

Combined Sewer Overflow Separation





100-Plus Years and Flowing

Founded in 1886, American Water has served customers and communities for more than 130 years. And as the country's largest publicly-traded water and wastewater utility company, we cover a lot ground. Our size and scale differentiate us from our competitors in terms of the type of solutions we can offer our communities. Here are a few of the numbers that we're proud to share.

1 BILLION

Gallons of water treated and delivered every day

7,000

Employees serving communities nationwide

25+

Years receiving awards for quality





Illinois American Water

Illinois American Water is a subsidiary of American Water.

- Serve 146 communities in 35 operating districts
- Provide high-quality water and/or wastewater service to 1.3 million residents
- Operate 18 water treatment plants
- Treat and Deliver over 113 million gallons of water per day
- Operate 17 wastewater treatment plants
- Maintain 5,800 miles of water and sewer pipeline
- Maintain 114 water storage facilities
- Maintain 214 water and wastewater pumping stations

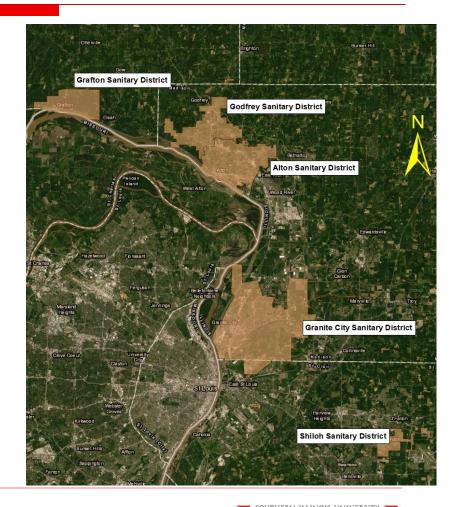






ILAW Nearby Sanitary Districts

| District | Year Acquired | Customers | Length of Sewer |
|--------------|------------------|-----------|--------------------|
| Grafton | 2016 | 340 | 64,000 |
| Godfrey | 2019 | 6,200 | 527,100 |
| Alton | 2019 | 23,000 | 1,018,500 |
| Granite City | 2020 | 12,500 | 676,100 |
| Shiloh | 2020 | 1,515 | 154,100 |

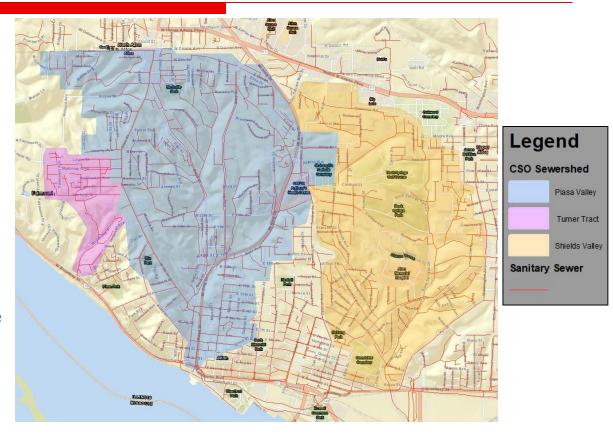






Alton Combined Sewershed

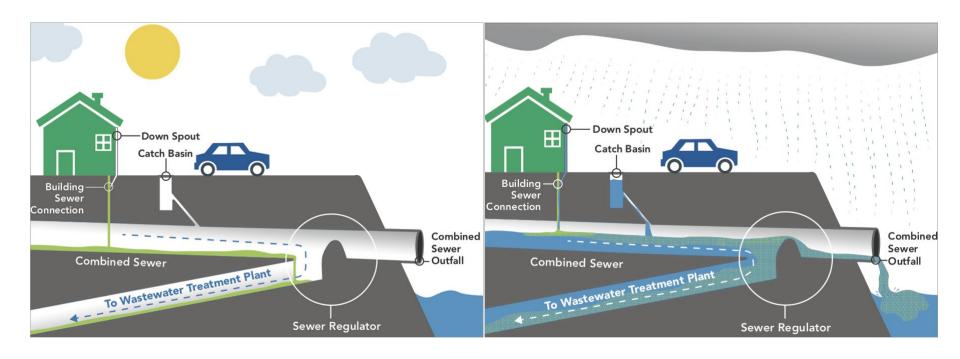
- 2019- purchased sanitary sewer system from Alton
- Purchased included
 - Separate Sanitary sewers
 - Combined sewers
 - Obligation to satisfy Long Term Control Plan (LTCP)
- Revised LTCP
 - New sanitary sewer
 - Environmentally friendly approach
 - Separation projects schedule includes 5 projects spanning from 2020-2030







