

Welcome to NEW Water

Quarterly Update

June 3, 2016



Overview of Today's Update

- R2E2 – Nate Qualls
- Interceptor Master Plan – Lisa Sarau
- Budget – brief overview – Tom Sigmund
- Billing Program – Brian Vander Loop
- SIU Awards – Bill Oldenburg
- “Toilets are not Trashcans” – Tom Sigmund
- National / state news – Tom Sigmund



R2E2 Update



R2E2 Contract 34 Update

- Project to construct Anaerobic Digestion & Solids Facility
- Work completed
 - placement of solids facility base slab
 - placement of digester base slabs
 - biogas building excavation
 - HSW roadway & temporary unloading
 - septage screening building structure
- Work underway
 - placement of solids facility first floor
 - placement of digester skirt walls
 - aeration basin no. 2 modifications





R2E2 Contract 34 Update

- Net change order amount = credit of \$1.2M
- Completed approximately \$15M of the \$131M construction contract through April '16
- Expensed approximately \$2M of the \$10.5M engineering services through March '16



High Strength Waste Unloading



Septage Screening Building & Unloading



Solids Facility Concrete Placement



Digester Base Prep



Digester Base Concrete Placement



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Digester Wall Concrete Placement



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Biogas Building Excavation



Aeration Basin No. 2 Modifications





Contract 34 Proposed Timeline

- 2016
 - Complete solids building enclosure, start mechanical and electrical installation
 - Start construction of fluid bed incinerator and placement of sludge dryer
 - Digester cone and skirt wall / base slab / gallery construction
 - Biogas building construction
 - New septage receiving complete
- 2017
 - Digester wall construction, covers placed, mechanical & electrical installation
 - Continue solids facility process mechanical & electrical installation
 - Continue construction of fluid bed reactor and air pollution control equipment
 - Ash dewatering cells construction
 - Biogas storage & treatment mechanical installation
 - Solids facility testing/training/startup
- 2018
 - Digestion & biogas facilities testing/training/startup
 - Nutrient extraction system testing/training/startup
 - August 2018 – Final Completion



