



CITY OF
GRAND
RAPIDS

PUBLIC EDUCATION PROGRAMS

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Environmental Services
City of Grand Rapids



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0025.3

Environmental Tips

Started in 2010

80,000 residential households

Distributed with water/sewer bill

Environmental Protection TIP #1

Proper grease disposal

Water and oil do NOT mix!

We need your help. If cooking oil, kitchen grease or fat from poultry and meat is washed down the drain, it can collect in pipes and cause sewer backups, basement flooding, or sewage spills to the environment. Costly clean up work can raise the sewer use rate in your bill.



What can YOU do to help?

1. Cool down cooking oil, grease and fat. Carefully pour into a sturdy, sealable container.
2. To help solidify oils, add absorbent material such as cat litter or coffee grounds.
3. When full, put the sealed container in the garbage with the regular household waste.
4. Use a paper towel to wipe out greasy pots and pans. Put paper towel in with the garbage.
5. Scrape grease and food scraps from plates and put in with the garbage.

For more information, visit our website at www.grcity.us or call 458-9625. With your help, we can keep our City sanitary sewers running smoothly.



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Grease problems in collection systems:

Restaurants

Households

Retirement communities

Nursing homes

Assisted care facilities

High density populations

Educate

Video

Recoup expenses

Environmental Protection TIP #2

Proper medicine disposal

Don't rush to flush!

Pharmaceuticals and personal care products (PPCPs) include prescription drugs, over the counter medications and cosmetics. They can pass through wastewater treatment plants in small amounts and find their way into rivers and lakes. Controlling what goes down the drain helps to protect our environment and quality of life.



What can YOU do to help?

1. Don't flush PPCPs down the toilet.
2. For expired or unused medicine disposal:
 - (a) Find a local pharmacy that participates in the West Michigan "Take Back Meds" program.
 - (b) For both solids (pills) and liquids, scratch out or black out the patient's name and address before taking it to a participating pharmacy. The pharmacy must be able to see the medication type so they can properly sort it.
3. Controlled Substances and medications must be taken to a participating local law enforcement station and deposited into the secured drop off box located in the lobby area.

For additional information visit our website at www.groty.us or call 436-3625. With your cooperation we can keep your home and community safe.



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Water Resource Recovery Facilities are not designed to remove compounds of medicines

Flush down toilet, through WRRF, discharge to river, flows to lake Michigan.

Landfill leachate

Environmental Protection TIP #2

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Waste Water Treatment Plants are not designed to remove compounds of medicines

Flush down toilet, through WWTP, discharge to river, flows to lake Michigan.

NatGeo:

Bank robbery avg. \$7,500

OxyContin 80mg 1000 pills
\$36,000



Partnering with communities
in West Michigan to collect and
properly dispose of unwanted,
unused and expired meds.

At no cost

Independent Pharmacies

Assisted living



Since 2010 over 47,000 lbs. of meds collected and properly disposed of.



“Smiling Bob”



Plugged lift station pumps

Opportunity !

Environmental Protection TIP #3

Disposable not Flushable

No Wipes in the Pipes!

Convenience wipes such as baby, hygienic, cleaning and disinfectant, as well as toilet bowl scrubbers and even paper towels might be labeled as “disposable or flushable” but these items should not go down the drain. Products like these do not break down in the sewer system, causing plugs in sewer pipes and pumps, resulting in sewage backups, costly cleanups and environmental consequences that can result in rate increases.



What can YOU do to help?

1. Do not flush objects down the toilet such as wipes, diapers, feminine hygiene products, or dental floss.
2. Dispose of these items in your household or business trash receptacle.
3. Inform those who clean your house or business of proper disposal methods for convenience products.
4. Select cleaning supplies that can be washed and reused.

For additional information visit our website at www.gndy.us or call 456-3625. With your help, we can keep our sanitary sewers running smoothly.



