



Oakland County Water Resources
Commissioner Jim Nash
Presents



WATER INFRASTRUCTURE 101

"WHAT YOU NEED TO KNOW
BELOW & BEYOND"
LIBRARY DISCUSSION SERIES



Discussion Topics Include:

- 💧 Aging Infrastructure
- 💧 Oakland County Water Resources Commissioner Projects
- 💧 Home Infrastructure "Tips to Protect Your Systems"
- 💧 Water Quality
- 💧 Sewer & Stormwater
- 💧 Lakes & Flooding
- 💧 Lead & Copper
- 💧 Employment Opportunities
- 💧 Water Residential Assistance Program (WRAP)
- 💧 Public Concerns, Q & A and Feedback

Oakland County Water Resources Office
One Public Works Drive, Building 95 West
Waterford, MI 48328-1907

Phone: 248-858-1404

Welcome



The Drain Commissioner History and Oakland County Work



First Organized in 1896

Drain Code of 1956

**Oakland County Changed to Water
Resources Commissioner in 2009.**

What We Do

Regional Collaboration

Aging Infrastructure >>>

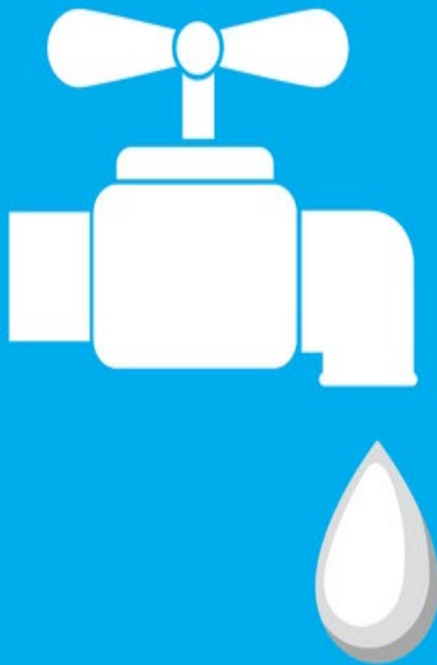


The national water infrastructure investment gap is \$82 billion per year

#TimeToBuild

Infrastructure Week





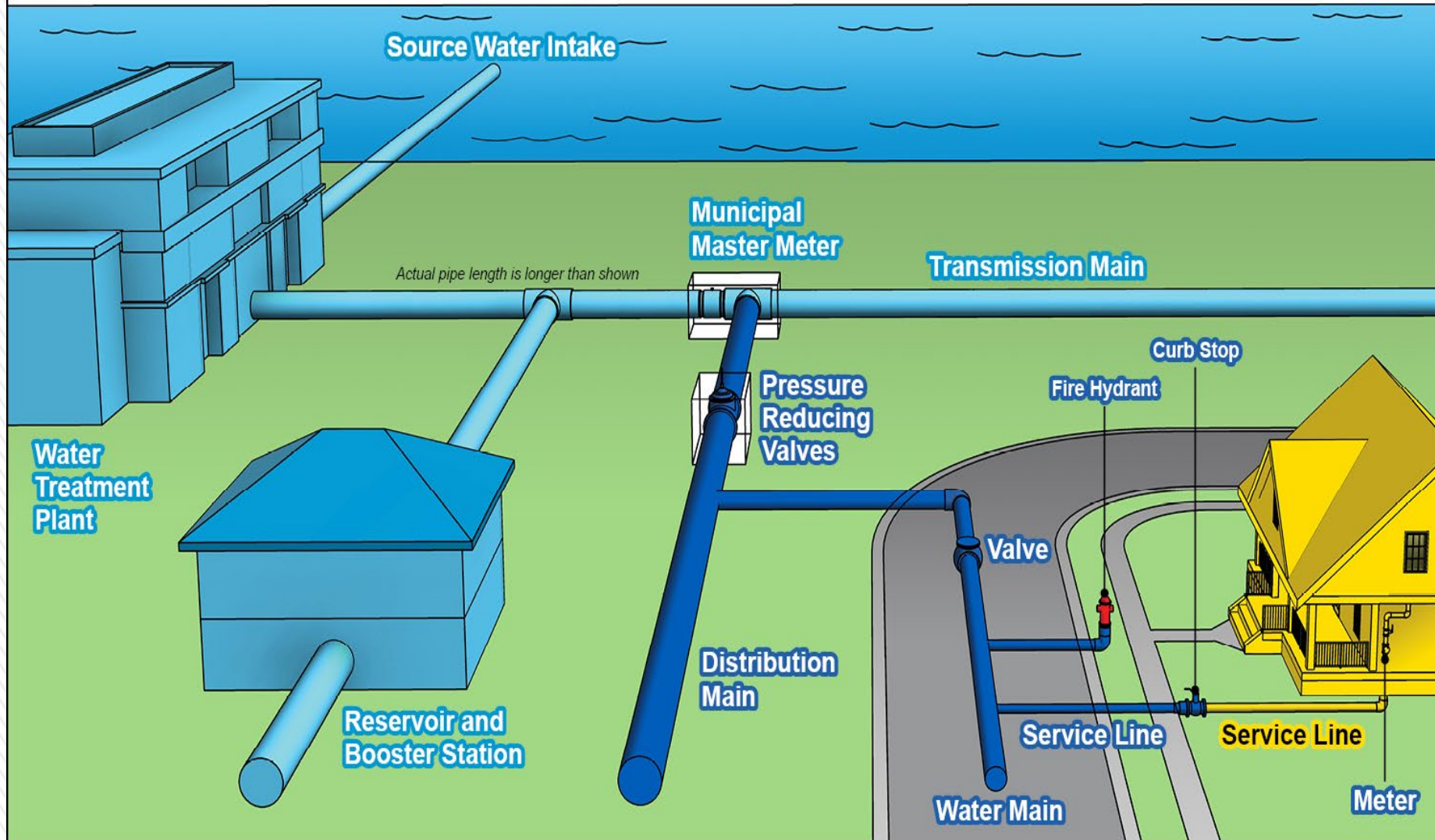
#TimeToBuild

Most Americans' water systems have been in operation for 75-100 years - well past their intended lifespans.

Infrastructure Week



Our water system is a shared responsibility.



Great Lakes Water Authority Municipality Property Owner

Older Cities Tend to Have the Greatest Need for Repair Because They Have the Oldest infrastructure.

