



Former Wurtsmith Air Force Base – State Health Department UPDATE



April 25, 2017 Community Meeting
Oscoda, Michigan

Outline

- Timeline and key points
- Decision “tree”
- RO filter test results
- Sampling requests
- TOUCHING the water is FINE
- Vegetable gardens
- Discussions with CDC (ATSDR)



PFAS in Drinking Water

- Timeline

- Sept 2015: Type 1 water-supply at mobile home park ID'd and sampled
- Oct 2015: Results received; planning begins for potable well survey
- Dec 2015: USAF and MDEQ sample 24 private residential wells
- Jan 2016: Results received; MDHHS prepares “Understanding Your Well Test Results” fact sheet
- Feb 2016: USAF and MDEQ send results letters and fact sheet; MDHHS sends recommendations letter with meeting info, updated fact sheet; local health conducts in-person outreach
- Mar 2016: MDHHS report showing evaluation of data sent to local health and township

PFAS and public health – key points

- Taking conservative (protective) stance
 - What we know
 - What we don't know
- Using best available science
- Using a decision “tree”
- Requesting more data to verify results, strengthen conclusions



Data Evaluation

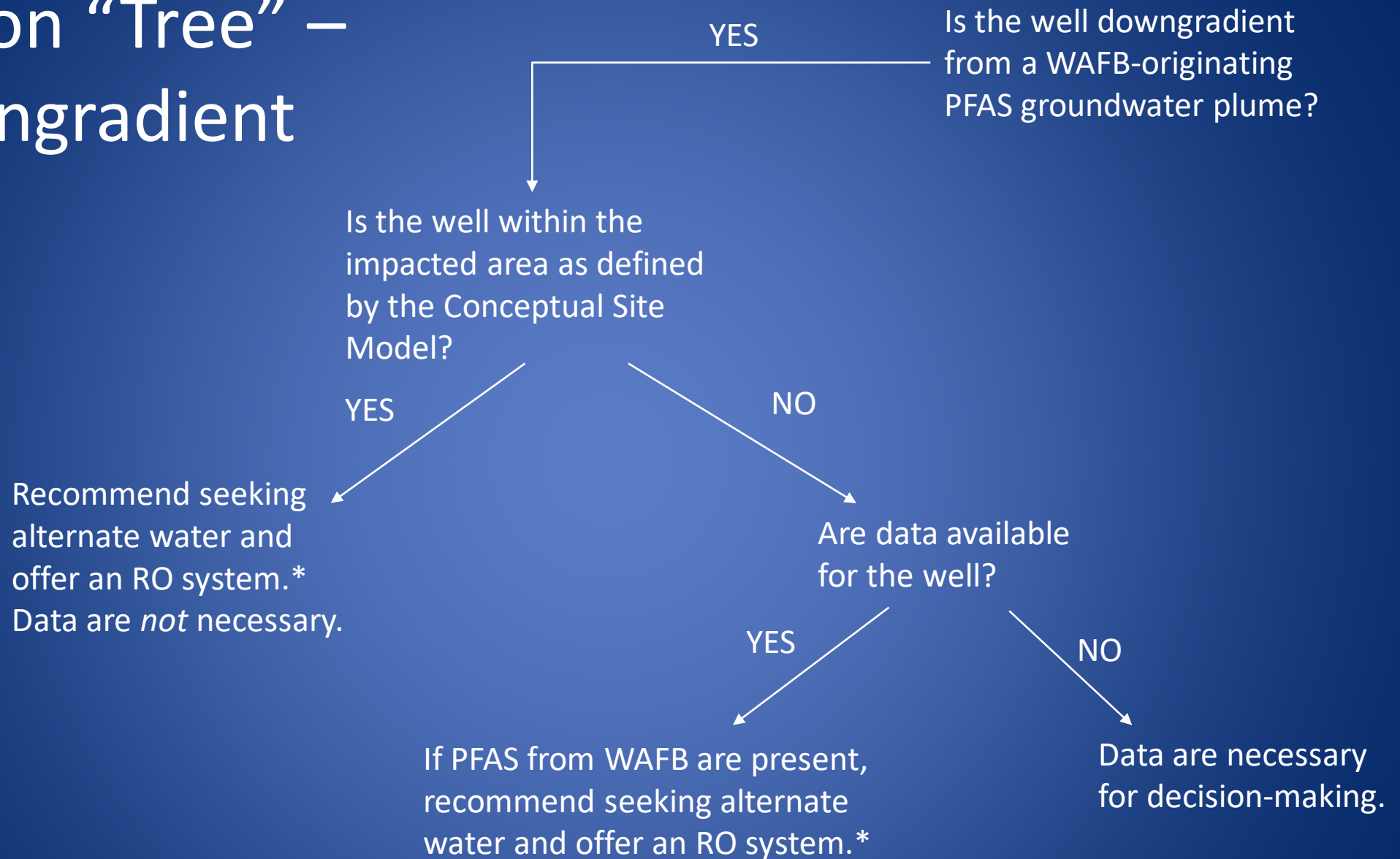
- Animal/human studies → potential for harm
- PFAS are persistent, bioaccumulate
- Some PFAS have long half-lives in humans
- Contamination not fully understood or controlled
- One sample cannot determine past exposure amount or duration, is not predictive of future
- Contamination at WAFB → → drinking water wells
- PFAS in most well water samples are higher than in HSRUA

