

Air Force Civil Engineer Center

Integrity - Service - Excellence



**Restoration Advisory
Board (RAB)
Orientation Meeting**

**Former Wurtsmith
Air Force Base**

2 August 2017



Former Wurtsmith AFB

Welcome and Introductions



Proposed ground rules

- **Respect one another and maintain an atmosphere of open dialogue and exchange of ideas.**
- **Use our time together efficiently, wisely and respectfully.**
- **Listen and remain open to differing points of view.**
- **Speak clearly and succinctly one person at a time; avoid interrupting others.**
- **Share information early, openly and honestly.**
- **Maintain a propensity for progress: prepare, discuss, document and move forward.**
- **Accurately and objectively relay to others the discussions that occur at board meetings.**



Former Wurtsmith AFB Historical Overview

- **Military use of Wurtsmith Air Force Base started in 1924 as Camp Skeel**
- **Base Closure process started in July 1991 when BRAC list was signed**
- **Air Force IRP site list totals 90 sites, of which 69 are closed (non PFOS/PFOA)**
- **Landfills account for 5 of the 21 open sites (2 of the 21 are closed for VOCs but the restrictions remain for PFOS/PFOA)**
- **Majority of site remedies are either pump and treat or natural attenuation for groundwater**
- **All Remedies are in place for the open sites and the current emphasis is optimizing those remedies to expedite closure**



Former Wurtsmith AFB Active IRP Sites

Active Sites	Site Name/Area	Description/Status
FT-02	Fire Training	Chlorinated Solvent Fuel PFOS/PFOA Air Sparge PTS IAB
WP-04	Former WWTP	Chlorinated solvent plume Natural Attenuation
SS-05	Alert Area TCE	Chlorinated Solvent Plume Natural Attenuation PFOS/PFOA
SS-06	POL Yard	Fuels From POL, BPTS PFOS/PFOA
SS-08/ST-68	Hanger Area	Chlorinated Solvent and Fuels Plume Natural Attenuation PFOS/PFOA
OT-16	Test Cell West Taxiway	Chlorinated Solvent Natural Attenuation PFOS/PFOA
SS-17/21/47	Arrow Street	Chlorinated solvent and Fuels plume APTS PFOS/PFOA
LF-23	Landfill S of POL	Buried Debris LUC/IC
LF-26	Landfill East of RW	Buried Debris LUC/IC
LF-27	Landfill Southwest	Buried Debris, Ammonia Manganese, Arsenic LU/IC GW Annual GW sampling
LF-3031	Northern Landfills	Domestic Landfill and Buried Rubble Pump and Treat PFOS/PFOA
SS-51	B52 Crash Site	Fuels Natural Attenuation NFA PFOS/PFOA
SS-57	Base Ops Apron	Fuels Air Sparging and DG APTS PFOS/PFOA
ST-69		TCE Natural Attenuation NFA PFOS/PFOA
WP-70		Buried Debris LUC/IC
SS-71	TCE Plume SE RW	Chlorinated Solvent Natural Attenuation NFA PFOS/PFOA
SS-72	SAFR PCE plume	Chlorinated Solvent from SAFR MNA and EVO injection 2016



What are PFOS and PFOA?



PFOS and PFOA are synthetic fluorinated organic compounds used in many industrial and consumer products, including: nonstick cookware, waterproof fabric, some food packaging and the firefighting agent Aqueous Film Forming Foam (AFFF).

- **AFFF is widely used to extinguish petroleum fires at civilian and military airports across the U.S. The Air Force began using AFFF in 1970.**
- **In 2009, the Environmental Protection Agency issued provisional health advisories for PFOS and PFOA, followed by a lifetime HA.**
- **PFOS/PFOA are classified as emerging contaminants because:**
 - ☑ **They have reasonable pathways to reach drinking water sources.**
 - ☑ **They present a potential unacceptable risk to human health.**
 - ☑ **Regulatory standards are evolving.**



What are PFOS and PFOA?

Background



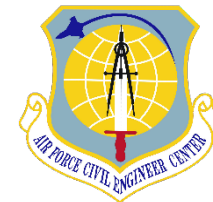
The Air Force is taking aggressive measures to reduce the risk of mission-related PFOS/PFOA contamination to drinking-water sources.

