

Air Force Civil Engineer Center



Wurtsmith Restoration Advisory Board Meeting

18 April 2018
Matt Marrs
AFCEC/CIB



Wurtsmith RAB



Welcome



Wurtsmith RAB Agenda



WELCOME

- Introductions
- Ground rules

UPDATES

- Stakeholder update

BREAK

10-minute

BREAK

- 2018 Activities Calendar
- Summer /Fall Activities
- DW Sampling Schedule
- 13 Feb. Meeting minutes
- Next meeting

- Two-minute limit

2018 ACTIVITIES

RAB BUSINESS

PUBLIC COMMENT



Wurtsmith RAB Ground Rules



01

Respect one another and maintain an atmosphere of open dialogue and exchange of ideas.

02

Use our time together efficiently, wisely and respectfully.

03

Speak clearly and succinctly one person at a time; avoid interrupting others.

04

Listen and remain open to differing points of view.

05

Maintain a propensity for progress: prepare, discuss, document and move forward.

06

Share information early, openly and honestly

07

Accurately and objectively relay to others the discussions that occur at board meetings.



Wurtsmith RAB



Updates



Wurtsmith RAB Stakeholder Updates



- New GAC P&TS location demo/construction began in March
- Improved IR setup



- Public Health Updates



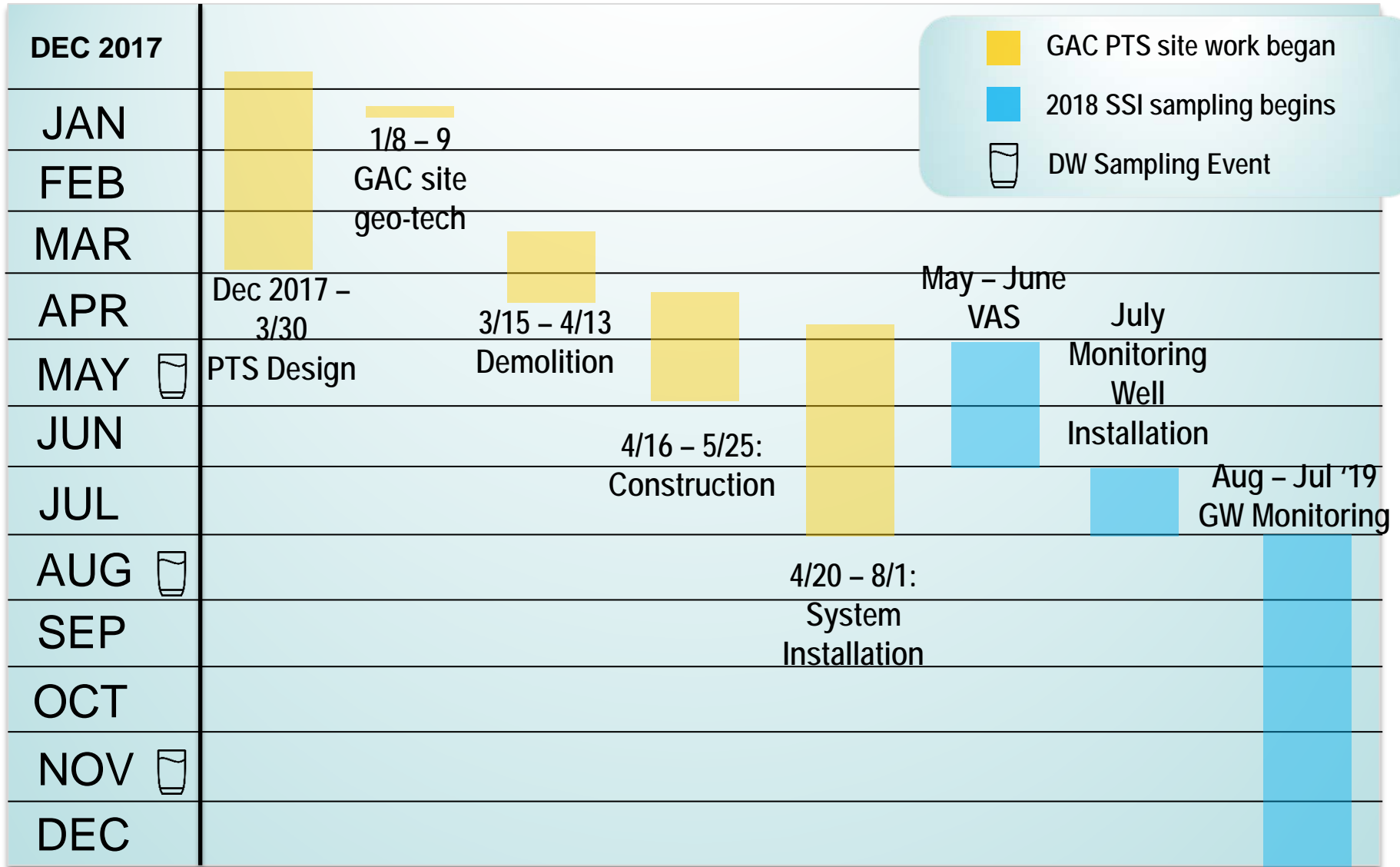
- Research USAF "CERCLA/AR 32-7020 vs DSMOA vs MDEQ Part 201 Remediation/Enforcement
- Status of MDEQ/MPART study & report: Modelling of PFAS Plumes Migration + Source - based on SW & GW sampling
- USAF Veteran anecdotes on AFFF use
- Community outreach, communication regarding remediation
- Summary of community requests on remediation