EPA's Health Advisory levels



- “Lifetime” Health Advisory (“LTHA,” May 2016)
 - PFOA + PFOS = 70 ppt
 - Translating ppt (ng/L) to ppb ($\mu\text{g/L}$)
→ 70 ppt = 0.07 ppb
- Protects fetus
- Protects against cancer/noncancer effects

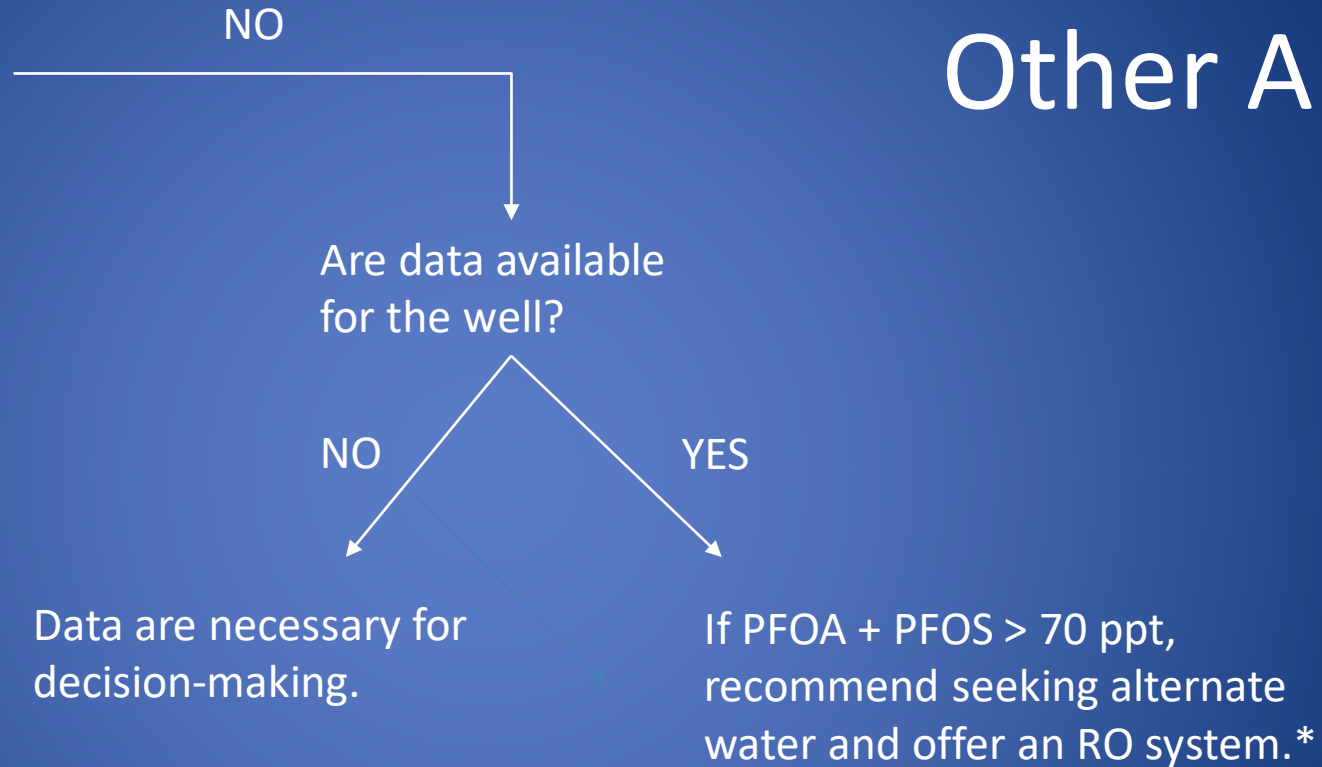
Decision “Tree” – Downgradient



*Well owners may choose to connect to township water, if that is currently available.