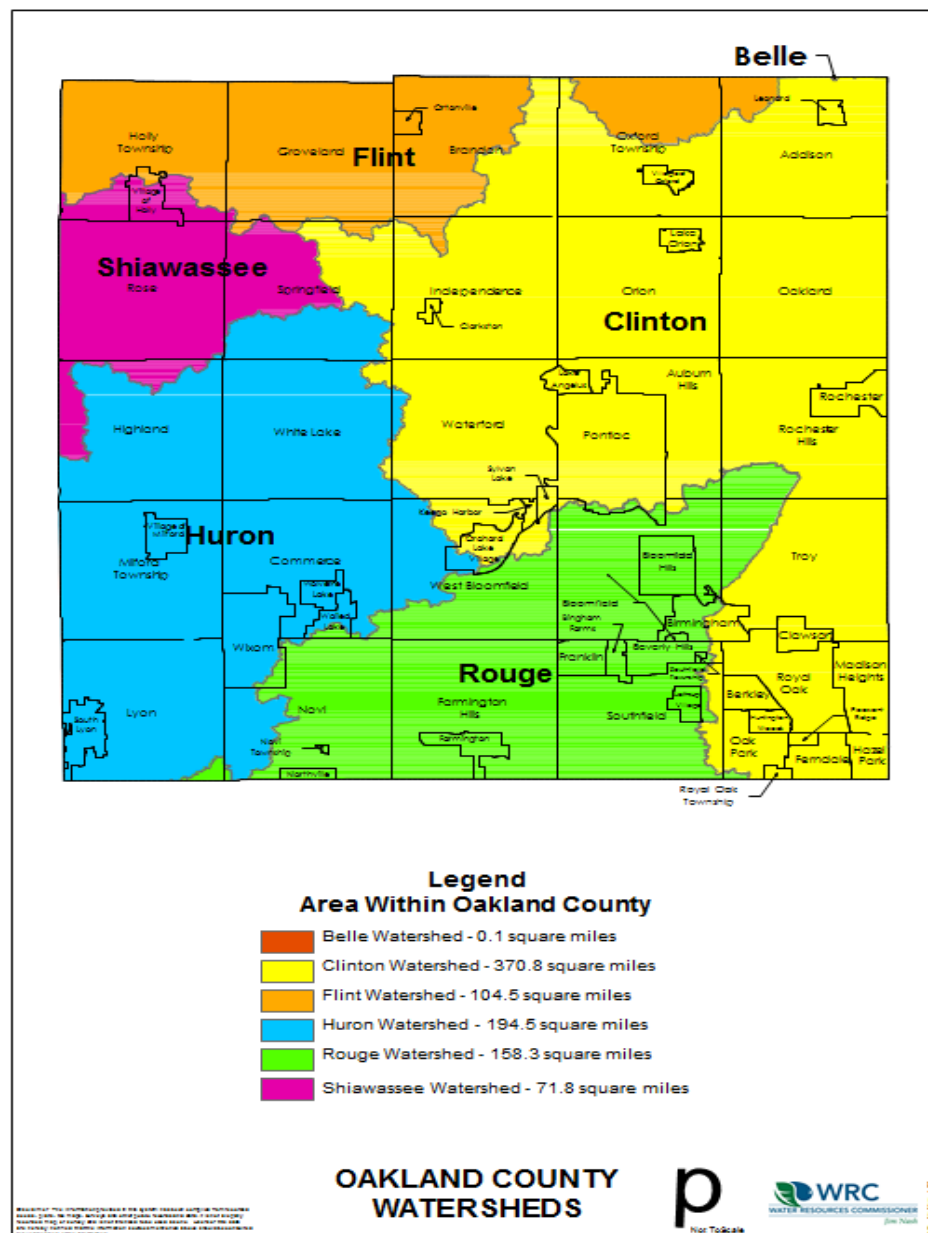


Emergency Repairs Can Cost 3 to 5 Times as Much as Planned Improvements





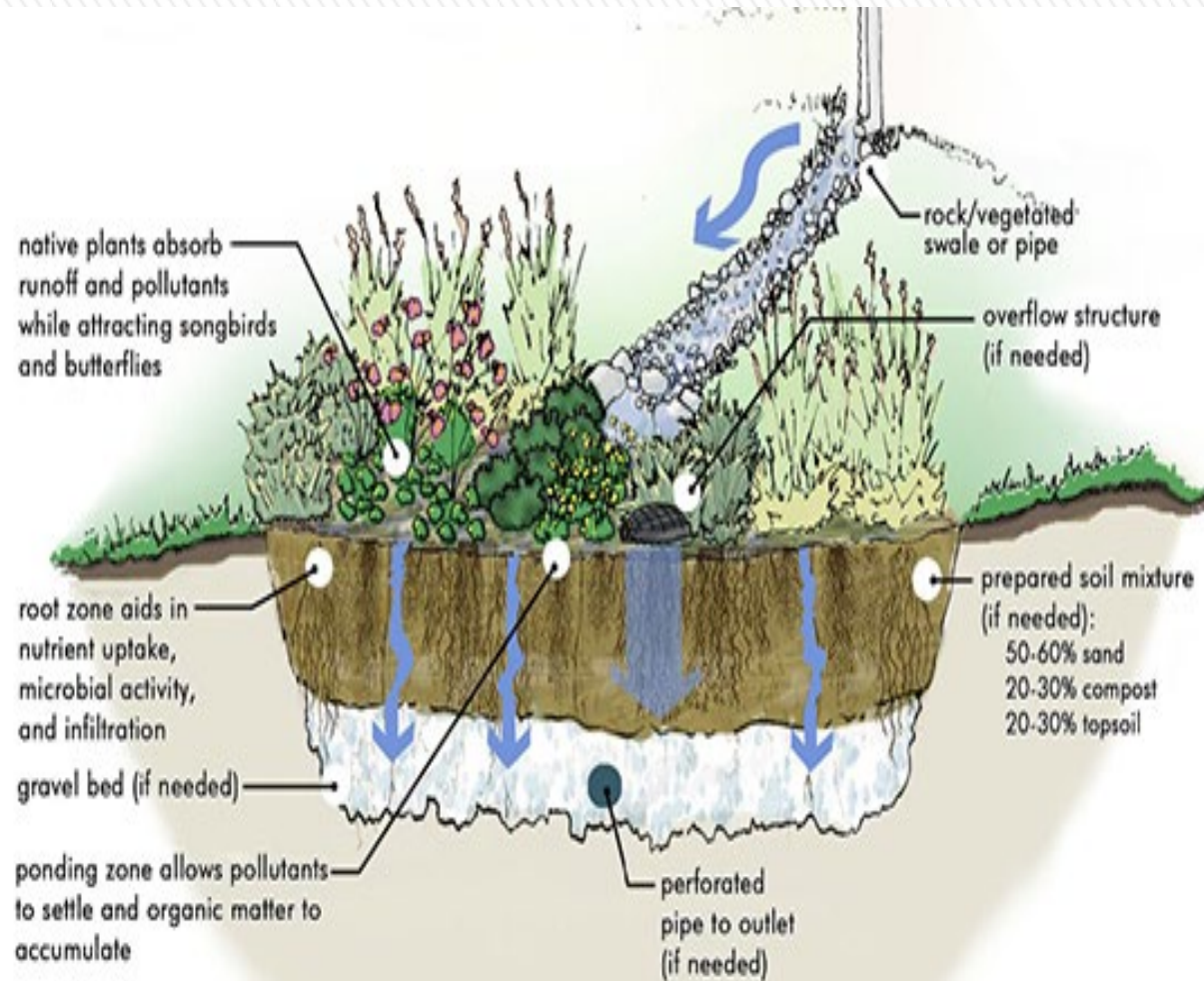
Stormwater



George W. Kuhn Detention Treatment Basin



Rain Gardens



Simple Home Green Infrastructure



Water Quality





2016 Water Quality Report

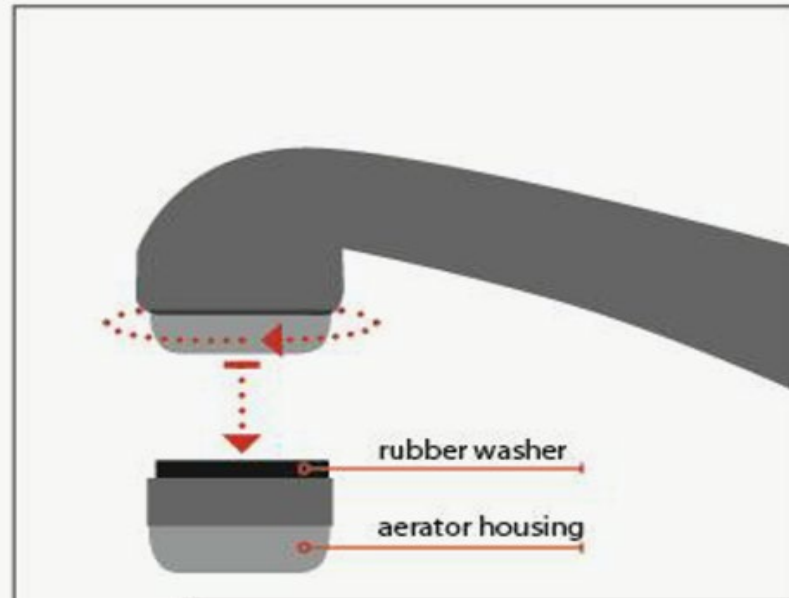
Keeping Water
Customers Informed



Home Infrastructure



CLEAN YOUR AREATOR



Helpful Tips on Reducing Your Potential Exposure to Lead in Your Drinking Water

Run Your Tap Until it's Cold

Run your tap for at least 30 seconds, until the water is noticeably colder, before using it for drinking, cooking or making baby formula any time the water in a faucet has stood for several hours.

Use Cold Tap Water for Drinking, Cooking and Making Baby Formula

Never use hot tap water for drinking, cooking or making baby formula and baby cereal. Lead can dissolve more easily in hot tap water.

Do Not Boil Water to Remove Lead

