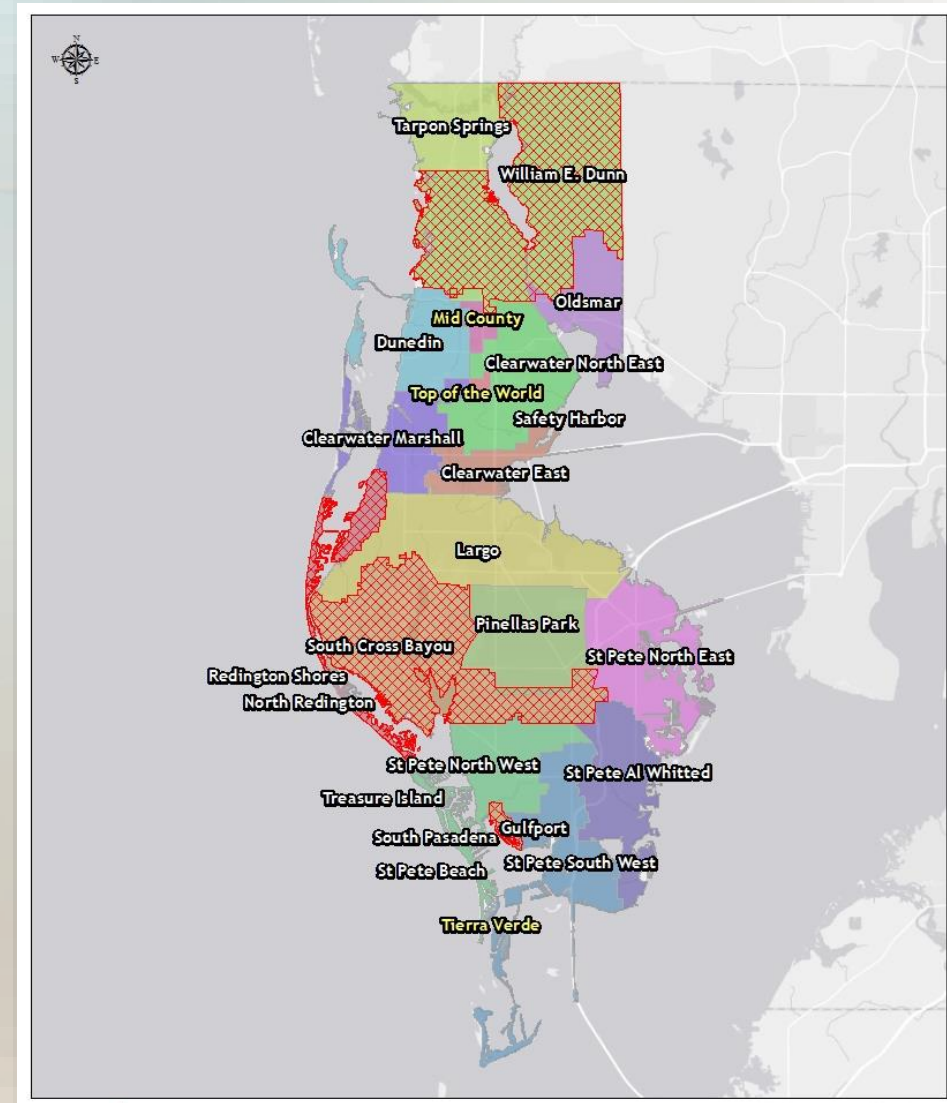
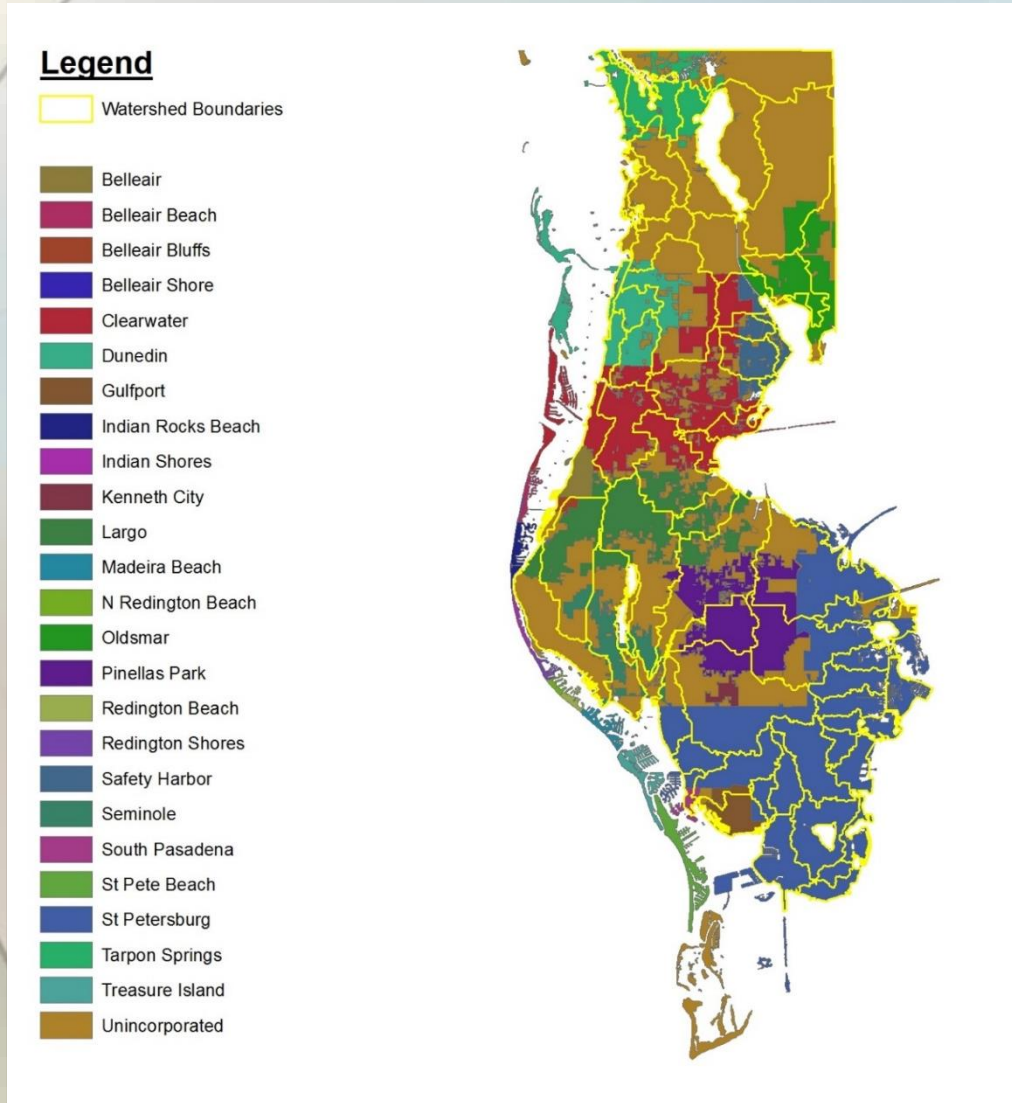
George Cretekos	Mayor, City of Clearwater	Rick Kriseman	Mayor, City of St. Petersburg
Julie Ward Bujalski	Mayor, City of Dunedin	Amy Foster	Council Chair, St. Petersburg City Council
Samuel Henderson	Mayor, City of Gulfport	Debora Schechner	Mayor, City of St. Pete Beach
Matthew Campbell	Manager, Town of Kenneth City	Chris Alahouzos	Mayor, City of Tarpon Springs
Woody Brown	Mayor, City of Largo	Robert Minning	Mayor, City of Treasure Island
Bill Queen	Mayor, Town of North Redington Beach	Terry Hamilton-Wollin	Chairman and President, Big - C
Doug Bevis	Mayor, City of Oldsmar	Marlene Murray	President, CONA, St. Petersburg
Charlie Justice	Commissioner, Pinellas County	Tim Lima	President, CNCN
Mark S. Woodard	County Administrator, Pinellas County	Linda Umberger	President, Lealman Community Association
Sandra Bradbury	Mayor, City of Pinellas Park	Gary Katica	President, Mayors' Council
Nick Simons	Mayor, Town of Redington Beach	Patrick C. Flynn	Vice President of Operations, Utilities, Inc. of Florida
Bert Adams	Mayor, Town of Redington Shores	Corey Givens	Vice President, NAACP
Andy Steingold	Mayor, City of Safety Harbor	Kenneth D. Colen	President, On Top of the World
Leslie Waters	Mayor, City of Seminole	Jerry Frulio	President, Tierra Verde Association
Max Elson	Mayor, City of South Pasadena		