10-Minute Break



Wurtsmith RAB 2018 Activities





Wurtsmith RAB 2018 Activities



Arrow Street/Benzene GAC PTS Update

- Began demolition work in March
- Full design submitted to AFCEC, MDEQ and USACE on March 30th
- Construction activities ongoing

Ground Breaking



Vessel Delivery



GAC Vessels

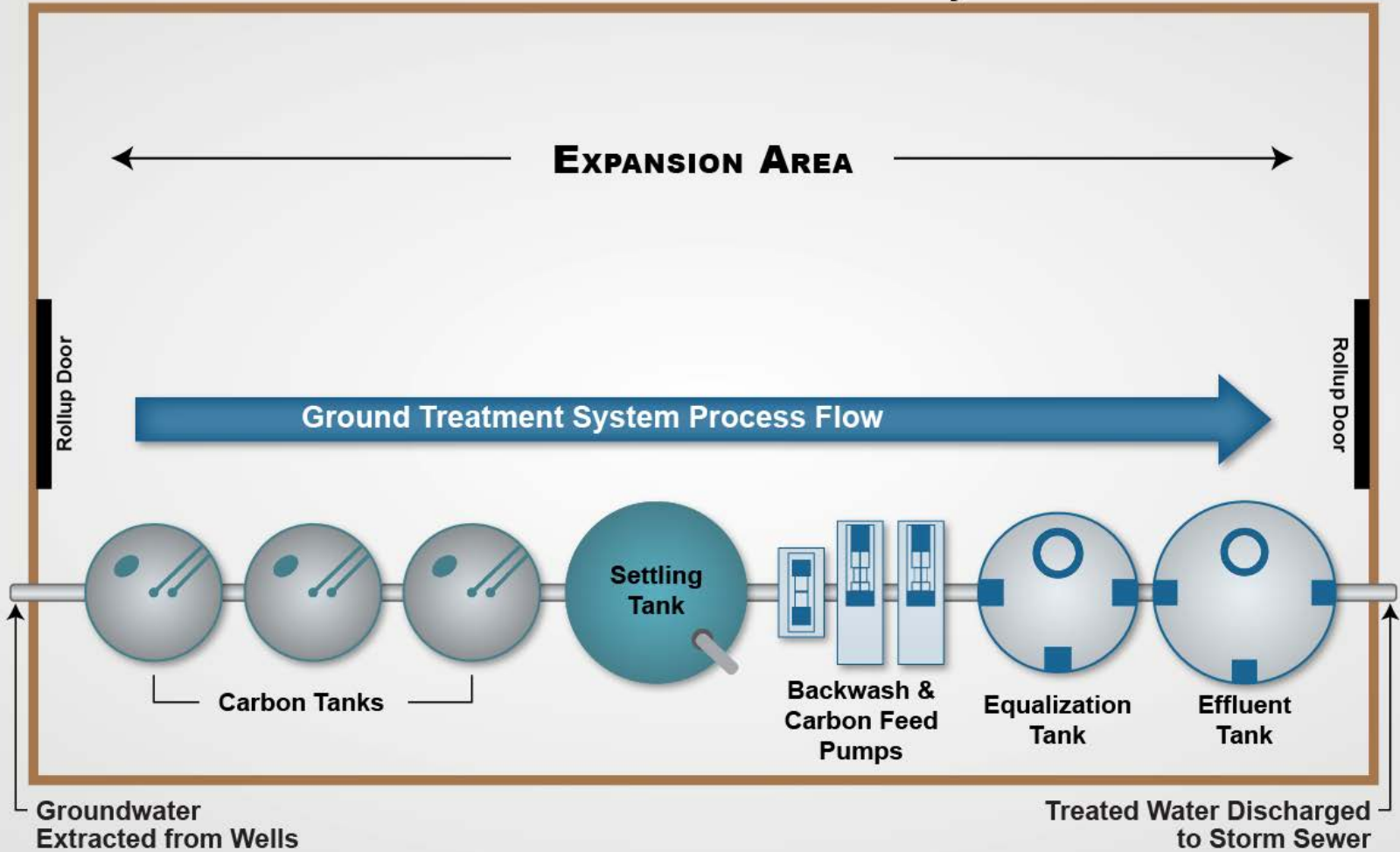