Boiling water will not remove lead and can actually concentrate it. Running the tap is the best way to flush lead from water in pipes.

Clean Your Faucet Screens

Sometimes lead and sediment can build up on the individual screens at your faucets. To clean them, periodically take off the faucet strainers from all taps and run the water for 3 to 5 minutes.



Test for Lead

If you still think that your household plumbing could contain lead after following these steps, call the Oakland County Health Division at 800-848-5533 to request a lead test kit. There is a \$24 kit fee.

To email go to: NOC@OakGov.com

Who do I contact for more information?

The local water authority is always your first source for testing and identifying lead contamination in your tap water. For more detailed information on Lead contamination, please call the Oakland County Health Division Nurse on Call at 1-800-848-5533 or visit:

- Centers for Disease Control and Prevention <http://www.cdc.gov>
- United States Environmental Protection Agency <http://www.epa.gov>
- Michigan Department of Environmental Quality <http://www.michigan.gov/deq/>
- NSF International <http://www.nsf.org/consumer-resources/what-is-nsf-certification/>



PFAS

What you should know about the man-made perfluoroalkyl and polyfluoroalkyl substances (PFAS), such as perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFAS, PFOA and PFOS are part of a group of chemicals that have been in manufacturing, firefighting, household products and many consumer products for the last century. For more information, view links below:

https://www.atsdr.cdc.gov/pfc/docs/pfas_fact_sheet.pdf

https://www.michigan.gov/documents/pfasresponse/PFAS_in_Drinking_Water_624844_7.pdf

<https://www.michigan.gov/pfasresponse/0,9038,7-365-86509---,00.html>

<https://www.michigan.gov/pfasresponse/>

<https://www.ngwa.org/docs/default-source/default-document-library/pfas/pfas-info.pdf>

<https://www.oakgov.com/health/information/Pages/PFAS.aspx>

For additional resource information, see below:

MDHHS can help with questions related to public health recommendations.