Interceptor System Master Plan

June 3, 2016
Customer Meeting

Model Development & Hydraulic Analysis

Interceptor System Master Plan

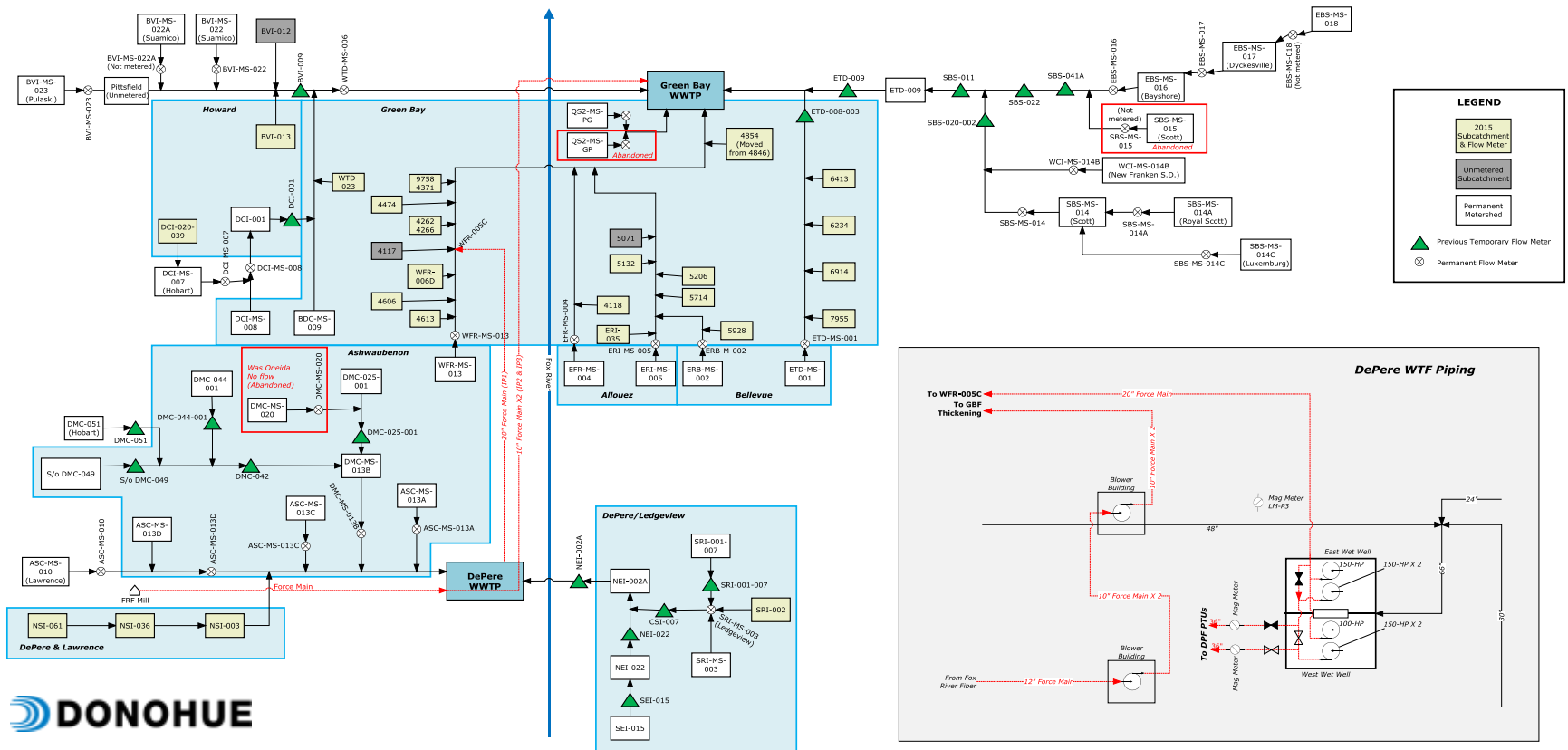