Wurtsmith RAB 2018 Activities



Groundwater Treatment Facility





Wurtsmith RAB 2018 Activities



**AFCEC wrapped up initial
SSI sampling in Dec. 2017.**

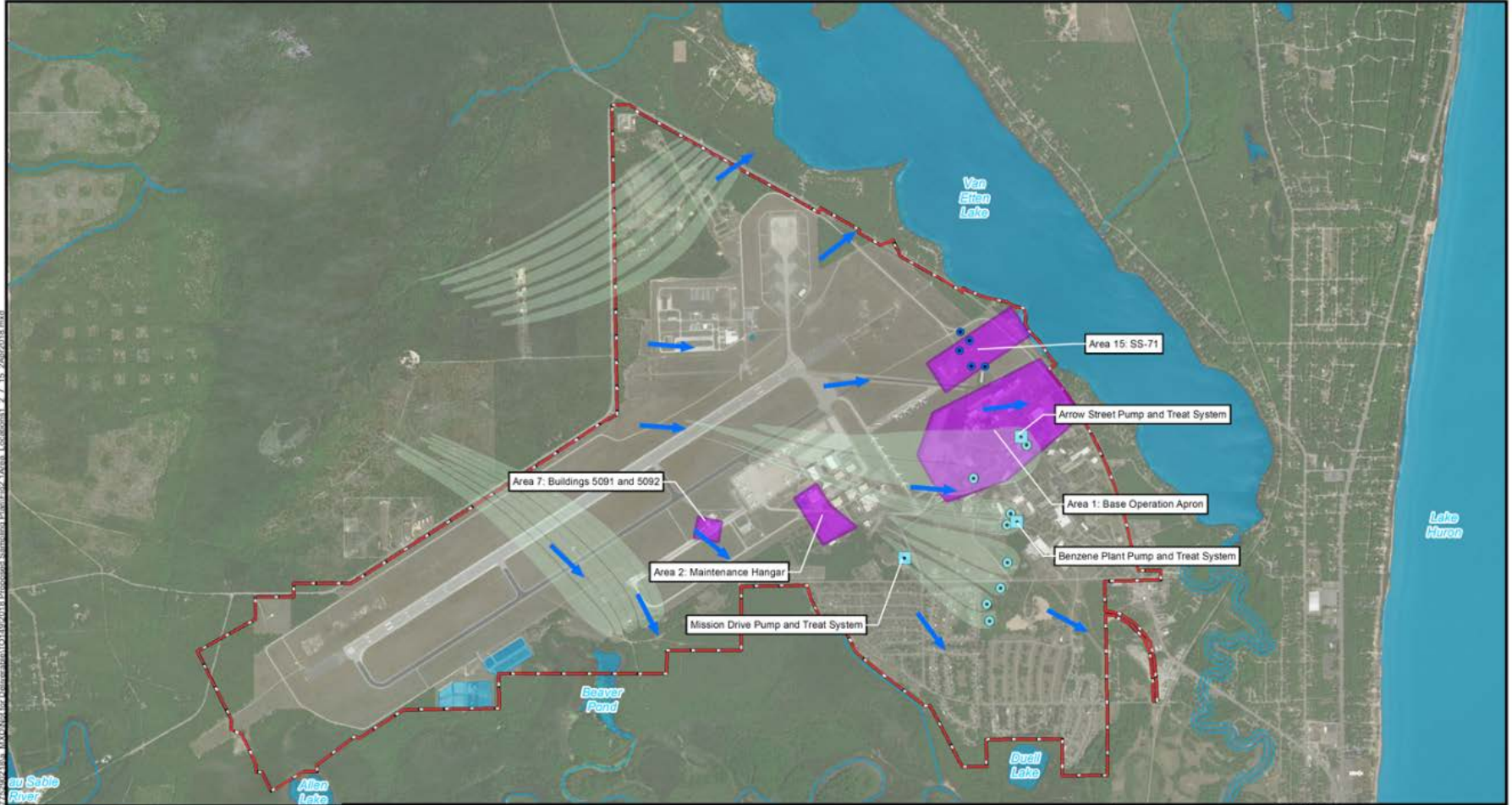
**AFCEC established preliminary prioritization
objectives for PFOS/PFOA response actions
based on validated 2017 results.**