Technical Working Group

David Porter	Utility Director, City of Clearwater
Jorge M. Quintas	Public Works & Utilities Director/City Engineer, City of Dunedin
Don Sopak	Public Works Director, City of Gulfport
Irvin Kety	Director of Environmental Service Department, City of Largo
Patrick C. Flynn	Vice President of Operations, Utilities, Inc. of Florida
Nan Bennett	Director of Public Works, City of Oldsmar
Bill Breckinridge	Assistant County Administrator, Pinellas County
Rahim Harji	Public Works Director, Pinellas County
Randi Kim	Utilities Director, Pinellas County
Marty Reich	Director of Public Utilities, City of Pinellas Park
John Branch	Sewers/Stormwater Supervisor, Town of Redington Shores
Ray Boler	Public Works Director, City of Safety Harbor
Shawn Shimko	Assistant Director of Public Works, City of South Pasadena
Claude Tankersley	Public Works Administrator, City of St. Petersburg
Mike Clarke	Public Works Director, City of St. Pete Beach
Paul Smith	Public Services Director, City of Tarpon Springs
Mike Helfrich	Director of Public Works, City of Treasure Island

Watersheds and Municipal Boundaries

County, City and Private Sewer Systems



COUNTYWIDE UTILITIES

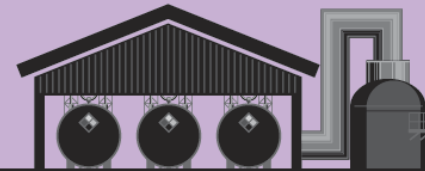
Serve **302,912** Customers
about 1 million people



3,646 Miles of Pipe



14 Wastewater
Treatment Plants

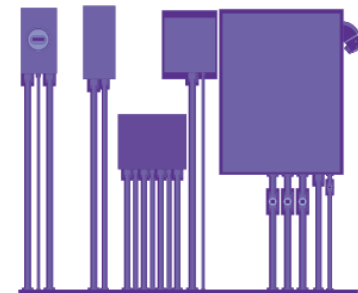


Treat **155 Million** Gallons Per Day

79,165
Manholes



825
Lift Stations



Causes of Sewage Overflows and Associated Level of Control by Utilities

Controllable

- Maintenance of wastewater and stormwater infrastructure, equipment and resources
- System capacity
- Storm preparation and response

Limited Control/Outside of our Control

- Malfunctioning private sewer systems
- Line blockages
- Extreme weather events
- Large scale power outages
- Catastrophic equipment failures
- Damage to utilities by outside forces

Storm Preparation & Response



NEWS RELEASE

Pinellas County
333 Chestnut Street
(727) 464-4600

Immediate Release
Aug. 31, 2016 *7:15 p.m.
Contact for Media Only
(727) 464-3820
(727) 580-1525* On Call PIO

Take flood precautions during Tropical Storm Hermine

With Tropical Storm Hermine expected to bring heavy rains to the Tampa Bay area through Friday, Pinellas County staff advises residents take extra precautions to stay safe from potential flood hazards.

