

City of Pensacola ECUA Presentation

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MAY 23, 2022



Presentation Outline

- ▶ Background
 - ▶ What Rehabilitation ECUA has already done
 - ▶ What we are working on now
- ▶ Investigation - Joint ECUA and City of Pensacola
 - ▶ Potential Sources
 - ▶ Four part plan
 - ▶ Timeline
- ▶ Questions



Background - Work on rehabilitating the system

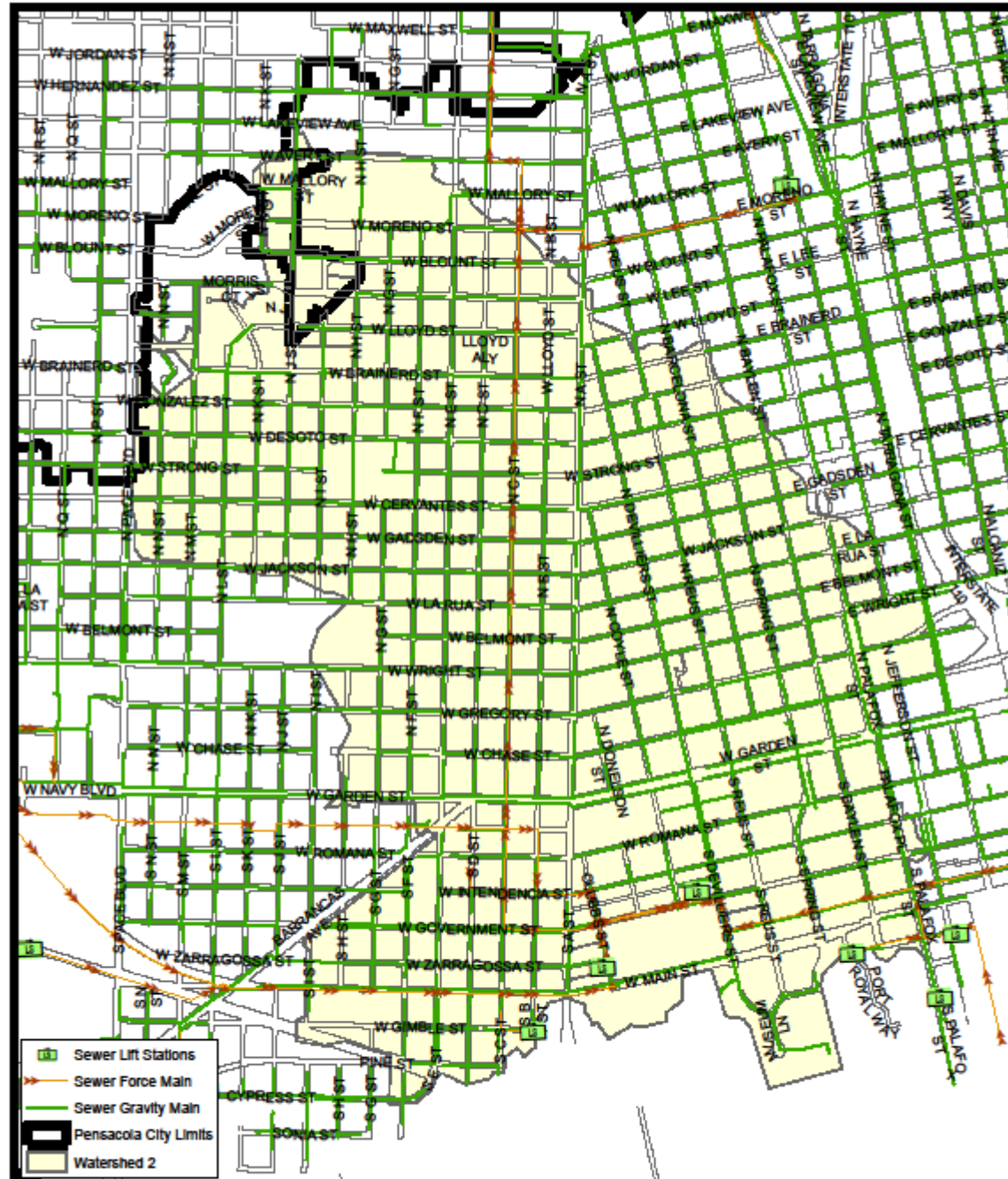
- ECUA regularly tests its sewer system by smoke testing and video inspection. Ongoing effort since inception; frequency has greatly increased in last 10 years.
- ECUA has a consent order based on SSOs that started in 2012 – As part of that consent order ECUA was required to investigate the system and prioritize rehabilitation efforts
- Most of the prioritized areas are in the downtown area.
- Since starting the program in 2012, ECUA has spent approximately \$76 million on sewer rehab – About 25 million has been spent in the downtown area