Preliminary Prioritization Objectives

- Protect drinking water receptors
- Monitor residential and public drinking water supplies



Wurtsmith RAB 2018 Activities



C:\wurtsmith\BFC\775329301\775329301_18_Diagnostic_Site_Inspection_Estimated_Capture_Zone_Location_2_7_18_26Apr2018.mxd

<p>Air Force Civil Engineer Center 2261 Hughes Avenue Building 171, Site 155 JBSA Lackland, Texas 78236</p>	Project: 775329301	
	By: KEH	Date: 04/11/2018

SYMBOL KEY		
Estimated Capture Zone (Bay West, 2017)	Purge Wells	Former Wurtsmith AFB Installation Boundary
Groundwater Treatment System	Estimated Groundwater Flow Direction	Stream
Former Base Supply Well	AFFF SSI Priority Areas	Surface Water

Disclaimer: For general reference purposes only. This is not a survey product. DO NOT USE to determine, certify, or verify map features, scale and/or other information.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FIGURE 2.1
SSI Area Locations: Area 01, 02, 07, and 15
Base Operation Apron, Maintenance Hangar,
Building 5091 and 5092, and Site SS-71
Former Wurtsmith Air Force Base
Oscoda, Michigan

Working Copy
Supplemental Site Inspection
Work Plan



Wurtsmith RAB 2018 Activities



**Continue to protect drinking water receptors
through further SSI sampling:**



Areas 1 & 15

- Evaluate the down-gradient extent of contamination
- Further characterize up-gradient source area
- Evaluate effectiveness of Arrow/Benzene PTS
- Collect additional hydrogeologic data to better understand aquifer characteristics and GW flow
- Update GW Model



Wurtsmith RAB 2018 Activities



**Continue to protect drinking water receptors
through further SSI sampling:**

Area 2

- Define extent of contamination outside modeled Mission Drive Capture
- Evaluate Mission Drive PTS
- Collect additional hydrogeologic data to better understand aquifer characteristics
- Update GW Model

Area 7

- Evaluate co-mingling of contamination with Area 2
- Collect additional hydrogeological data to better understand contaminant migration
- Update GW model



Wurtsmith RAB 2018 Activities



Protect human health by monitoring residential and public drinking water supplies:

The Air Force is implementing a monitoring schedule for two public-supply wells and 36+ residential wells for a three-year period.