- In June 2009, DoD established policy and assigned responsibilities for the identification, assessment and risk management of ECs.
- In 2010, AFCEC began a comprehensive assessment that determined AFFF may have been released at the following locations:

Active Bases	Fire Training Areas
Reserve Bases	Emergency Response Sites
Air National Guard Bases	Aircraft Crash Sites
Closed Bases	Other release areas



CERCLA



Comprehensive Environmental Response, Compensation and Liability Act

The Air Force's investigation work and mitigation actions are guided by CERCLA, applicable state laws and the EPA's drinking water health advisory of 70 parts per trillion.

AFCEC is moving forward aggressively in accordance with the CERCLA process to identify, define and mitigate potential contamination.



The CERCLA process:

- **Ensures thorough investigation work**
- **Leads to proper and complete removal actions**
- **Promotes accountability, community involvement and long-term protectiveness**



Air Force Response



The Air Force is using a three-step approach to assess the potential for PFOS/PFOA contamination of drinking water and respond appropriately.

1. Identify

- Determine potential AFFF releases
- Verify releases through sampling
- Determine if contaminant pathways to DW exist



2. Respond

- PFOS/PFOA > HA, provide alternate DW supply
- If PFOS/PFOA < HA, establish monitoring schedule



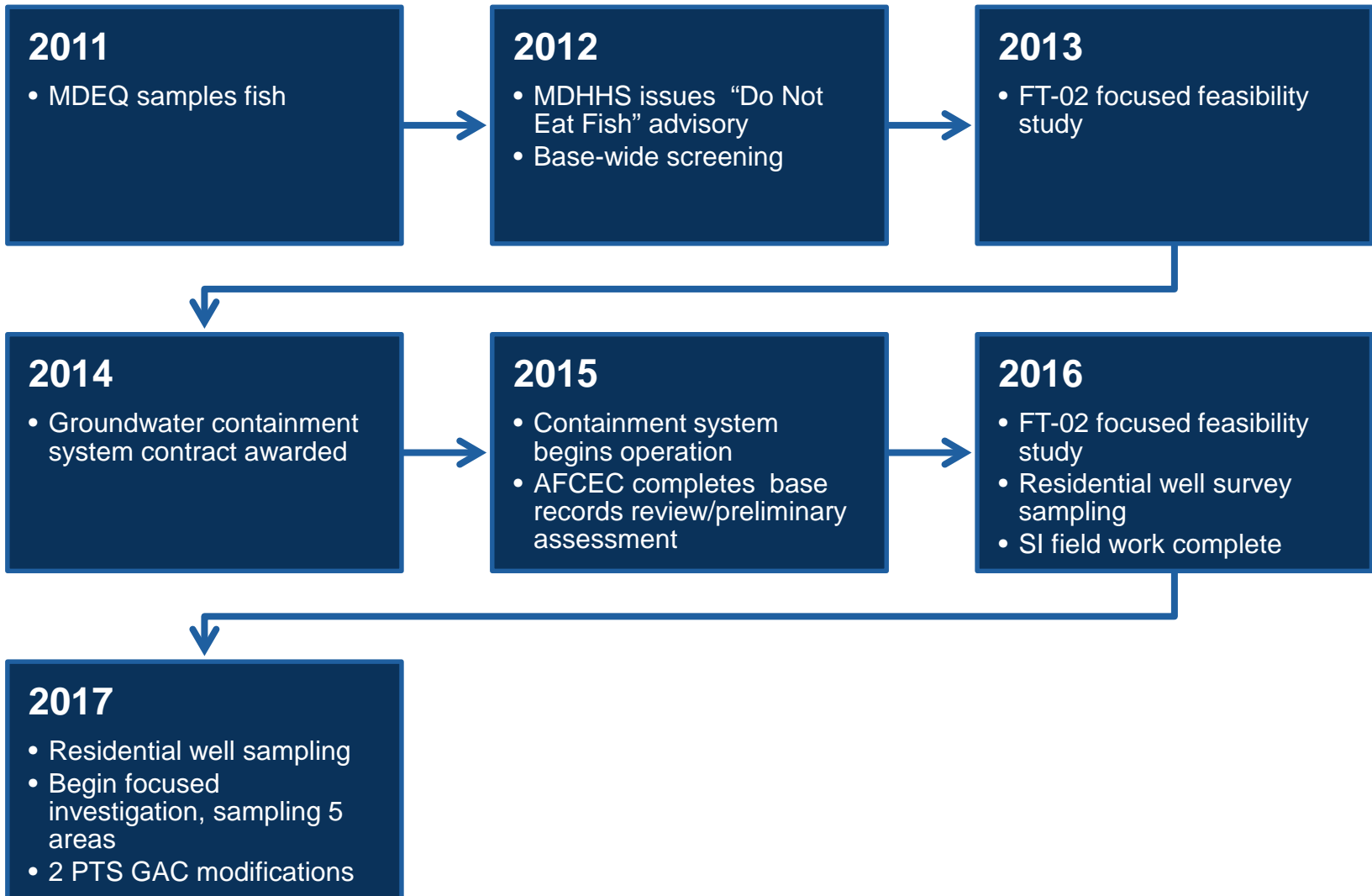
3. Prevent

- Legacy AFFF disposal
- Transition to new AFFF
- Retrofit fire vehicles



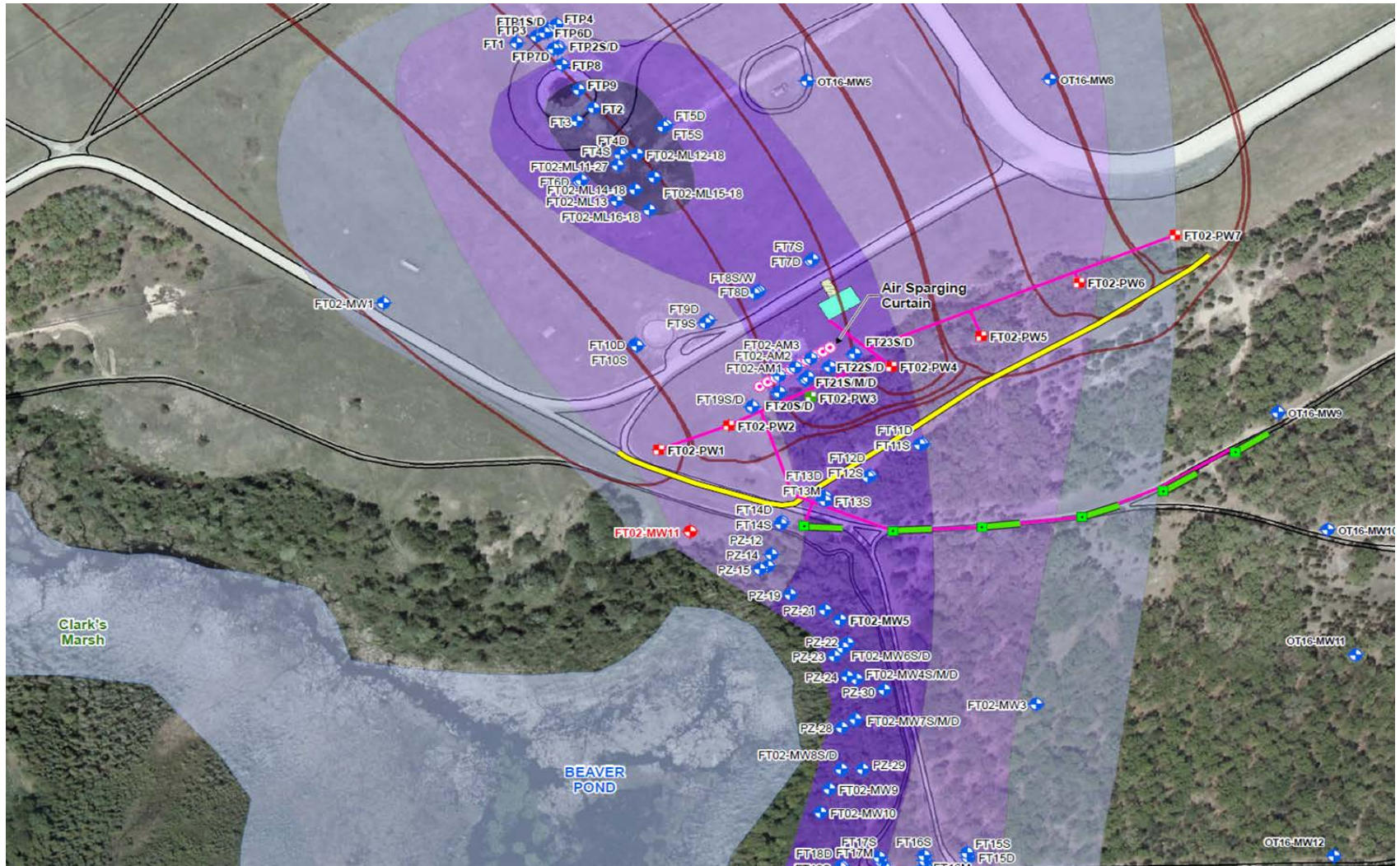
PFOS/PFOA Timeline

Wurtsmith





FT-02 Pump and Treat System





Air Force Private Well survey and sampling

- In the 2015/2016 the AF contractor Amec Foster Wheeler sampled private wells with potential AFFF impacts
 - Of the 54 private residential wells sampled, one well exceeded the EPA's Health Advisory (HA) level of 70 ppt PFOS + PFOA
 - That one well was immediately hooked up to Municipal water supply paid for by the AF
 - 2 Municipal wells were sampled at the Whispering Woods Trailer park adjacent to the base and both wells were below the EPA HA
 - AF is currently resampling 53 of the 54 private residential wells and the two wells at Whispering Woods during peak pumping season to verify that they all are still below the HA levels
 - When PFOS/PFOA levels exceed the HA in drinking water, the Air Force will take measures to target the source and reduce risk and provide an alternate water source, like bottled water, until a permanent solution is in place
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Private Well Sampling Results

■ EPA Health Advisory

- PFOS = 70 ppt; PFOA = 70 ppt or PFOS + PFOA = 70 ppt

■ Whispering Woods results (2 wells)