Call MDHHS at

1-800-648-6942

MDEQ can help with questions about water sampling.

Call the MDEQ Environmental Assistance Center at

1-800-662-9278



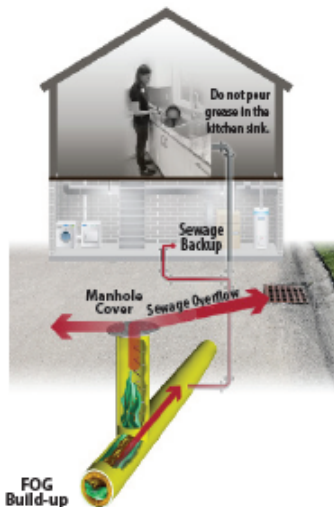
How You Can Protect Our Infrastructure



PREVENT THE CLOG, DON'T FOG!



Protect our environment and keep drains clear of fats, oils and grease.



WRC
WATER RESOURCES COMMISSIONER

Jim Nash

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www.oakgov.com/water

WHAT IS FOG?

FOG stands for fats, oils, and grease produced from food preparation, packaged foods and food scraps.

FOG should never be put down any sink drain. FOG should only be disposed into the trash.

Where Does It Come From?

Homes, restaurants, schools, churches, food processing plants, hospitals, hotels, shopping malls, and many other establishments produce FOG; for example, from fries and hamburger grease.



- Meat Fats • Lard • Cooking Oils
- Butter • Margarine • Shortening
- Sauces • Dressings
- Cooking Scraps • Dairy Products



Improper FOG Disposal Causes:

- An increase in sewer rates that customers pay.
- Costly sewer backups and overflows created, can lead to public health and environmental hazards.
- FOG build-up in sewer pipes is costly to clean. It contributed to more than \$300,000 in sewer cleanings to remove blockage by WRC in 2017.

WHAT CAN I DO?


- Never pour oil and grease down the sink, toilet or any drains.
- Put used oil and grease in covered containers and cans for proper disposal.
- Wipe down greasy pots and pans with a dry paper towel and dispose the paper towel into the trash.
- Scrape food scraps and discards into the trash and avoid using the garbage disposal.
- Don't rely on a garbage disposal to get rid of grease - it grinds it into smaller pieces and it doesn't keep grease from going down the drain.
- Don't run hot water over greasy pans or use hot water to wash grease down the drain. The grease will eventually cool and congeal (stick together) in your pipes.



Don't Flush "flushable wipes" or Anything but Toilet Paper and What You Produce !




YIKES!
DON'T FLUSH THAT WIPE!



Avoid Clogged pipes.

Never Flush...

- Personal and Baby Wipes
- Medicine
- Paper Towels
- Cleaning Wipes
- Dental Floss
- Cotton Balls and Swabs
- Facial Tissue
- Cooking Oil or Food



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WHAT'S ALL THE HYPE ABOUT FLUSHABLE WIPES?

"Flushable" doesn't mean it's safe for the sewer system.

More than \$300,000 was spent to clean sewers by WRC in 2017. Clogged pipes lead to overflowing toilets and sewage backups.

Wipes+Pipes = Clogging
Wipes+Pipes = Backup
Wipes+Pipes = Ragging

Most wipes don't break apart in water and can form clumps that grow into hard masses that can create blockages.

Flush only what humans produce and toilet paper.

Protect Your pipes!
Throw Away Wipes

What You Should Know:

Homes
Residents are responsible for pipes inside homes and service leads where sewage transport begins.

Community Sewers
Sewage is transported through community sewers to a large interceptor sewer at our community boundary.

County or GLWA Interceptors
Interceptors, operated by the County or GLWA (Great Lakes Water Authority), transport sewage to a final set of interceptors that connect to the WRRF (Water Resources Recovery Facility).

WRRF
Sewage is treated and effluent is discharged to the Detroit and Rouge Rivers.



**Ragging is caused by
flushable wipes**



Community Action Alliance

Water Residential Assistance Program





Contact WRC at 248-858-0968

Email at wrc@oakgov.com