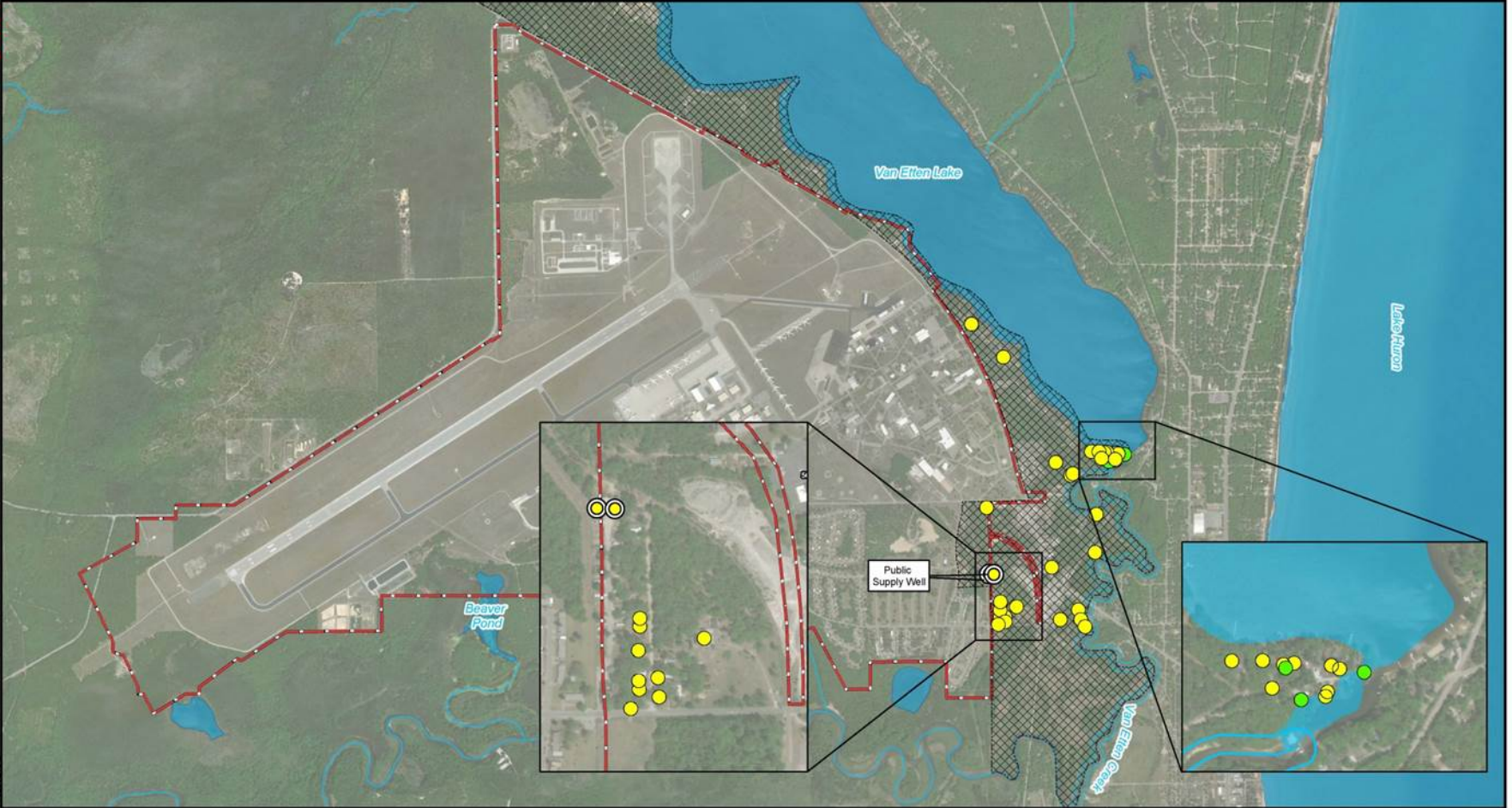
- Quarterly/Semiannual sampling beginning May 2018
- Annual sampling additional two years
- Additional outreach to capture all DW sources within the Air Force study area



Wurtsmith RAB 2018 Activities



DRAFT



Document Path: G:\Wurtsmith\CECs_77529017\Private Wells_WP_Sampling_Plan.mxd



Air Force Civil Engineer Center
 2251 Hughes Avenue
 Building 171, Site 155
 JBSA Lackland, Texas 78236

Project: 775290177

By: AES

Date: 03/12/2018



0 1,000 2,000 4,000
 Feet

SYMBOL KEY

- Private Water Supply - Quarterly Sampling
- Private Water Supply - Semi-Annual Sampling
- Public Water Supply - Quarterly Sampling
- Former Wurtsmith AFB Installation Boundary
- Potable Well Survey Area
- Stream
- Surface Water

Note: Additional sampling locations to be determined based on response from public notice/inquire.

Disclaimer: For general reference purposes only. This is not a survey product. DO NOT USE to determine, certify, or verify map features, scale and/or other information.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FIGURE
Potable Water Supply Sampling Schedule
 Former Wurtsmith Air Force Base
 Oscoda, Michigan

Private Well Sampling Work Plan



Wurtsmith RAB



RAB Business



Wurtsmith RAB RAB Business



- Wurtsmith Project and RAB Documents**

Document	
2 Aug. minutes	IR
19 Sep minutes + packet	IR
13 Feb minutes	IR
RAB Handbook	IR
Wurtsmith RAB Operating Procedures	IR
1992 & 2016 DSMOA	IR
RAB administrative docs	IR

