

TAMING THE CLOG MONSTER

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CLOG PROBLEM

- Studies show that **98%** of materials that clog equipment at wastewater treatment plants are non-flushable items



CLOG OVERVIEW

- History of clogs
- Regulatory support
- Greeley's investigation
- Actions taken
- Results
- Continuing efforts



GREELEY'S NON-FLUSHABLE PROBLEMS

Historical problems

- Commercial, industrial and institutional customers.
- Body wipes at commercial sector hospitals, medical offices and assisted living facilities.
- Increased maintenance costs
- **Sanitary Sewer Overflow**

Current problems

- Residential
- Lifestyle and pandemic use of cleaning wipes
- **Lift station pump clogs causing motor overload and reduced discharge**
- Digester and heat exchanger blocked reducing mixing and recirculation
- Hauled waste screen motor torque overload
- Increased maintenance costs

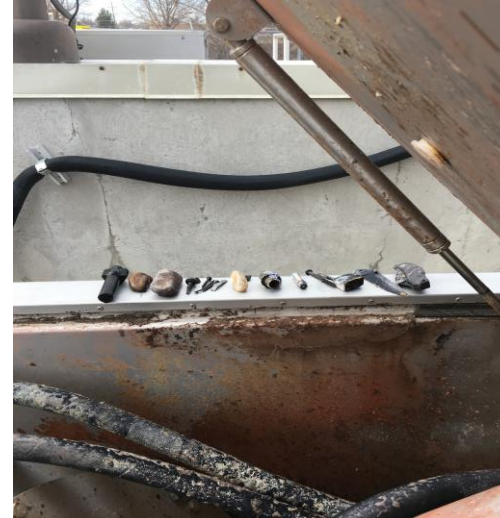
THE CLOG MONSTER STRIKES



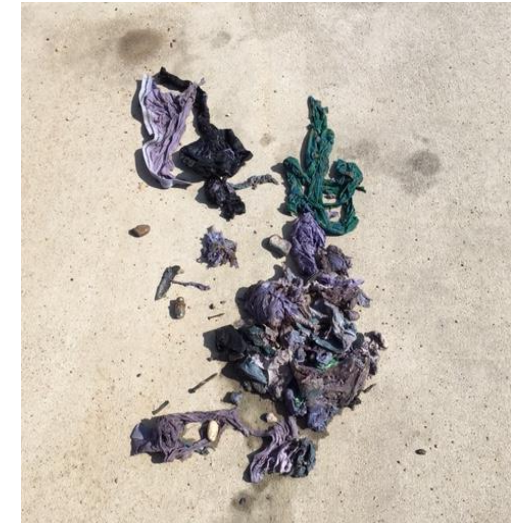
- Lift station pump
- Wipes



- Digester heat exchanger
- Wipes



- Hauled waste screen
- Rocks and Metal Pieces



- Hauled waste screenings
- Underwear and Wipes

LEGAL AUTHORITY

Pretreatment (Industrial/Commercial)

40 CFR 403.5 Specific Prohibitions:
Narrative Standard against blockages
and
Best Management Practices through
permits or sector control programs

Sanitary Sewers (Residential)

General Objective Statement:
To protect the health, welfare
and safety of the citizens of the
city from the improper disposal
of sanitary wastes, **garbage or
other objectionable wastes.**