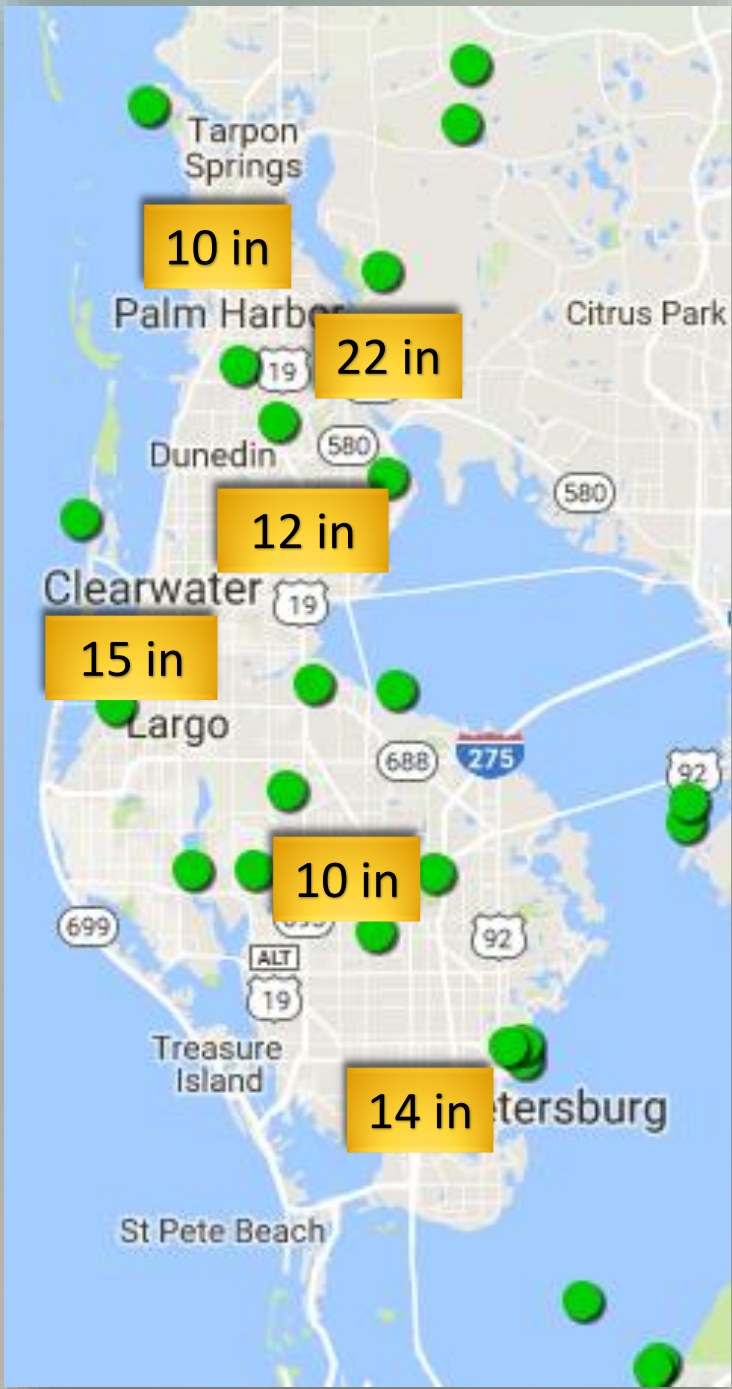
Residents can report flooding issues or get emergency preparedness information by calling the Citizen Information Center at (727) 464-4333, which will be open until 8 p.m. Wednesday.