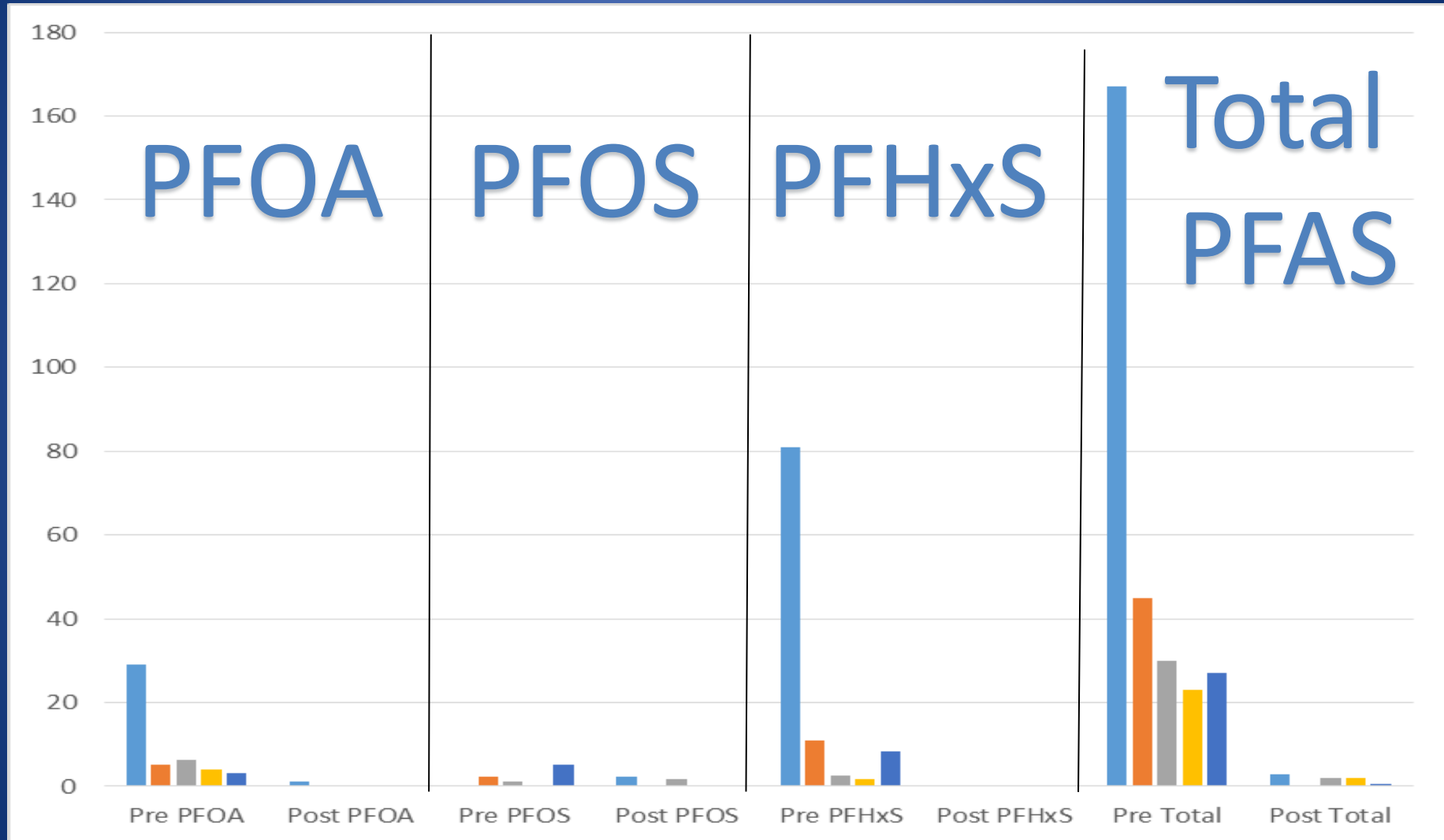
Decision “Tree” – Other Areas

Is the well downgradient
from a WAFB-originating
PFAS groundwater plume?



*Well owners may choose to connect to township water, if that is currently available.

Pre- and Post-RO filter tests



Sampling requests

- No guarantee that sampling will occur
- Make request to DHD2, they forward to MDHHS
- MDHHS enters into database
- MDHHS and MDEQ team discuss requests → strategize
- MDEQ team contacts homes to be sampled, MDHHS contacts homes that are “not yet”
- MDHHS gets results and recommendations to homeowners and to DHD2

Waiting for your results?

- Missing some MAILING addresses, some returned mail
- Contact Chris Bush at MDHHS to check
 - 517-284-4794 or 800-648-6942
 - bushc6@michigan.gov

Sampling on your own

- MDHHS checking with labs
 - Cost
 - List of PFAS
 - How-to
- Fact sheet in the works



TOUCHING the water is FINE!



- Household use is OK
 - Bathing
 - Washing dishes or clothes
- Recreational skin contact is OK
 - Swimming and wading
 - Boating
 - Handling fish
- “Down the hatch” is the concern

Vegetable gardens

- Research on using biosolids, water with PFAS
- May be plant uptake of smaller-sized PFAS
 - Smaller PFAS not expected to build up in body
 - NOT expected to be a health concern for home-grown produce
 - For canning, use PFAS-free water for syrups, etc. (“down the hatch”)