Model Development

Model Development

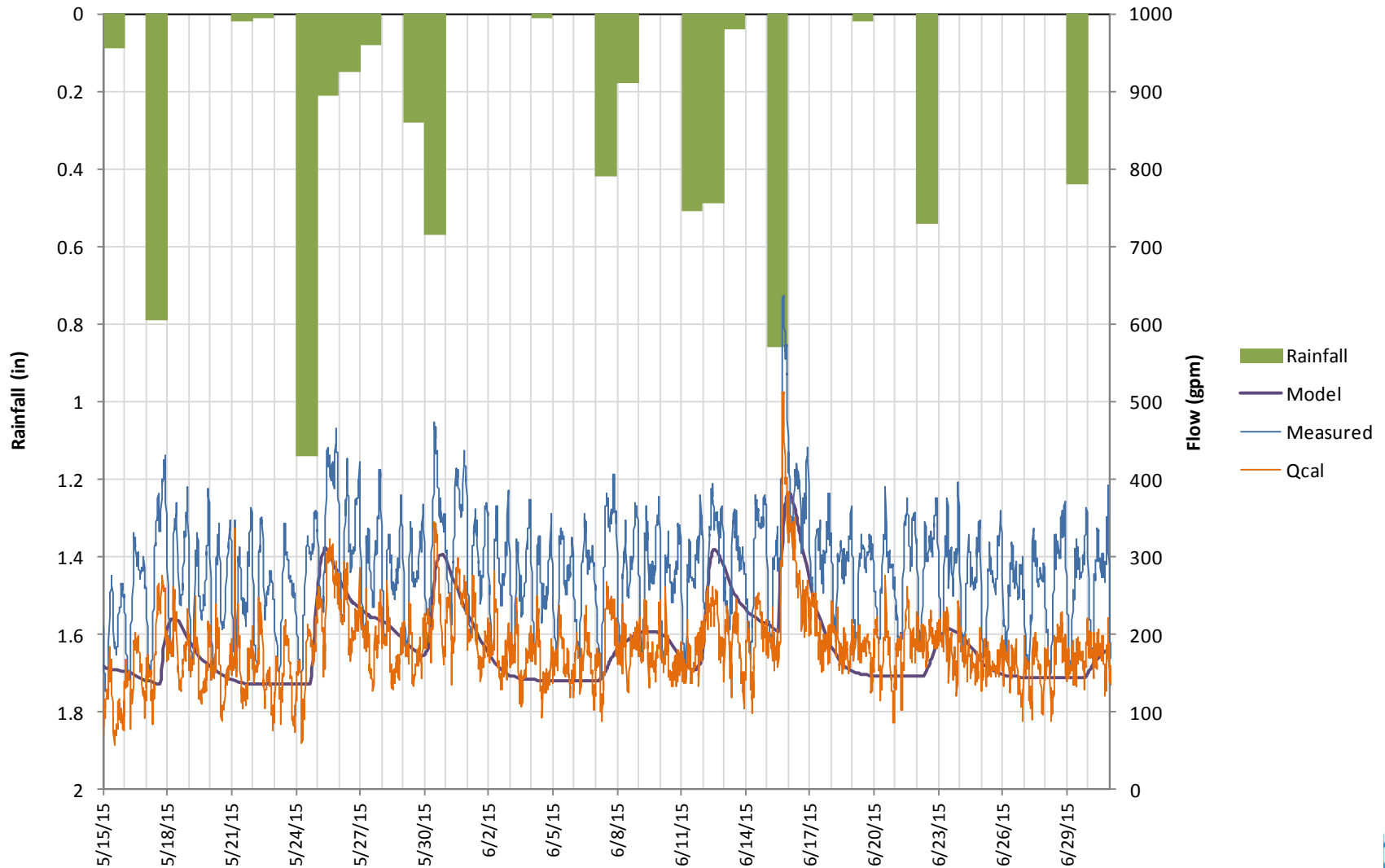
- System Schematic / Model Setup
- Model Calibration
- Long-Term Simulation

