What to know about PFAS (perfluoroalkyl and polyfluoroalkyl substances)

• Since the 1940s a number of products made to repel oil and water as well as fire retardants contain the man-made chemicals, *perfluoroalkyl* and *polyfluoroalkyl* substances (PFAS). Today, PFAS are found in nonstick cookware, flame- and water-resistant clothing, food wrappers, plumber's tape, stain prevention products, and even coatings on wires.

• PFAs are also used in heavy equipment fluids (think farming, logging, construction) so dispersal into the environment is not limited to manufacturing areas.

• The Michigan Department of Environmental Quality (MDEQ) is using the current level of 70 ppt (parts per trillion) as the threshold for state action.

• Because PFAS are an emerging contaminant, there is a lot of information we still do not know such as: What do we do now? How can I protect my home and family? How do we detect the source and clean up?

• PFAS have been linked to many health problems, although research is still on-going to help understand the levels of danger, correlation or causation of PFAS presence in drinking water and whether future health problems will be discovered.

• Tip of the Mitt Watershed Council is a good resource for both policy and water quality questions: Dave Edwards (water quality) and Jennifer McKay (policy) are available to talk. 231-347-1181.

• Freshwater Future is a policy voice for Great Lakes residents and has purchased the equipment to make testing for those on individual wells (not on systems tested by the MDEQ) available at an affordable rate. Testing will be up and running hopefully early in 2019. You can call Ann Baughman at Freshwater Future for information at 231-348-8200. Test kits will be available for \$60 and contain instructions for taking a sample at your home. Homeowners will also be responsible for shipping the sample to the UM Biological Station for analysis.

• Little is known about the presence of PFAS in surface water (our lakes, streams, wetlands, ponds) but we hope to make testing for these contaminants part of our water quality monitoring next year.

Links for information and websites:

To learn more about PFAS, listen to podcasts or review transcripts from the groundwater "virtual town hall" referenced in this article, please visit this link to **Circle of Blue**. <u>https://www.circleofblue.org/2018/groundwater/pfas-what-you-need-to-know/</u>

Michigan Department of Environmental Quality MPART website:

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

Freshwater Future Resources

https://freshwaterfuture.org/ourissues/drinking-water/pfas/ MLIVE report https://pfasproject.com/2018/07/16/mlive-how-to-protect-yourself-from-pfas-contamination/

State of Michigan, PFAS in fish listing https://www.michigan.gov/som/0,4669,7-192-45414_45929_83470_83473-463860--_00.html

Environmental Working Group, map of known PFAS contamination https://www.ewg.org/interactive-maps/2017_pfa/#.W32z6uhKiUk

Center for Disease Control, An Overview of Perfluoroalkyl and Polyfluoroalkyl Substances and Interim Guidance for Clinicians Responding to Patient Exposure Concerns

https://www.atsdr.cdc.gov/pfas/docs/pfas_clinician_fact_sheet_508.pdf

Center for Disease Control, Toxicological Profile for Perfluoroalkyls Draft for Public Comment June 2018 https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf

Minnesota Department of Health, PFAS Fact Sheet

http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcshealth.pdf

Michigan's Contaminant Induced Human Health Crisis Addressing Michigan's Future By Facing the Challenge of the Evolving Nature of Environmental Contamination

https://www.michigan.gov/documents/deg/1773-18 Response 612346 7.pdf

Michigan Radio

http://www.michiganradio.org/post/new-cdc-report-finds-federal-pfas-health-standard-too-lax WZZM 13 <u>https://www.wzzm13.com/article/news/local/water-worries/controversial-health-report-released-</u> recommends-lower-pfas-risk-level/69-565980809

Guidelines--how to protect yourself from PFAS

https://pfasproject.com/2018/07/16/mlive-how-to-protect-yourself-from-pfas-contamination/