Background

- Yellow shading shows the storm water basin boundary
- Green lines are ECUA gravity sewer lines
- The majority of the gravity sewer lines have been rehabilitated/ lined, some of the services have been lined up to the property line.
- Some of the stormwater in this basin goes to Bruce Beach and some to the east of Maritime Park

City of Pensacola Stormwater Watershed 2 + ECUA

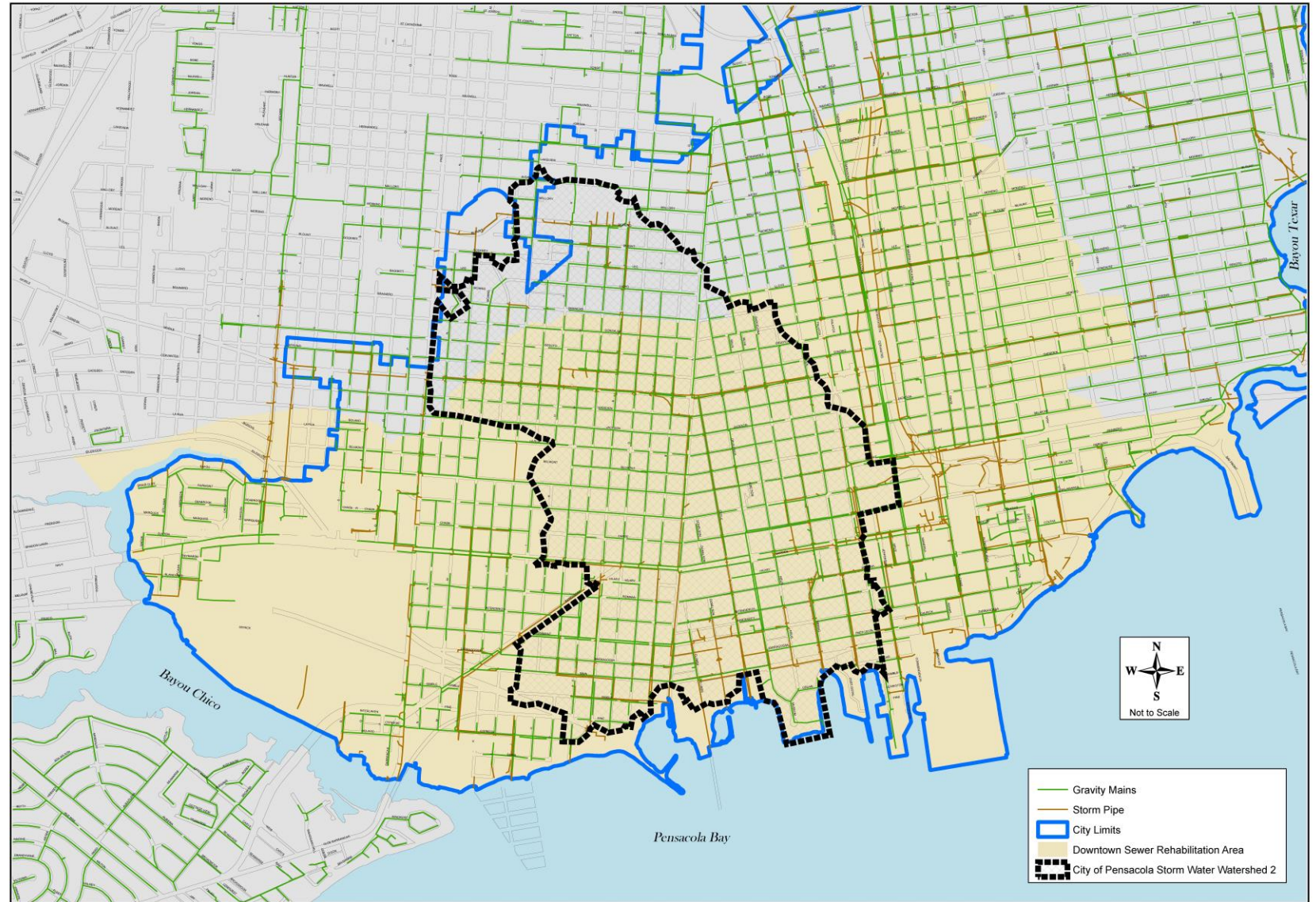


DOWNTOWN PENSACOLA SEWER REHABILITATION

TAN SHADED AREA IS
THE MAIN
REHABILITATION
FOCUS AREA.

REHABILITATION
WORK CONSISTS OF:

- REPLACEMENT OF LAMPHOLES
- POINT REPAIRS
- LINE SEWER MAINS
- INSTALL CLEANOUTS ON SERVICE LATERALS
- LINE SERVICE LATERALS WITHIN RIGHTS OF WAYS
- MANHOLE REHABILITATION

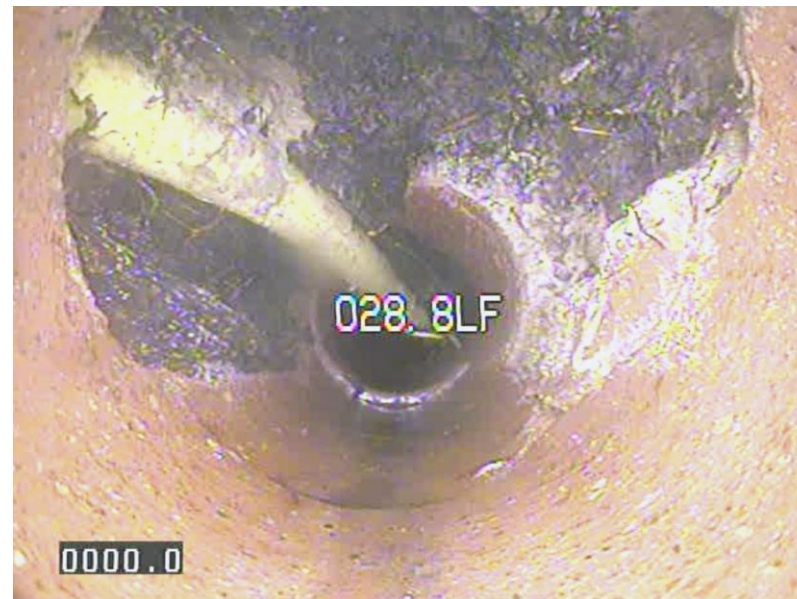
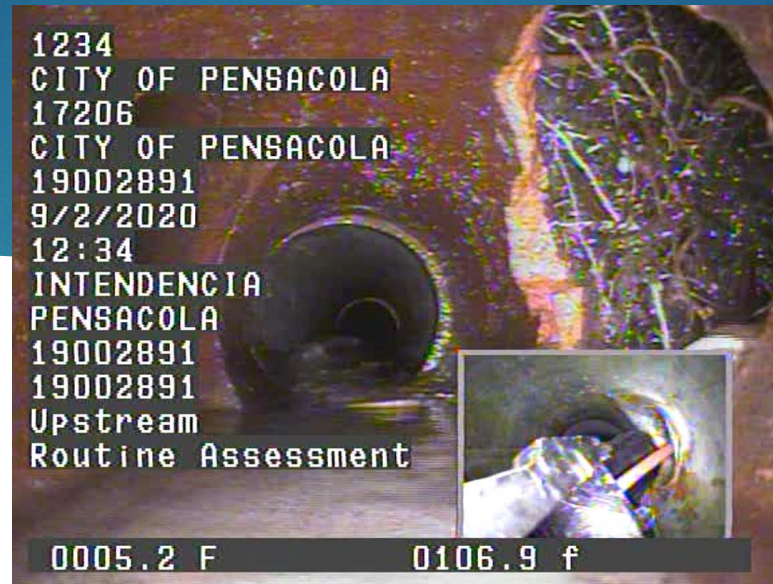