LIFT STATION #9

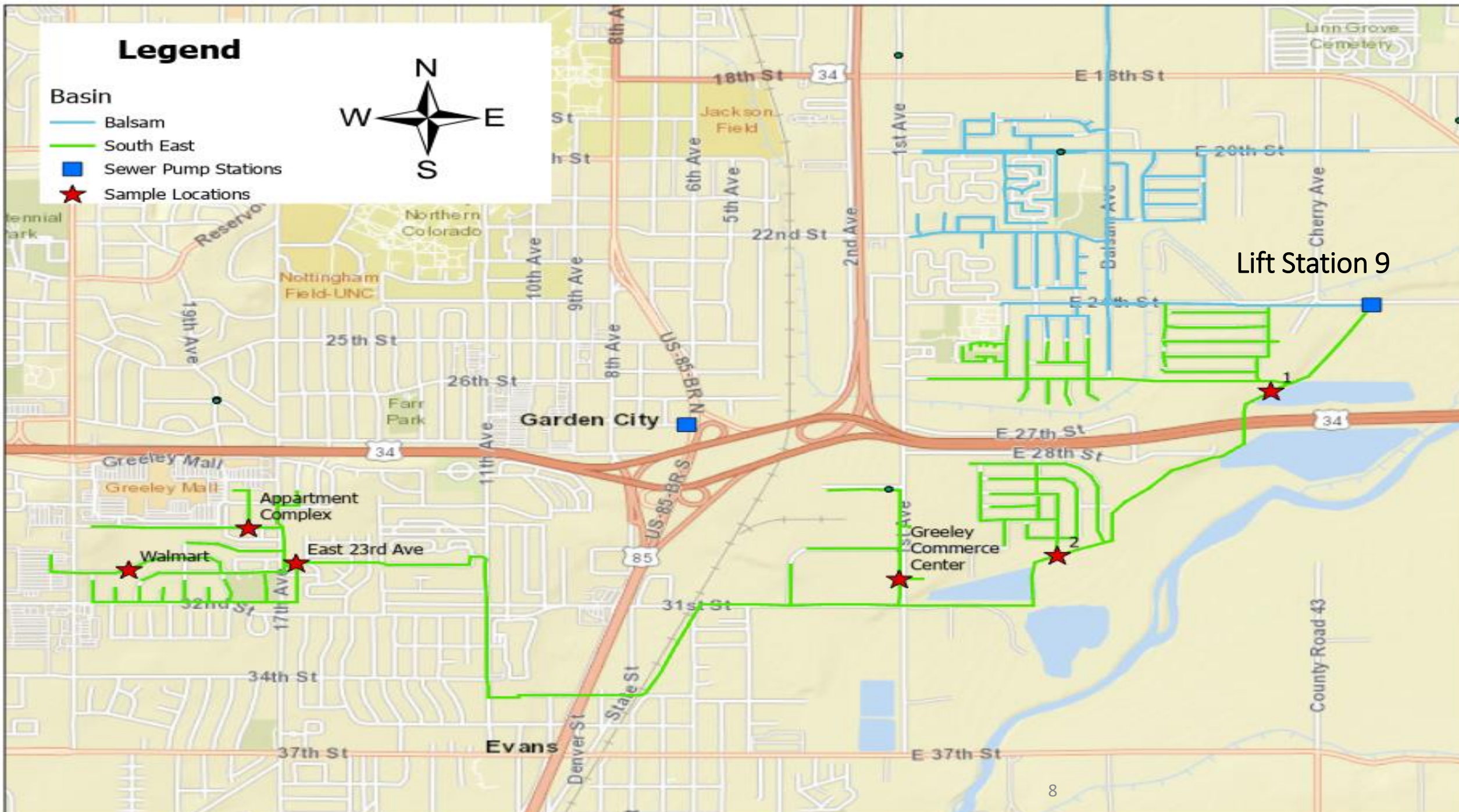
- Gorman Rupp
- Two 21 HP submersible pumps
- 0.68 MGD capacity,
- Operating at 70% capacity
- SCADA system monitoring
- Historical problem became acceptable nuisance not reported until fall 2021
- Weekly clogging