Draft Final 2016 RAO Report: Arrow Street, Benzene Plant, and Mission Street P&TS	AR
DoD RAB Rule	IR
571962- Data Gap for SS008	AR
571963- Data Gap for WP004	AR
571964- QAPP with Attachment E	AR
571966- LUC/IC Report	AR

- Next RAB Meeting**
- Meeting evaluation cards**



Wurtsmith RAB



Public Comment



Public Comment Period

- 01** Sign in and write your name on a card
- 02** Deliver your comments from the front of the room
- 03** Two minute time limit
- 04** RAB members will confer after your comment to see if a follow-up action is needed



Conclusion & Adjournment



Restoration Advisory Meeting MDEQ Update

APRIL 18, 2018





4/17/2018

PFOA + PFOS (ppt)

Residential Wells

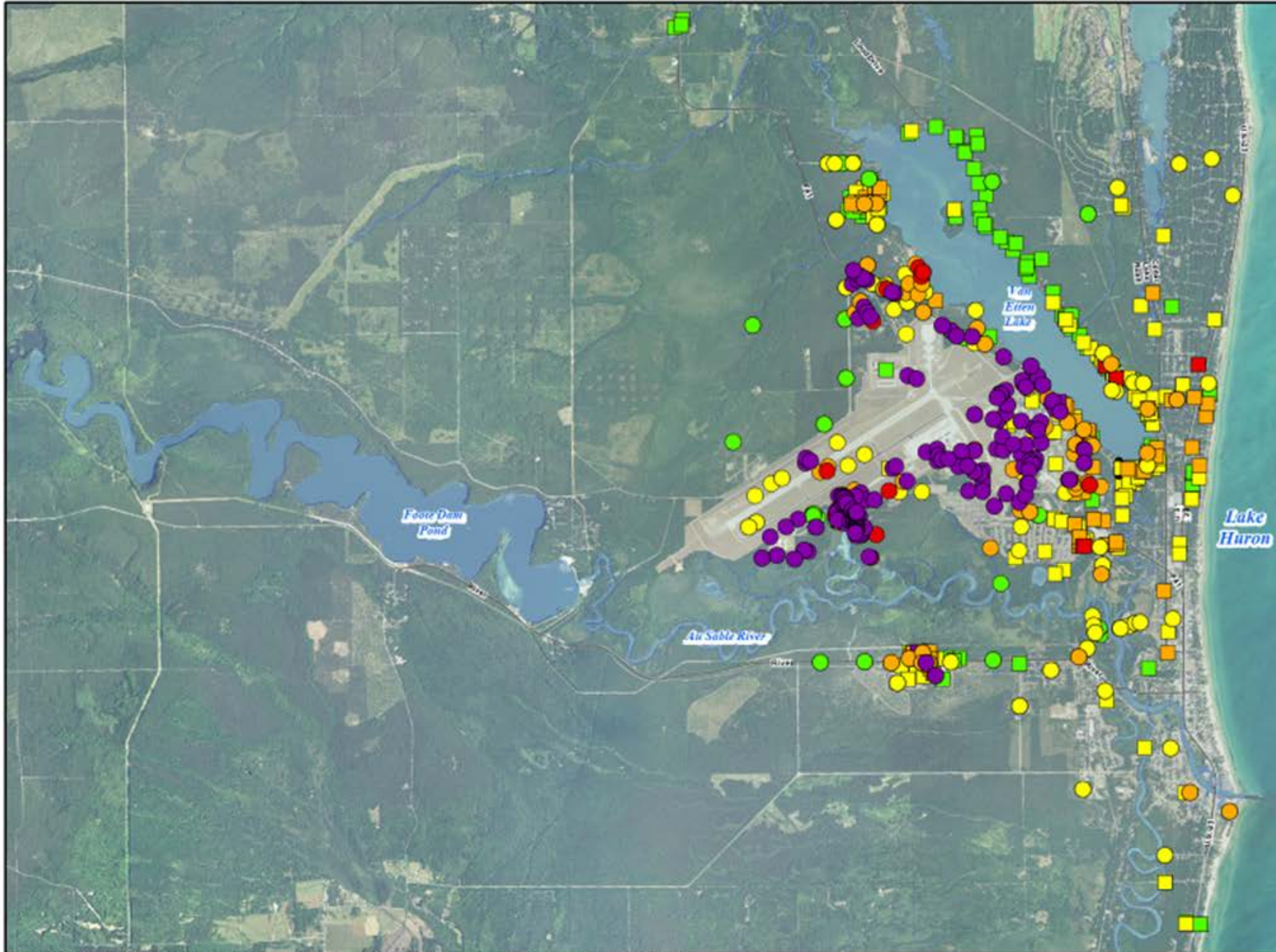
- Non-Detect
- <10
- 10 - <50
- 50 - <70
- >70