System Schematic

NEW Water System Schematic

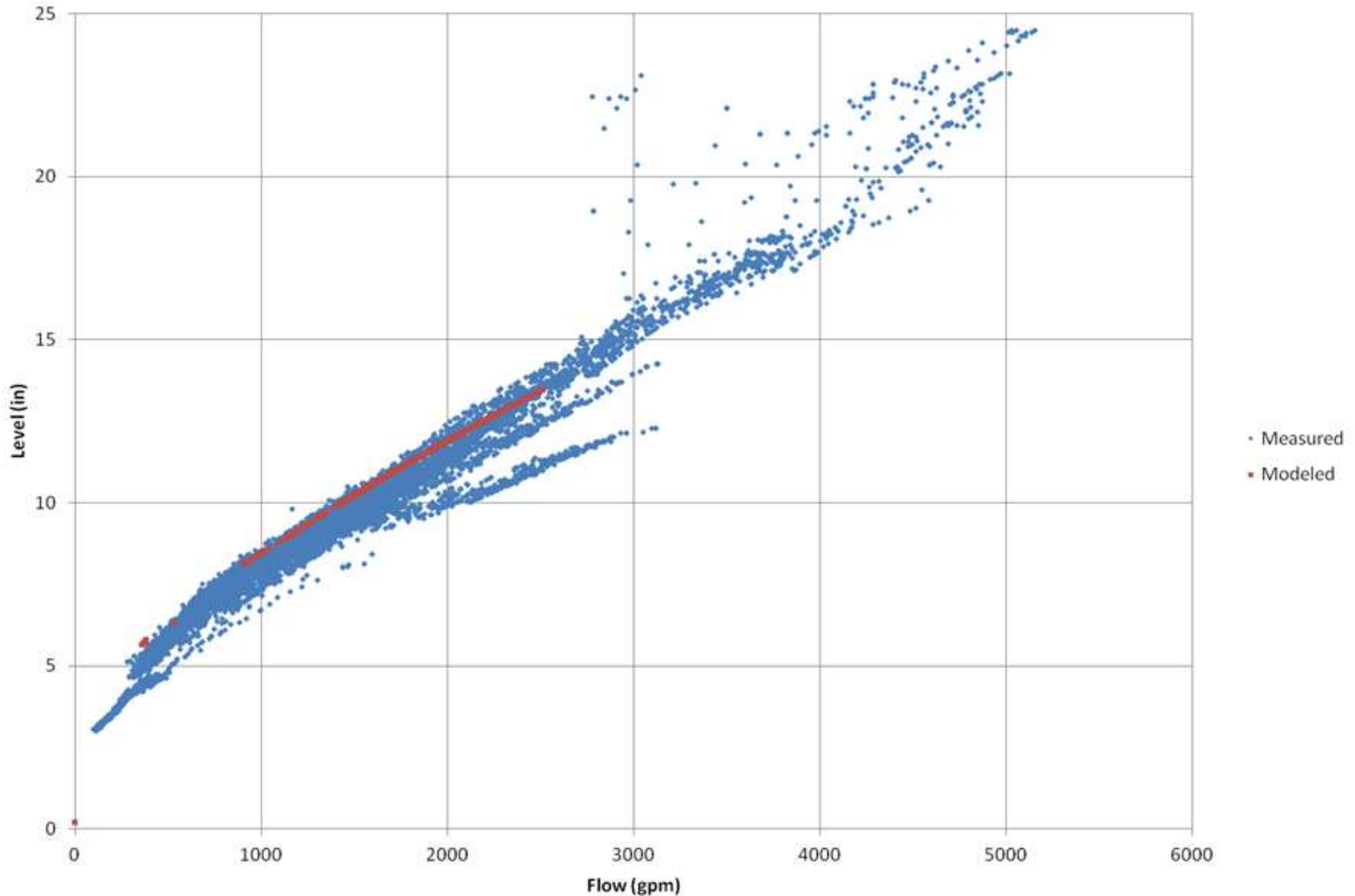


Hydrologic Calibration



Hydraulic Calibration

Manning's Scatter Plot for NEI-002A



Long-Term Simulation (LTS)

- 50 years of rainfall data
- Hourly data obtained from NCDC
- 1/1/64 – 12/31/13

■ Precipitation Hourly Station Details

STATION DETAILS	
Name	GREEN BAY AUSTIN STRAUBEL INTERNATIONAL AIRPORT, WI US
Network:ID	COOP:473269
Latitude/Longitude	44.4794°, -88.1366°
Elevation	209.4 m



10 Largest Events in LTS

Rank	Date	Rainfall Volume (in)	Peak Hourly Rainfall Intensity (in/hr)	Recurrence Interval (yrs)
1	06/22/90	4.90	0.56	50
2	8/28/75 - 8/29/75	4.60	0.80	30
3	09/03/64	2.99	2.84	5
4	10/31/95 - 11/1/95	1.83	0.54	1
5	6/25/69 - 6/27/69	3.95	1.18	15
6	08/20/10	2.98	1.74	5
7	5/27/73 - 5/28/73	3.28	0.44	7
8	4/10/078 - 4/12/08	1.43	0.22	<1
9	3/23/79 - 3/25/79	1.34	0.10	<1
10	7/4/93 - 7/5/93	2.50	0.63	3