EMERALD COAST UTILITIES AUTHORITY

Downtown Sewer Rehabilitation - May 2022

Background

- Sanitary sewer system is not entirely owned by ECUA
- Approximately 30 percent of the gravity collection system is privately owned
- Private laterals can be a source of infiltration into the sanitary system as well as exfiltration out of the sanitary system.



Background

What are we doing now?

- Video inspecting private sewer laterals – Slow process
- Notifying property owners when we find something wrong
- Continuing rehabilitation of main lines, laterals and manholes
- Ongoing discussions with City and County Staff about a private lateral program



Investigation

Potential Sources:

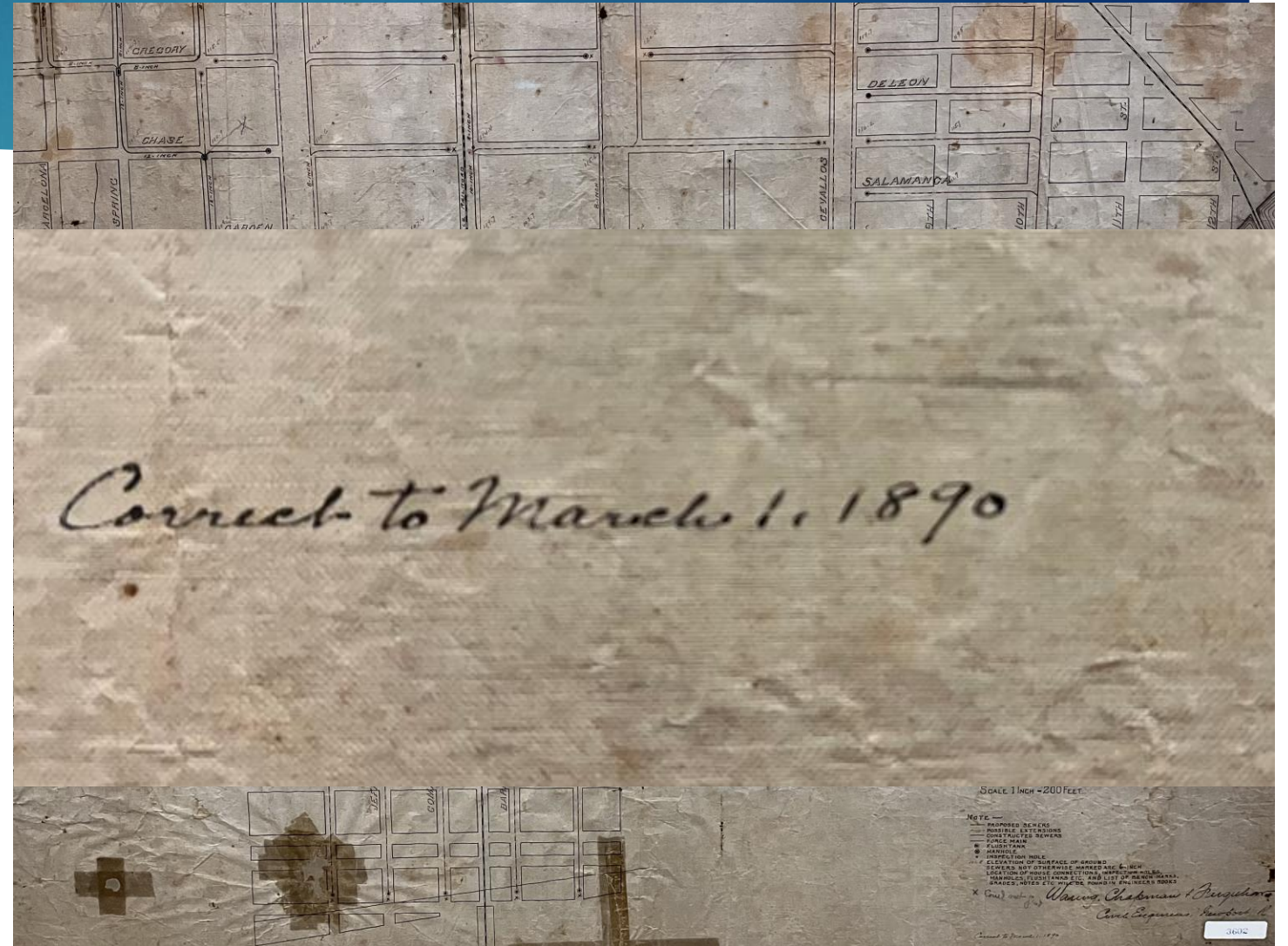
- Damaged ECUA facilities leaking near stormwater system
- Direct connection from sanitary to stormwater system
- Private sewer laterals leaking into storm system
- Wildlife contamination
- Septic tanks – None known in the area – but possible
- Homeless population