How Combined Sewers Work







Current Projects

- 2020-2023 Separation Projects to be Completed
 - Turner Tract Separation
 - · April 30, 2022 completion deadline
 - · Separation complete
 - Shields Branch-Rerouting
 - April 30, 2022 completion deadline
 - · Re-routing completed
 - Piasa Valley Separation
 - · April 30, 2023 completion deadline
 - Three Phases
 - Phase 1 Completed June 2022







- Team Members
 - Sheppard, Morgan, Schwaab (SMS)
 - Design
 - Construction Management
 - · Kamadulski Excavating
 - Contractor
- Project Details
 - Value- 23 million dollars
 - 5 miles of new sanitary main
 - 2 miles of new sanitary laterals
 - · Directly Impacts
 - 600+ customers
 - 80+ businesses
- Construction started June 2021
- 3-Phases of Project
 - Phase 1- Completed (orange)
 - Phase 2- In Progress (teal)
 - Phase 3- Start in 2023(blue)







Phase 1

- Work completed
- Direct customer impact
 - 20 businesses
 - 220 Residents
- Communication approach
 - Notification letters
 - Local road closure signage
- Work more challenging than expected
 - Old utilities encapsulated in concrete
 - Old coal chutes connected to buildings
 - Bedrock
 - Poor soils
 - Unidentified utilities
 - Unmarked Utilities
 - Stormwater connections
 - Voids under pavement
 - Restoration-brick streets







Phase 1

- Results of Challenging work
 - Delays in progress/schedule
 - Complaints
 - Businesses
 - Lower foot traffic
 - Parking for customers
 - Unexpected work in front of businesses
 - Residents
 - Increased traffic to side streets
 - Not aware when streets will be shut down
 - Slow restoration
 - Rise in cost due to change Orders
- How do we get better???







1. Planning

- Investigation ahead of work
 - Interior plumbing of businesses
 - Location of unknown utilities
 - Dye testing to determine active laterals
 - SSES study to determine unwanted stormwater connection
- Soil borings
 - Determines soil conditions
 - Exploratory Excavation
- Review of contaminated sites in area
 - LUST sites
 - Remediated sites
- Review of traffic detours and impacts
 - High traffic streets
 - One-way streets
 - Business parking
- Work with City officials and local utilities
 - Shared restoration
 - Minimize disruption time to customers







2. Communication

- Business owner meetings
 - Explain project expectations
 - Receive feedback and concerns
- Weekly communication update to public
 - Published in local media outlets
 - Engage city officials
- Notification Postcards for upcoming work
 - Update customers 2-3 weeks in advance
- Dedicated access to businesses
- Suggested parking areas for customers
- Billboard signage for traffic understanding



Road Closures



Phase 2

- Work Started July 2022
- Direct customer impact
 - 60 businesses
 - 400 Residents
- Applied lessons learned from Phase I
 - Planning for unknowns
 - Get support from local businesses
 - Better communication to public
 - Partnership with local city officials and utilities
- Results
 - · Very little complains
 - Community support
 - Successful project







LESSONS LEARNED

- How to minimize impacts to businesses
 - · Weekly communication
 - Open business signs
 - Post card reminders of upcoming work
 - Social media updates
 - Dedicated access to businesses
 - Suggested parking areas
 - Initial investigation of sewer laterals & utilities to minimize downtime
 - · Obtain input from business owners
- Low impact excavation utilizing hydroexcavation
- Coordination with other utilities to minimize work and road closure
- Dye testing and televising equipment to help identify unknowns
- Soil borings to identify soil challenges







ILAW St. Louis Metro-East River Intakes

Why is separating Alton's combined sewers so important?

- Mississippi River Source Water
- ☐ ILAW has three Major Intakes (Firm Capacity)
 - Alton: 22 MGD
 - Chouteau Island: 34.6 MGD
 - E. St. Louis: 72.6 MGD