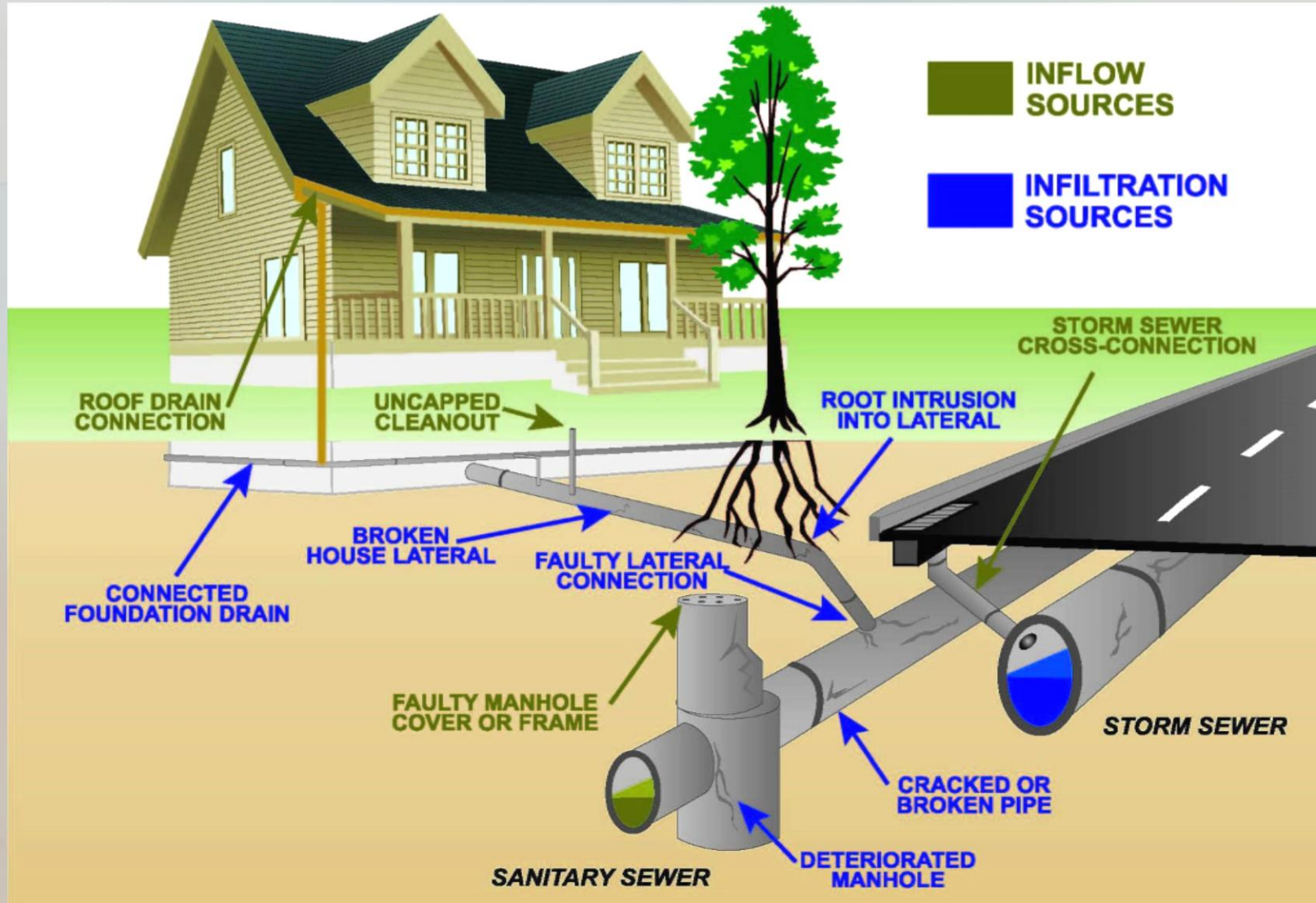
What Happened



3x Average Flow in Wastewater System



How does groundwater and stormwater get in?



Options to Reduce Wet Weather Flow Impacts

- **Expanding Wastewater Treatment Capacity to Increase Level of Service**



Options to Reduce Wet Weather Flow Impacts

- **Expanding Storage Capacity to Increase Level of Service**

Event Duration	Storage Capacity (gallons)
3-day storm	465 million
4-day post-storm	620 million
Total	1 billion

