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

<table>
<thead>
<tr>
<th>District</th>
<th>Year Acquired</th>
<th>Customers</th>
<th>Length of Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grafton</td>
<td>2016</td>
<td>340</td>
<td>64,000</td>
</tr>
<tr>
<td>Godfrey</td>
<td>2019</td>
<td>6,200</td>
<td>527,100</td>
</tr>
<tr>
<td>Alton</td>
<td>2019</td>
<td>23,000</td>
<td>1,018,500</td>
</tr>
<tr>
<td>Granite City</td>
<td>2020</td>
<td>12,500</td>
<td>676,100</td>
</tr>
<tr>
<td>Shiloh</td>
<td>2020</td>
<td>1,515</td>
<td>154,100</td>
</tr>
</tbody>
</table>
**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)
Piasa Valley

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
Piasa Valley

**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???
Piasa Valley

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
Piasa Valley

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 hydro-excitation

• 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

American Water
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
Thank you!