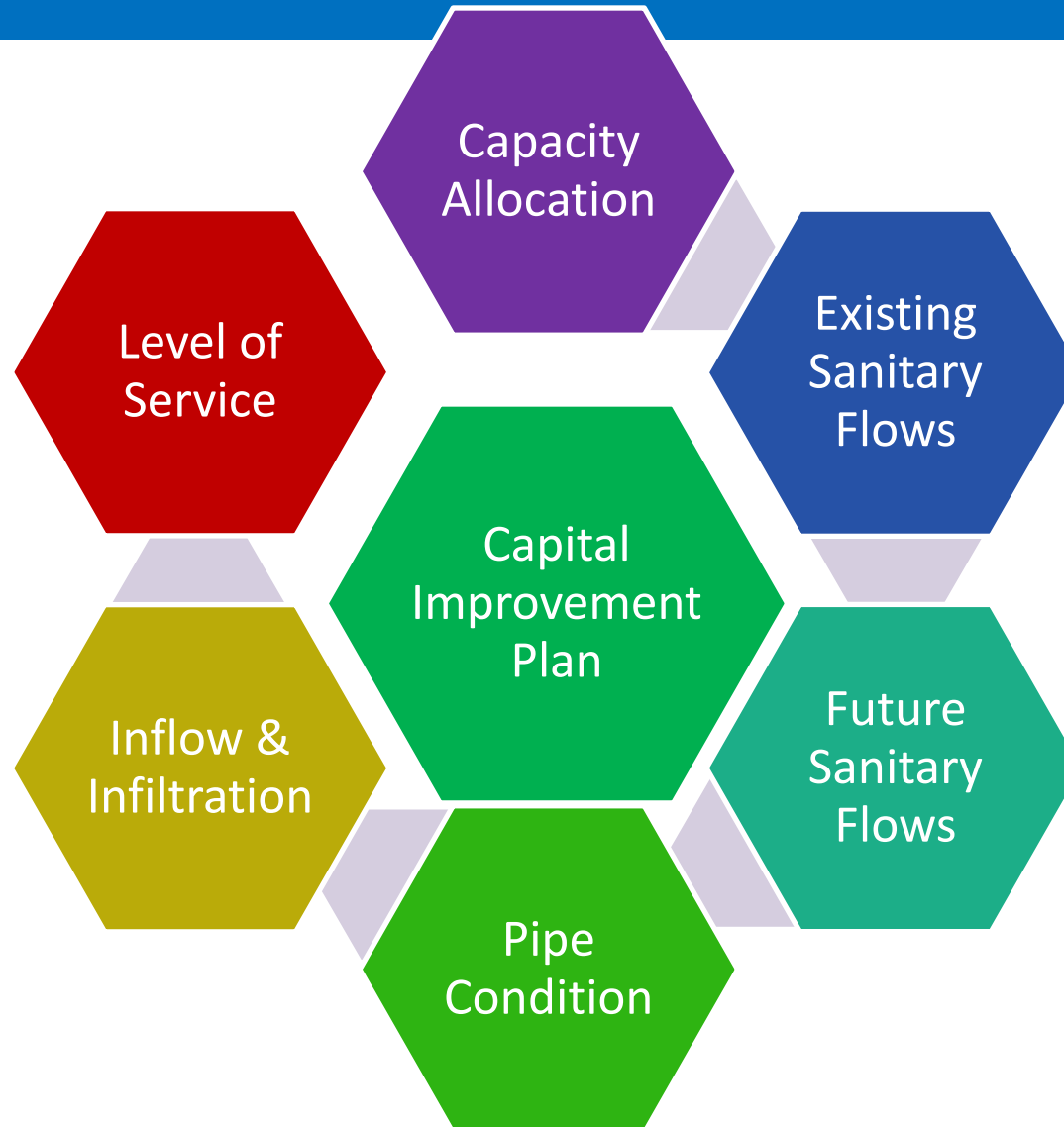
Model Results

- Reviewed the following wet weather responses:
 - 10-year
 - 20-year
- Reviewed the following basins:
 - De Pere Facility
 - Green Bay Facility