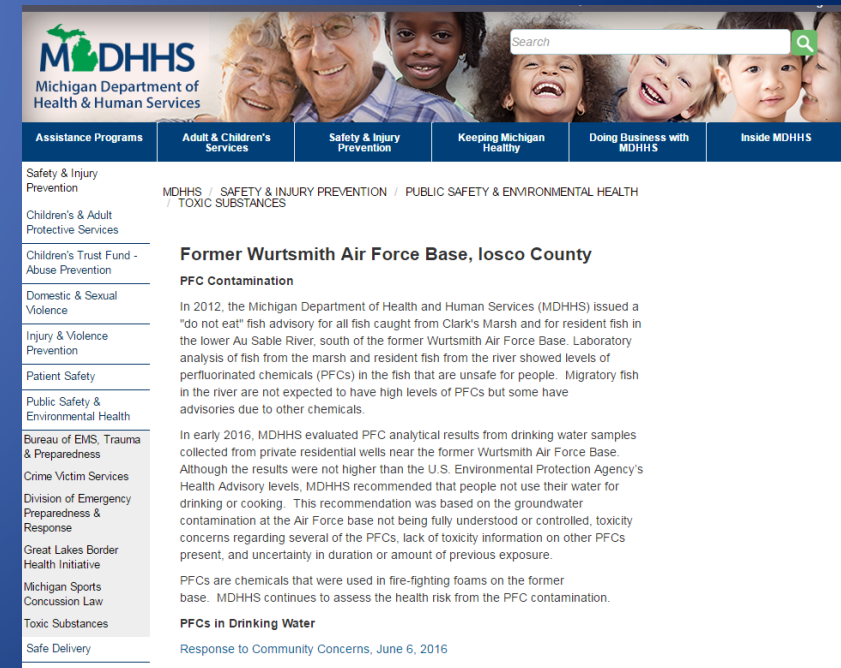


Discussions with CDC

- ATSDR = Agency for Toxic Substances and Disease Registry
- MDHHS partners with ATSDR
- MDHHS keeps ATSDR informed of PFAS sites in Michigan
- Discussing community's and veterans' concerns
- PFAS is a national (global) issue
- No final response yet

Web

- MDHHS webpage for Wurtsmith work:
 - www.mi.gov/wurtsmith
 - Newer information at top of each section
 - Links to EPA, ATSDR, USAF webpages



The screenshot shows the MDHHS website header with the logo and a search bar. Below the header is a navigation menu with categories: Assistance Programs, Adult & Children's Services, Safety & Injury Prevention, Keeping Michigan Healthy, Doing Business with MDHHS, and Inside MDHHS. The main content area displays a breadcrumb trail: MDHHS / SAFETY & INJURY PREVENTION / PUBLIC SAFETY & ENVIRONMENTAL HEALTH / TOXIC SUBSTANCES. The article title is "Former Wurtsmith Air Force Base, Iosco County" with a sub-heading "PFC Contamination". The text describes a "do not eat" fish advisory issued in 2012 due to PFC contamination in fish from the former base. It also mentions a 2016 evaluation of PFCs in drinking water from private residential wells near the base. The article concludes with a note that PFCs are chemicals used in fire-fighting foams and that MDHHS continues to assess the health risk.

Former Wurtsmith Air Force Base, Iosco County
PFC Contamination

In 2012, the Michigan Department of Health and Human Services (MDHHS) issued a "do not eat" fish advisory for all fish caught from Clark's Marsh and for resident fish in the lower Au Sable River, south of the former Wurtsmith Air Force Base. Laboratory analysis of fish from the marsh and resident fish from the river showed levels of perfluorinated chemicals (PFCs) in the fish that are unsafe for people. Migratory fish in the river are not expected to have high levels of PFCs but some have advisories due to other chemicals.

In early 2016, MDHHS evaluated PFC analytical results from drinking water samples collected from private residential wells near the former Wurtsmith Air Force Base. Although the results were not higher than the U.S. Environmental Protection Agency's Health Advisory levels, MDHHS recommended that people not use their water for drinking or cooking. This recommendation was based on the groundwater contamination at the Air Force base not being fully understood or controlled, toxicity concerns regarding several of the PFCs, lack of toxicity information on other PFCs present, and uncertainty in duration or amount of previous exposure.

PFCs are chemicals that were used in fire-fighting foams on the former base. MDHHS continues to assess the health risk from the PFC contamination.

PFCs in Drinking Water

Response to Community Concerns, June 6, 2016

Health Dept Contacts

- FIRST CONTACT = District Health Dept No. 2 –
Denise Bryan, Health Officer
– 989-343-1800
- MDHHS - Christina Bush, Toxicologist
– 517-284-4794 (NEW) or 800-648-6942
– bushc6@michigan.gov