Options to Reduce Wet Weather Flow Impacts

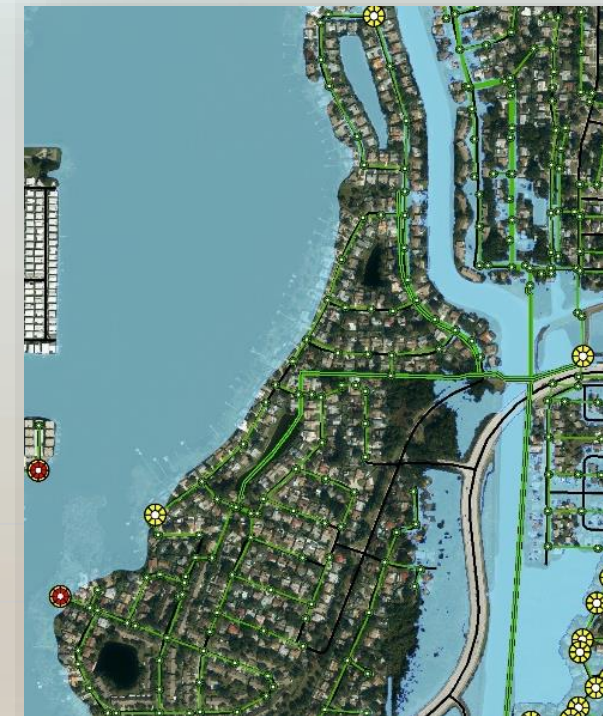
- **Expanding Storage Capacity to Increase Level of Service**



Lake Seminole = 1.22 Billion Gallons

Options to Reduce Wet Weather Flow Impacts

- Reducing Inflow and Infiltration to Increase Level of Service



Legend

- WWMH_SWMP_25
- WWMH_SWMP_100
- WW Manhole
- WW Gravity Main Diameter**
 - < 4
 - 4 - 10
 - 10 - 20
 - 20 - 30
 - 30 - 48
 - WW Pressurized Main
- Pinellas_County_25yr1d
- Pinellas_County_100yr1d
- FLOOD_ZONE**
 - AE-DRAFT
 - <Null>
 - A
 - AE
 - ANI
 - TRANSITION
 - X
 - X_TRANSITION
 - Floodplain (100 Yr)

Initial Action Plan

Activity	Timeline
1) Inflow and Infiltration Studies	May 2017 – Sep 2018
2) Address System Hydraulic Bottlenecks	Apr 2017 – Apr 2018
3) Rehabilitation/Replacement Programs for Aging Infrastructure	Jan 2017 – Sep 2018
4) Stormwater Drainage Improvements	Mar 2017 – Sep 2018
5) Resource Sharing/Maximization	Jan 2017 – Mar 2018
6) Develop Public Dialogue Program	Feb – Apr 2017
7) Develop Legislation, Regulations, Local Ordinances	Jan – Dec 2017

Long-Term Actions

Activity	Actions
1) Inflow and Infiltration	<ul style="list-style-type: none"><li data-bbox="1302 382 1854 429">• I&I Reduction Projects
2) System Hydraulic Bottlenecks	<ul style="list-style-type: none"><li data-bbox="1302 478 2308 525">• Periodic reassessment of system hydraulics
3) Rehabilitation/Replacement Programs	<ul style="list-style-type: none"><li data-bbox="1302 574 2181 621">• Ongoing Asset Management Program
4) Stormwater Drainage Improvements	<ul style="list-style-type: none"><li data-bbox="1302 711 2423 815">• Reduce stormwater drainage and connections to sanitary sewer system<li data-bbox="1302 839 2232 886">• Infrastructure planning for sea level rise<li data-bbox="1302 911 2333 1001">• Watershed plans to coordinate jurisdictional boundaries
5) Resource Sharing/Maximization	<ul style="list-style-type: none"><li data-bbox="1302 1049 1854 1096">• Ongoing Collaboration
6) Public Dialogue	<ul style="list-style-type: none"><li data-bbox="1302 1153 2333 1258">• Implement maintenance program for private laterals, sewer systems and lift stations
7) Legislation, Regulations, Local Ordinances	<ul style="list-style-type: none"><li data-bbox="1302 1306 2435 1353">• Adoption of local ordinances and state legislation

Key Points

- Accelerating inflow and infiltration identification and mitigation projects will reduce overflows
- Implementing targeted system capacity projects will reduce overflows in the short term as inflow and infiltration reduction is achieved
- Integrating stormwater/sewer projects to increase the resiliency of our infrastructure will reduce overflows and save money in the long run
- Funding, legislation and public participation is needed to support outcomes