- PFOS 6 ppt and 9.6 ppt; PFOA non-detect

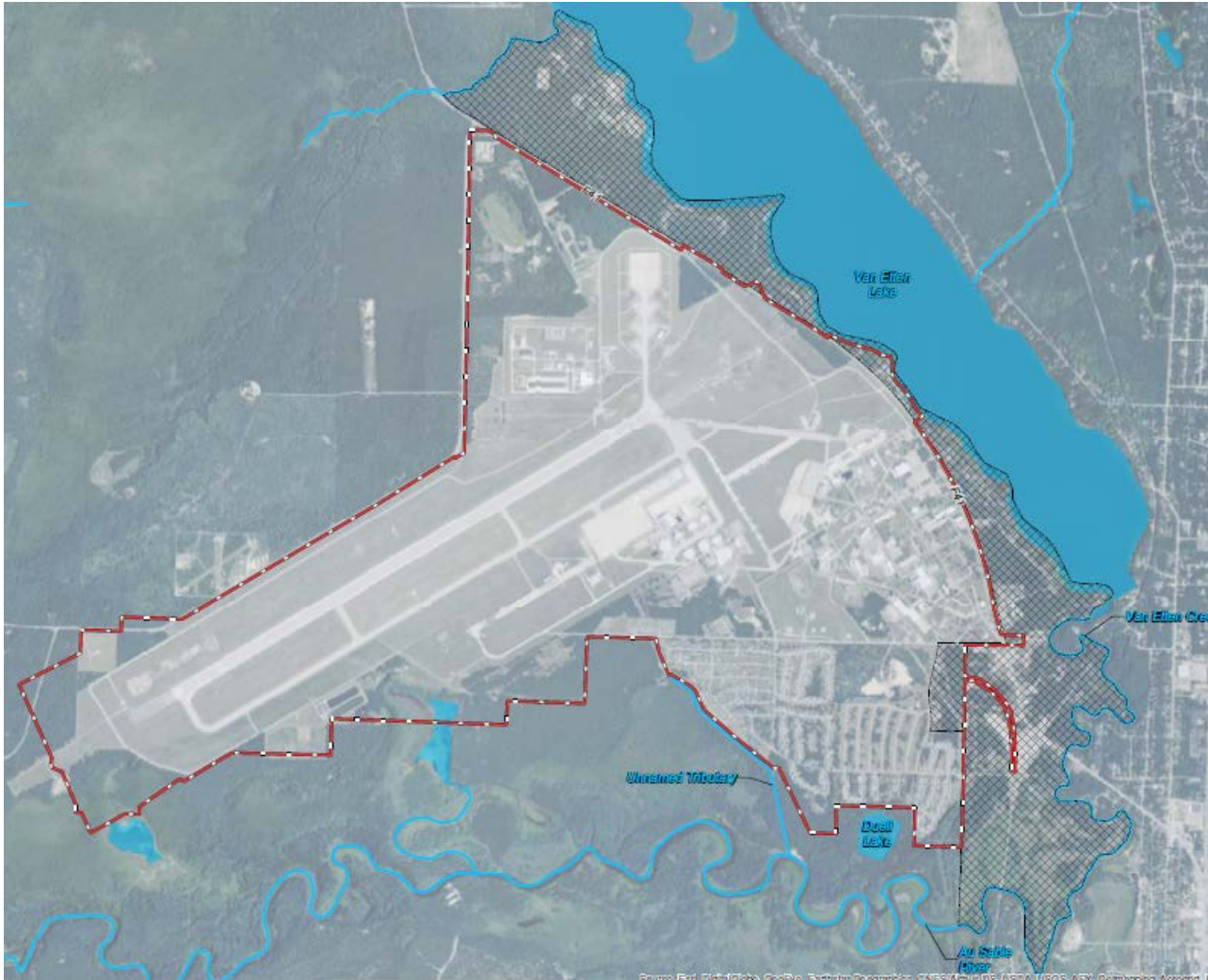
■ 53 of 54 residential well results

- PFOS was detected in 20 of 54 wells sampled with a maximum concentration of 37.9 ppt
- PFOA was detected in 31 of 54 wells sampled with a maximum concentration of 33.2 ppt
- Maximum PFOS + PFOA was 59.3 ppt

■ AF to return in 2017 to resample all wells (currently underway)