Investigation

Challenges:

- Old system
- Storm system is generally submerged/ tidally influenced in this area
- Flow from interconnect(s) could be intermittent
- Bacteria can grow in environment
- Rehabilitation is time-consuming and expensive



Investigation

Plan for investigation:

- Dye testing
- Detergent testing
- Fecal testing
- Inspections
 - City – stormwater system
 - ECUA – sanitary system



Dye Testing

Dye Testing:

- Put dye in bathrooms and check the sewer system and storm system for dye
- Buildings planned:
 - City Hall
 - Chappie James
 - Judicial Center
- City will monitor storm drains
- ECUA will monitor sanitary lines



Detergent and Fecal Testing

Detergent and fecal testing:

- Indicator test used to determine presence of detergent
- Test done on storm system
- It will give a yes or no with relative strength
- Could miss if discharge is intermittent
- Very fast to do – results on site in minutes
- Inexpensive to run – Cost is in time and labor
- Testing can move quickly upstream
- Intent is to determine area for further investigation
- Fecal sampling may be done at same time
 - Positive fecal but no detergent would indicate environmental source of fecal but not definitive
- City will provide manhole access and traffic control and ECUA will do testing



Inspections

ECUA will inspect its system.

- ECUA has ongoing video inspection program approximately 250,000 feet per year
- ECUA will target inspection in areas of concern

City will inspect its storm system.

- System in the south downtown area is generally submerged making video inspection very difficult
- Inspect outfalls and junction boxes for connections



Timeline

Overall timeline is dependent on findings in initial phase:

- Timing for planning is immediate – City and ECUA staff have already met and will continue to meet weekly to work out details.
- We are reviewing locations for inserting dye and monitoring locations and should start within a month. Timing of tides to ensure outgoing tide will be coordinated with testing.
- After completing dye testing, detergent and fecal testing will start. Locations and staffing are still to be determined but a plan for this should be complete within a month. Once started it should move quickly.



Questions

Questions ?