Next Steps

- Existing Conditions
 - Identify hydraulic deficiencies
 - Relate model results to capacity allocations
 - Identify exceedances of allocated capacities
 - Structural deficiencies / pipe condition
- Future Flow Analysis
- Identify System Improvement Alternatives
 - I&I Reduction
 - Increase Conveyance
 - Rehabilitation / replacement
- Prepare Capital Improvement Plan

Capital Improvement Planning





Billing Program Update

- Program was designed for the New Billing Methodology
 - Meter Stations and Unmetered/Unsampled service areas (UMS)
- Fixed Mass units for UMS areas
- Budgetary smoothing of monthly invoices
- December invoice reconciles the year
 - Zeroes out excess or surplus units carry forwards
- Streamlines parameter data importing



2017 Budget Overview Update

- Flows and loads have been projected
- Initial draft of expenses
- Updated allocation of costs
- Updating budget model




SIU Awards

- 54 Significant Industrial Users in our program
- Regularly monitored for compliance
- Launched Awards Program to celebrate their successes
- Awardees promoted in the Press Gazette, and our social media, website, newsletter
 - *This year, 31 awardees*
 - *Created social media banners*





Toilets are not Trashcans



Can the Wipes?

Don't Turkey Your Drain

Proper Medication Disposal

Love Your Pipes

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www.newwater.us

Love Your Pipes - The drains in your home aren't something you think about each day, yet dumping certain items down your drain can result in sewer backups and costly repairs for both homeowners and sewer authorities.

Don't Turkey Your Drain - Fats, oils, and grease (FOG) should not be poured down the kitchen sink, as they can cause clogged pipes, backups, and necessitate costly repairs. These materials can harden as they travel through pipes, and stick to the interior walls, creating a drag on water flow, and eventually, clogging altogether. FOG should be disposed of in the trashcan.


Can the Wipes? - "Flushable" wipes are becoming increasingly popular - and are causing backups in homes across the U.S. These wipes should be disposed of in the trashcan, not the toilet. They can clog up pipes, and get tangled in pumps and sewer equipment, causing sewerage backups, and costly repairs for homeowners and wastewater utilities alike. "Flushable" wipes, along with baby wipes, dental floss, mop refills, paper towels, towlettes, and cleaning wipes also should be put into the trashcan. Only toilet paper and human waste (the "3Ps") should be flushed. Save yourself and your wastewater utility from a pain in the drain - flush only the 3Ps!

Unused Medication - Unwanted and unused medication can present opportunities for environmental contamination, drug abuse and accidental poisonings. Pharmaceuticals should not be flushed down the toilet or poured down the sink - wastewater treatment facilities are not equipped to treat these materials. Collection events and drop boxes are necessary to ensure their proper disposal. For pharmaceutical drop-off information in Brown County, please visit: [Brown County Sheriff's Prescription Drug Collection Program](#).

Household Hazardous Waste - Hazardous waste items like paints, cleaners, and pesticides should not go down the drain. These items should be properly disposed of at the Brown County Household Hazardous Waste Facility. For more information please visit their website: [Brown County Household Hazardous Waste Facility](#).

National Association of Clean Water Agencies (NACWA) has started the "Toilets Are Not Trashcans" campaign to help protect pipes, pumps, plants, and personnel of wastewater utilities across the nation. The goal of this campaign is to increase awareness about proper disposal practices and reduce the amount of materials that are inappropriate flushed or dumped into the sewer system.

Products such as wet-wipe paper towels, feminine hygiene products should not be flushed. Other consumer products contain ingredients, such as plastic microbeads and parabens, may harm water quality and the environment. FOG (fats, oils, and grease) and unused pharmaceuticals should also be kept out of the sewer system. Source: NACWA



For more information, please visit: [Toilets Are Not Trashcans Campaign](#)
[Toilets Are Not Trashcans](#) - Help Click Any Problem - National Wastewater Utility Association





News



Thank you for coming!