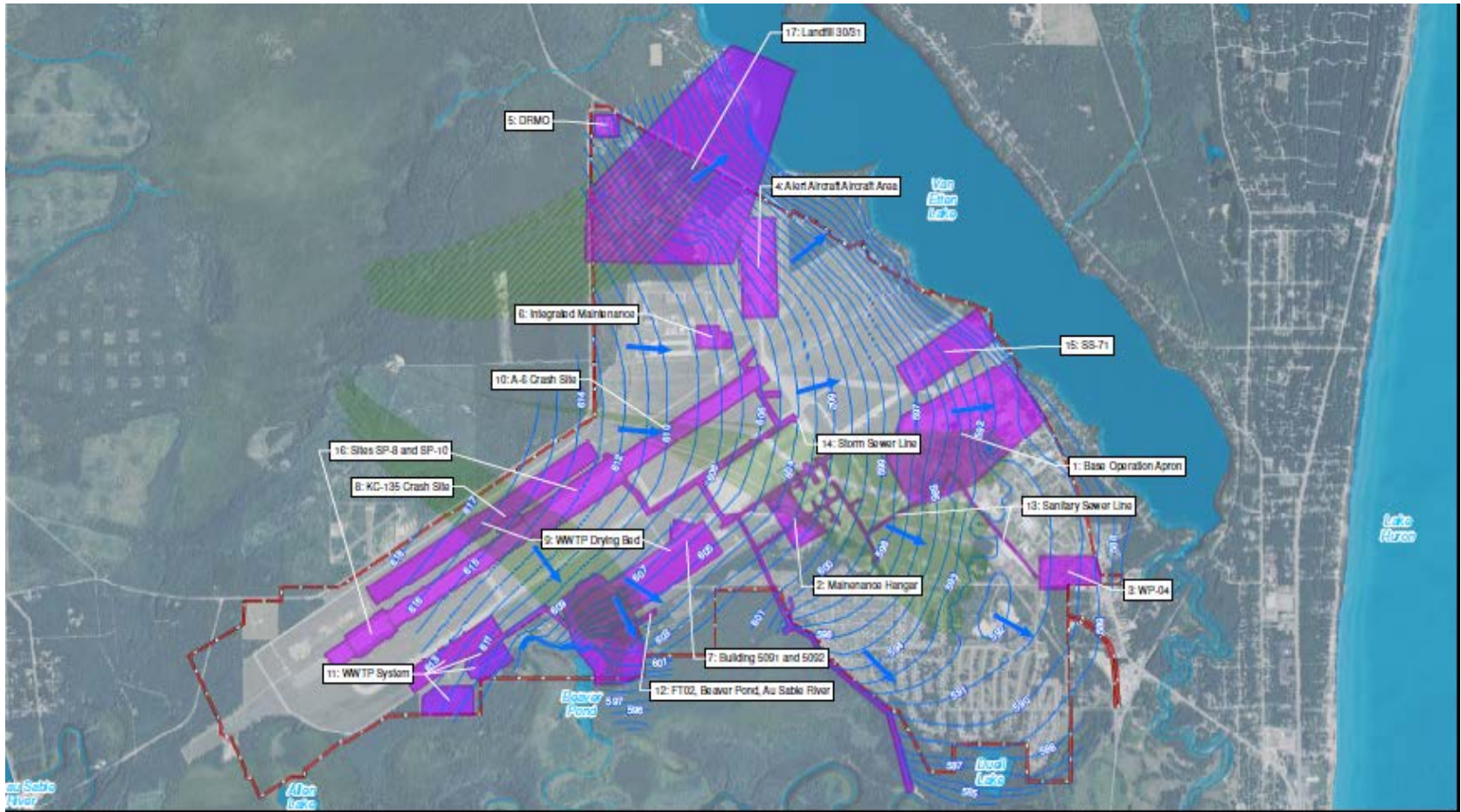


AF Private Well Survey Area





Potential AFFF Release Areas





Site Inspection Results

- **17 potential AFFF release areas identified in PA considered for investigation in 2016 to confirm presence/absence of PFOS/PFOA**
 - **13 confirmed in SI**
 - **SI included 209 groundwater samples, 60 surface and/or subsurface soil samples, 14 sediment, five process water and four surface water samples.**
 - **Storm sewer, area 14, found PFOS/PFOA in the 3 pipes ditch, that is believed to be from infiltrated groundwater into the storm piping – meaning the pipe is not the source**
 - **AF used SI results to prioritize sites for further sampling, investigation**
 - **Priority sites and will be part of the focused investigation work to begin in fall 2017**
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PFOS/PFOA Path Forward

- **Install GAC system in 2017 to treat effluent from two PTSs that discharge to Van Etten Creek**
- **Resample potable wells in summer 2017**
- **Provide mitigations to any human drinking water exposures above the HA**
- **Initiate focused investigation at priority sites in 2017**



Former Wurtsmith AFB RAB Historical Overview

- **RABs were established by the DoD to inform and involve communities**
 - May 2006 RAB Rule (March 2007 RAB Rule Handbook) provides legal guidelines
- **Wurtsmith Technical Review Committee (TRC) was active prior to Base Closure, and the initial RAB began under BRAC in 1994**
- **RAB disbanded in 2004 after majority of remedial decisions had been made**
- **Air Force is reestablishing the RAB**
 - Due to concerns about PFOS/PFOA
 - To promote awareness about ongoing cleanup activities
 - To answer questions about entire restoration program



Former Wurtsmith AFB RAB Overview and Purpose

- **Provides you an opportunity to become involved in the Wurtsmith environmental restoration through:**
 - RAB membership
 - Meeting attendance
 - Site tours
 - Relationship with restoration team
- **You can influence decisions related to Wurtsmith environmental restoration**
- **You can serve as a conduit to the greater community by sharing their questions, concerns and ideas with Air Force and regulatory representatives involved in the cleanup**
- **RAB is not a forum for discussion of matters pertaining to blood testing or health concerns. Other forums exist for this purpose.**



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RAB Member

Roles and Responsibilities



Former Wurtsmith AFB RAB Member Roles and Responsibilities

Installation Co-Chair

Responsibilities:

- Coordinate with Community Co-chair (and other RAB members as necessary) to prepare agenda prior to each RAB meeting
- Ensure Air Force participation is open and constructive
- Attend meetings and ensure RAB participation in restoration decisions
- Ensure community issues related to restoration are addressed
- Ensure documents distributed to RAB are also made available to public
- Develop and maintain accurate list of stakeholders
- Provide relevant policies and guidance documents to the RAB
- Ensure adequate administrative support is provided to the RAB
- Refer issues not related to restoration to others, as appropriate



Former Wurtsmith AFB RAB Member Roles and Responsibilities

Community Co-Chair

Responsibilities:

- Coordinate with the Air Force Co-Chair and other RAB members to prepare agenda prior to each RAB meeting
- Ensure community member participation is open and constructive
- Attend meetings and ensure community issues and concerns related to restoration are raised
- Assist with providing information to the public
- Report back to the community
- Serve without compensation



Former Wurtsmith AFB RAB Member Roles and Responsibilities

Community Member

Responsibilities:

- Attend RAB meetings
- Provide advice and input on restoration issues to decision makers
- Represent and communicate community interests and concerns
- Act as a conduit for the exchange of information between the community, RAB and environmental oversight agencies regarding the former installation's restoration program
- Review, evaluate and comment on documents and other materials related to installation restoration and closure, where applicable
- Serve without compensation



Former Wurtsmith AFB RAB Member Roles and Responsibilities

Regulatory Agency Member

Responsibilities:

- Attend RAB meetings
- Serve as community information, referral and resource bank for information on Wurtsmith restoration
- Review restoration-related documents and materials
- Ensure state and federal environmental standards and regulations are identified and addressed by Air Force
- Facilitate flexible and innovative resolutions of environmental issues and concerns
- Assist in educating and training RAB members



Former Wurtsmith AFB Air Force Assistance to RAB

■ **Air Force Will Assist the RAB By:**

- Preparing and distributing a fact sheet to announce RAB establishment, publish member names, and encourage community attendance
- Providing guidance on development of RAB mission statement, operating procedures and supplemental funding programs, if appropriate
- Coordinating with RAB to determine the most effective training methods
- Preparing meeting agendas and sending in advance to RAB members
- Coordinating RAB meeting logistics, taking meeting minutes and uploading meeting packets onto the Administrative Record and af.mil
- Responding to public comments and requests for information
- Keep website up to date:

<http://www.afcec.af.mil/Home/BRAC/Wurtsmith.aspx>



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Next Steps



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Next Steps

- **Present RAB Operating Procedures**
- **Introduce Community Co-chair and Air Force Co-chair**
- **Determine Recurring RAB Meeting Schedule**
- **Schedule First RAB Meeting**
- **Suggest topics for the first RAB Meeting agenda**



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Next Steps – Operating Procedures

- **Present Operating Procedures intended to:**
 - Guide RAB members
 - Make RAB an effective and functioning advisory board
 - Establish rules and guidelines to address common issues



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Next Steps – Operating Procedures Content

- **Operating Procedures should include:**
 - Mission Statement (typically one to three sentences)
 - Policies on attendance
 - Meeting frequency
 - Procedures for removing, replacing and adding members
 - Length of member service
 - Methods of resolving member disputes
 - Process for reviewing and responding to public comments
 - Procedures for public participation
 - RAB member roles and responsibilities



Former Wurtsmith AFB ***Next Steps – Selecting A Community Co-chair***

■ **Community Co-chair**

- Co-chair should have sufficient authority and ability to fully undertake RAB chairperson responsibilities
- Length of the Co-chair term should be decided by the RAB and outlined in the RAB's operating procedures (one- or two-year terms are common)
- Co-chair termination procedures should be included in the RAB's operating procedures
- Co-chair was selected by the RAB Selection Committee



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Next Steps – Future RAB Meeting Logistics

Future RAB Meetings and Other Opportunities:

- **Determine best meeting schedule/location**
 - Frequency (Most RABs meet quarterly)
 - Location
 - Day of the Week/Time
- **Set First RAB Meeting**
 - Date/Location
 - Agenda Topics
- **RAB Training Opportunities**



*Former Wurtsmith AFB
RAB Orientation Meeting Wrap Up*

**Open Discussion
Adjourn**