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Convenience Generation

“get that clean feeling”

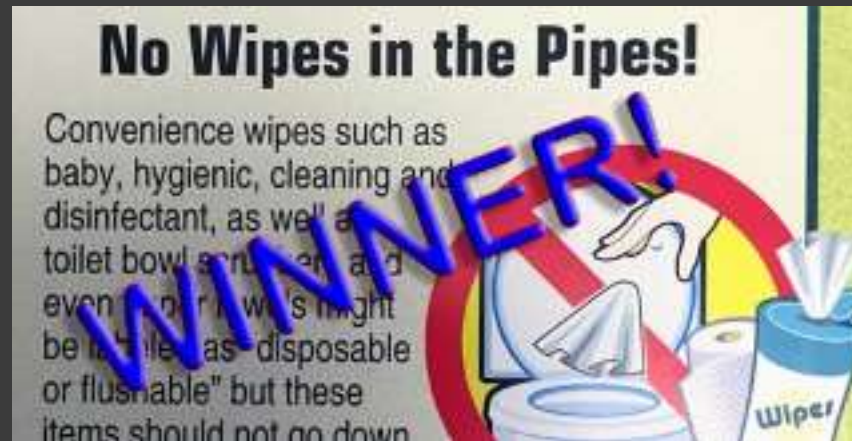
Current action to remove
“flushable” labeling

Wipes in the pipes snarling sewers

Kirsti Marohn, USA TODAY 7:57 a.m. EDT July 17, 2013



• In Grand Rapids, Mich., wipes get hung up on pumps and in pipes, says Mike Lunn, environmental services manager. City officials have focused on public education and sent a mailing to residents that urged "no wipes in the pipes," but the problems continue, Lunn says.



The Grand Rapids Environmental Services Department's innovative embrace of social media to promote awareness of its "No Wipes in the Pipes" campaign has captured a 2015 Award of Excellence by the Central Michigan Chapter of the Public Relations Society of America (PRSA).

Environmental Protection TIP #4

Rain water
is not wastewater

Drain the Rain

It is illegal to pump ground water or rain water into the sanitary sewer system. Ground water from your footing drain (or other sources) must go to the storm water sewer system or be returned back to the environment.



During wet weather, illegal connections can allow ground water to overload the collection system. This can cause sewage to backup in homes and increases the cost of treating wastewater.

What can YOU do to help?

1. Redirect your sump pump discharge to the storm water sewer system or to an outside area for natural drainage.
2. Slope your landscape downhill, away from the foundation of your house and place extensions on your downspouts to direct water away from your house, as well as your neighbor's.
3. Plant a rain garden to utilize the rain water as well as to beautify your yard.
4. Utilize a rain barrel to capture and reuse the rain water.

The City is implementing a program to assist residents to redirect footing drain discharges. For information on the City assisted Footing Drain Disconnection (FDD) program and other helpful information, visit our website at www.grcity.us or call us at 456-3625.



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OVERVIEW - The homes that have had groundwater redirected to the storm water system in the East Leonard Heights area equates to 18,170,092 gallons being kept out of the sanitary sewers annually. The waters redirected from the Maryland Estates Area into the storm water system is presently at 6,756,388 gallons.

Eliminate sewer backups
Hydraulic overflows

Environmental Protection TIP #5

Report it
don't ignore it

GRCity311

Environmental issues or questionable practices need to be reported. Download your free **GRCity311** smart phone app from our web site, www.grcity.us. You can instantly report to us any suspicious or illegal acts against the environment.

We will investigate all reported incidents. You can also call us at 456-3246 to report any environmental issues or questionable environmental practices. If you see anyone dumping anything into a storm drain, roadside curb or on the ground...



Report it – Don't ignore it!

What can YOU do to help?

1. Clean debris from storm drains, in all seasons.
2. Never dump grass clippings, vehicle fluids, animal wastes or anything down a storm drain.
3. No one should ever discharge into a manhole. If you see this activity notify us immediately.
4. Dispose of unwanted paints, solvents and cleaners at your county household hazardous waste collection center.
5. Pollution can be any type of waste or chemicals that are dangerous to people and the environment.

For additional information visit our web site at www.grcity.us or call 456-3625. With your help we can put a stop to pollution.



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Downloadable app on I phone
or android

Public involvement

Environmental Protection TIP #6

Did YOU know...

We never close!

The Grand Rapids Wastewater Treatment Plant is open 24 hours a day, 365 days a year. Employees work around the clock to clean an average of 49 million gallons a day, respond to environmental emergencies and protect our waters. The underground collection system includes over 1000 MILES of maintained sewer pipe servicing over 262,000 people. The treatment plant is ALIVE! We monitor, operate and sustain a living biological system that requires essentials, like other living things, such as food, air and a "livable" environment. Our nationally certified Biosolids Environmental Management System removes 200 wet tons of biosolids that is reclaimed daily and responsibly utilized in acceptable uses.