Legend

Basin

- Balsam
- South East
- Sewer Pump Stations
- Sample Locations



Lift Station 9

MEET THE RAG SNAGGER

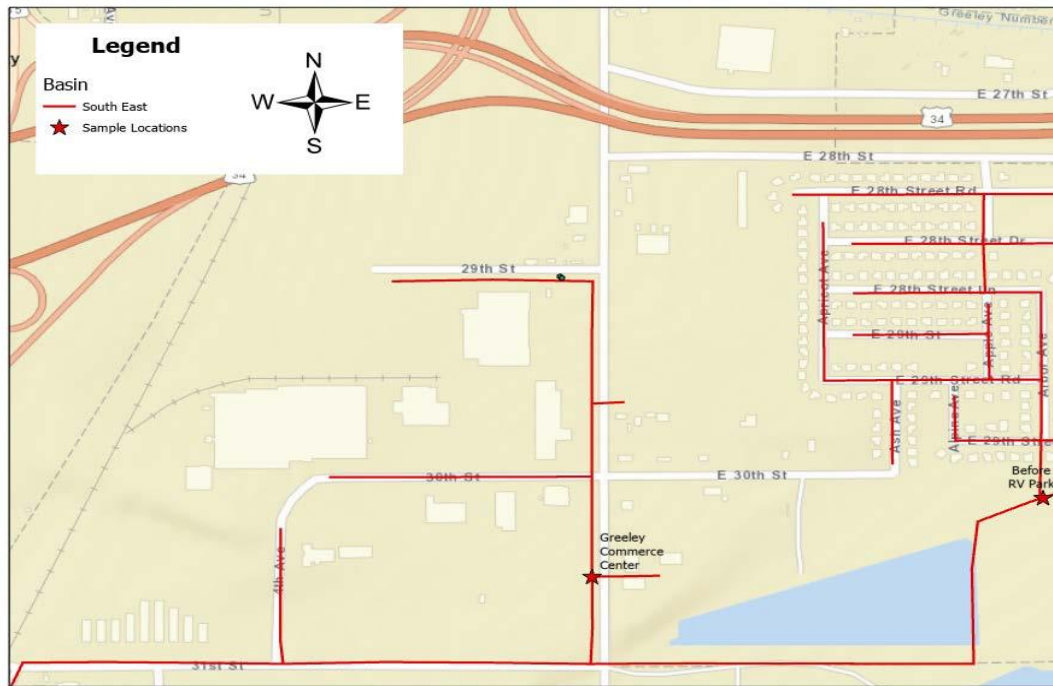


THE CULPRITS

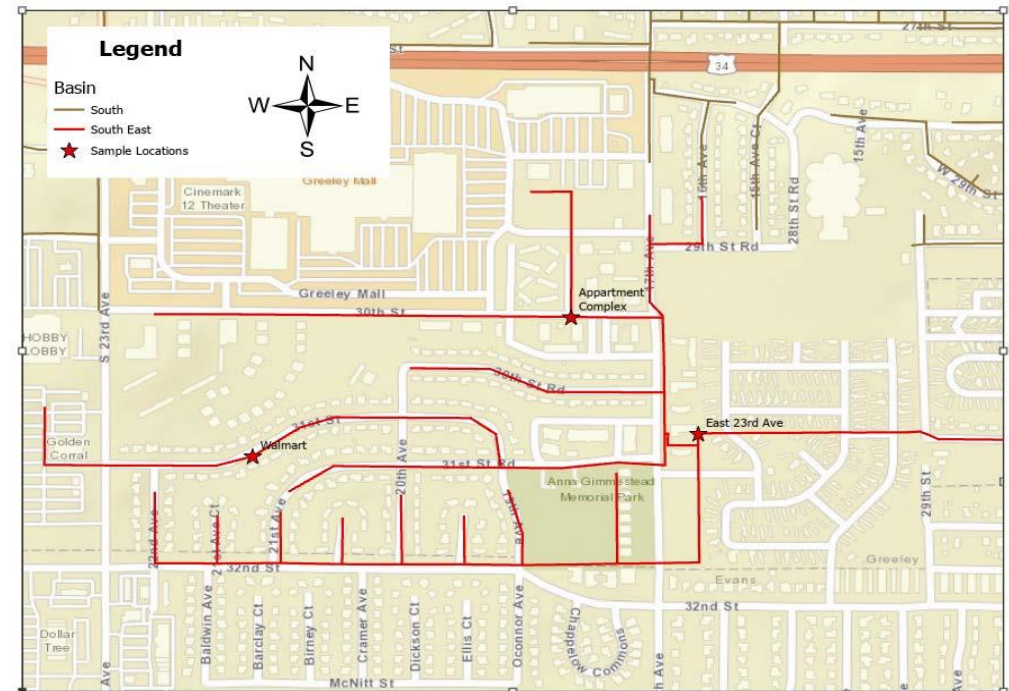


WHO DUN IT ?

Concentrated Industrial Sector



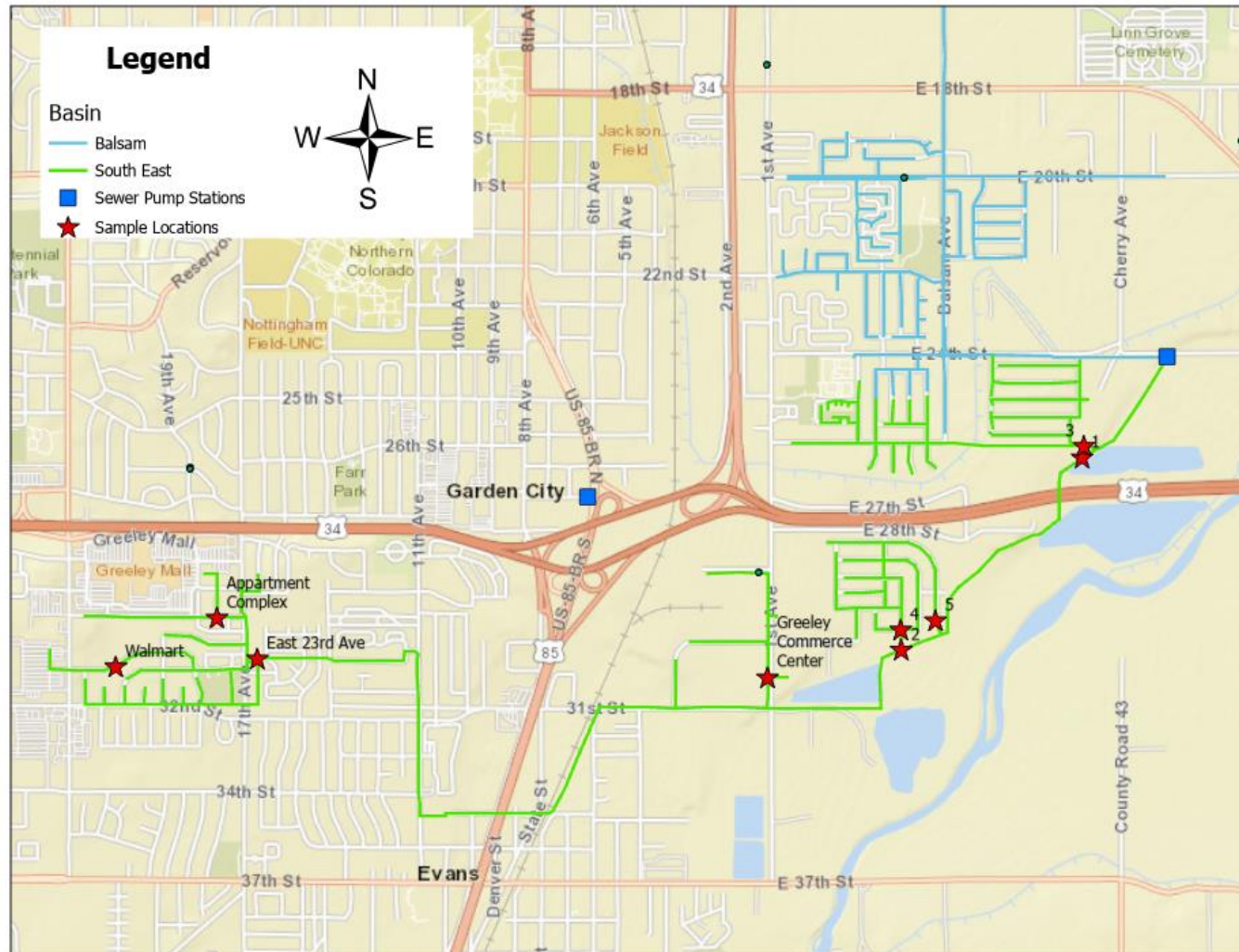
Concentrated Residential Apartments



THANKSGIVING SURPRISE



SNAGGER EXPANDED LOCATIONS



ACTIONS TAKEN

- Communications:
 - **A TOILET IS NOT A TRASHCAN**
 - Educational outreach to landlords and commercial sector.
 - Survey update
 - Inspections
 - Bill stuffers
 - Website, social media and radio
 - NACWA advocacy for rulemaking on labeling
- Maintenance:
 - Clean lift station wet well more often
 - Lift station modifications
- Persistence



MAILER



Stop the Clogmonster and Prevent Sewage Backups

Your toilet and sewer system are designed to dispose of human waste and toilet paper. But some people use the toilet as a trash can. However, trash and other objects combine with hair, grease and other debris in sewage to cause a Clogmonster. Even small items such as cotton swabs and cigarette filters feed this beast and cause havoc in the city's pipes, preventing sewage from flowing through the system and causing backups and spills. Any trash-type items that you dump in toilets and sinks at home, work, schools, shopping centers, movie theaters, or parks can contribute to sewage spills.

Do not flush trash down the toilet. Instead, discard these items in the trash can. Flushable wipes and baby wipes do not break down and should be placed in the trash can – even if the packaging says disposable.

Human waste and toilet paper are the only things that you should flush down the toilet.

Please keep these items out of the toilet:

- | | |
|--|--|
| Ø "Flushable" sanitary wipes | Ø Fats, oils and grease (FOG) |
| Ø Paper (paper towels, facial tissue, paper napkins, wrappers) | Ø Cigarette filters |
| Ø Cleaning wipes of any kind | Ø Automotive fluids |
| Ø Disposable diapers | Ø Paint, solvents, sealants and thinners |
| Ø Cotton balls and swabs | Ø Poisons and hazardous waste |
| Ø Rubber (gloves, condoms) | Ø Toys, cans, sticks, pebbles and sand |
| Ø Tampons and tampon applicators | Ø Unused medications |
| Ø Sanitary napkins | Ø Pet litter |
| Ø Bandages and bandage wrappings | |

Call (970) 350-9363 or (970) 350-9724 with questions.
For daytime emergencies call (970) 336-4247;
after hours, call (970) 396-3827.



WATER & SEWER



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WATER & SEWER

POSITIVE IMPACTS

- Less clogging at lift station
- Community interaction
- Staff mentoring and knowledge exchange
 - Collection system
 - Safety
 - User survey
 - Teamwork
 - Legal authority



CLOG MONSTER LAYS LOW

- Lift Station #9 pumps still occasionally clogs up
- Investigating dumpers
- Local health department septage disposal records
- Continuing outreach efforts





QUESTIONS?

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