What can YOU do to help?

1. Do not flush foreign objects down the toilet.
2. Practice proper disposal methods for household hazardous waste.
3. Get involved in resource conservation efforts.
4. Become environmentally responsible.
5. Reduce, reuse and recycle whenever possible.

For additional information visit our website at www.grcity.us or call 496-3625.
With your commitment, **WE** can make a difference.



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Engineering Wonders
Caledonia to Ada to Marne

Tours available
“Super bowl surges”?

Environmental Protection TIP #7

Maintain the Drain

Without a doubt, you can help out

A stormwater catch basin is usually located near the curb at the low point of the street. Catch basins are designed to capture pollutants before they enter the storm water system. When properly cleaned they can be quite effective at performing that task. However, once they are clogged with dirt and debris, it loses most of its ability to capture contaminants and fails to divert the stormwater properly.



The largest source of water pollution today is contaminated storm runoff from paved areas. In Grand Rapids it takes rain ONLY 15 to 30 minutes from your drive way to reach the Grand River then on to Lake Michigan.

What can YOU do to help?

Adopt a Catch Basin, and earn grcity points at grcity.us/basinbuddy

1. Do not rake or blow leaves or grass clippings from your yard into the street.
2. Dispose of all waste (including pet waste) in trash receptacles instead of sweeping it into the gutters or catch basins.
3. Place motor oil, paint and antifreeze in separate sturdy containers and recycle them at a local disposal facility.

View the video and start earning additional grcity points. Get involved it is YOUR neighborhood. For additional information visit our web site www.grcity.us or call 456-3246.

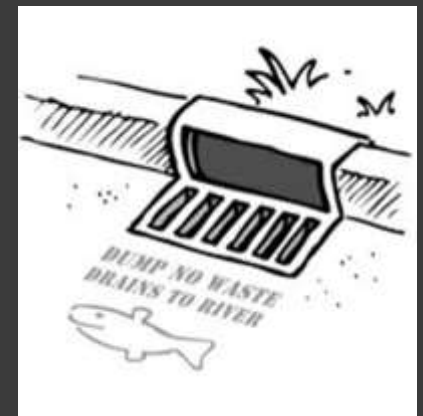
Green and Bear It



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17,800 publically owned catch basins, 5 year cleaning cycle.
Enrollment in Grcitypoints.



Environmental Protection TIP # 8

Water Conservation

Every drop counts!

Resource conservation starts at home. Water is our most precious resource. A dripping faucet can waste 100 gallons a day. By fixing leaking toilets, replacing leaky gaskets and installing low flow shower heads, you can make a difference. You will save water and not use energy to heat it. Those savings trickle down the pipe to those who pump and clean the water, conserving more energy and labor costs. When you save water, you save money.



What can YOU do to help?

1. Run only full loads in the washing machine and dishwasher.
2. Stop dripping faucets by installing new washers.
3. Add a few drops of food coloring to your toilet's tank. If the toilet needs repair, color will appear in the bowl within 15 mins. (Flush when test is done since food coloring may stain tank).
4. When replacing appliances, choose water and energy efficient models.

For additional information visit our website at www.gco.us or call 406-3625.
With your commitment, WE can make a difference.



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Toilet tricks works

Timing is everything



New opportunity

Flushing hand towels in toilet

Who gives a **SHEET?**



*WE DO AND
SO SHOULD YOU!*

Please do not flush paper hand towels down the toilet. Paper towels are made to be disposed of in the trash. When flushed they can cause obstructions and costly **SHEETY** cleanups.

REMEMBER

ONLY THE 3 P's GO INTO THE TOILET!

Toilet **P**aper — **P**ee — **P**oop!

FILTER-FILTER-FILTER

Entertainment venues

Bars

Restaurants

Movie theaters

Fitness centers

Sporting venues

Whitecaps ball park

Berlin race track

Arenas

Golf Courses



Who gives a
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paper hand towels
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obstructions and
costly cleanups.

REMEMBER
ONLY THE 3 P's GO INTO THE TOILET!
Toilet Paper — Pee — Poop!

Environmental
Services
CITY OF SEAWALK



Final Product



You can be #1



OR

You can be #2