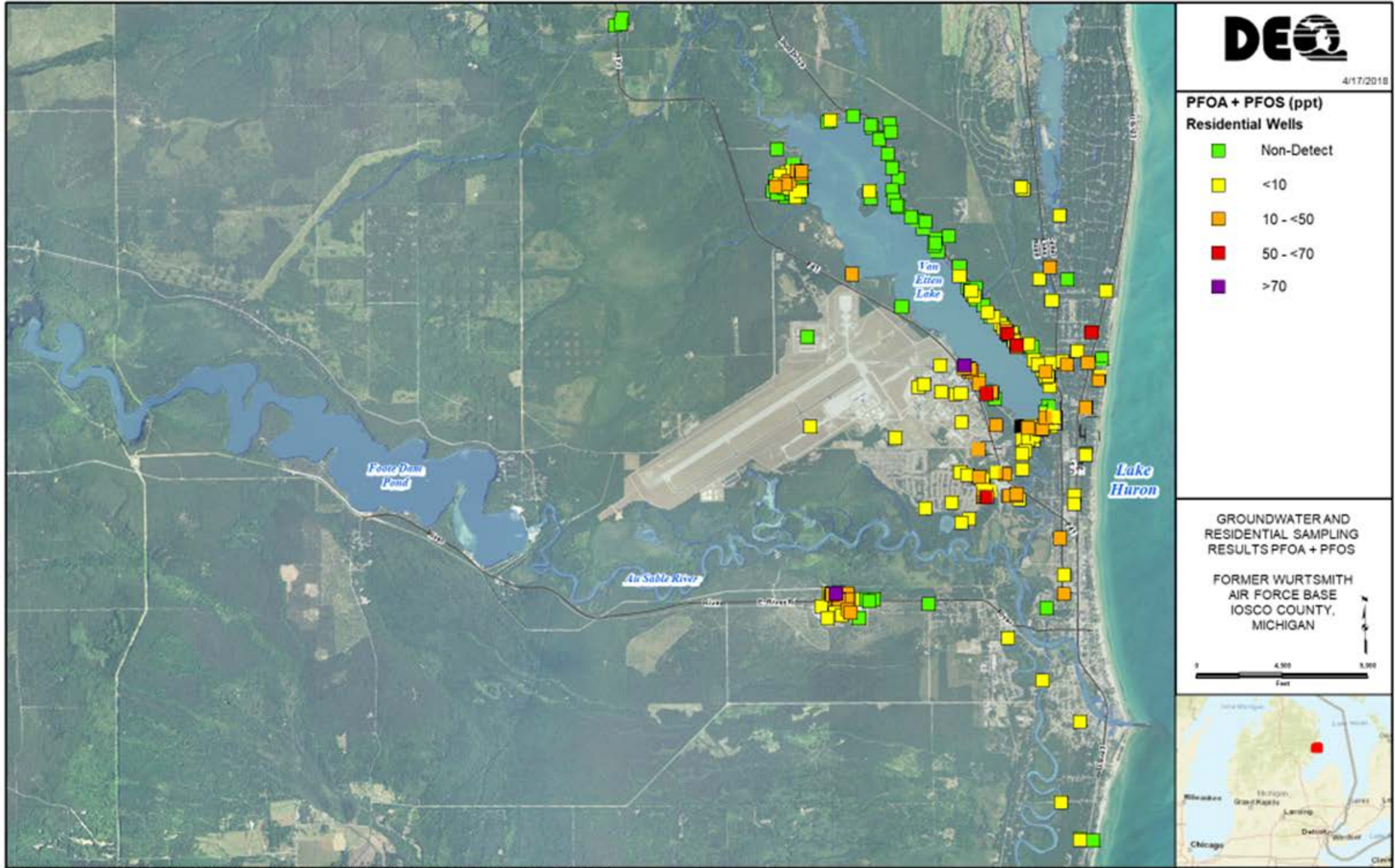
Groundwater Samples

- Non-Detect
- <10
- 10 - <50
- 50 - <70
- >70

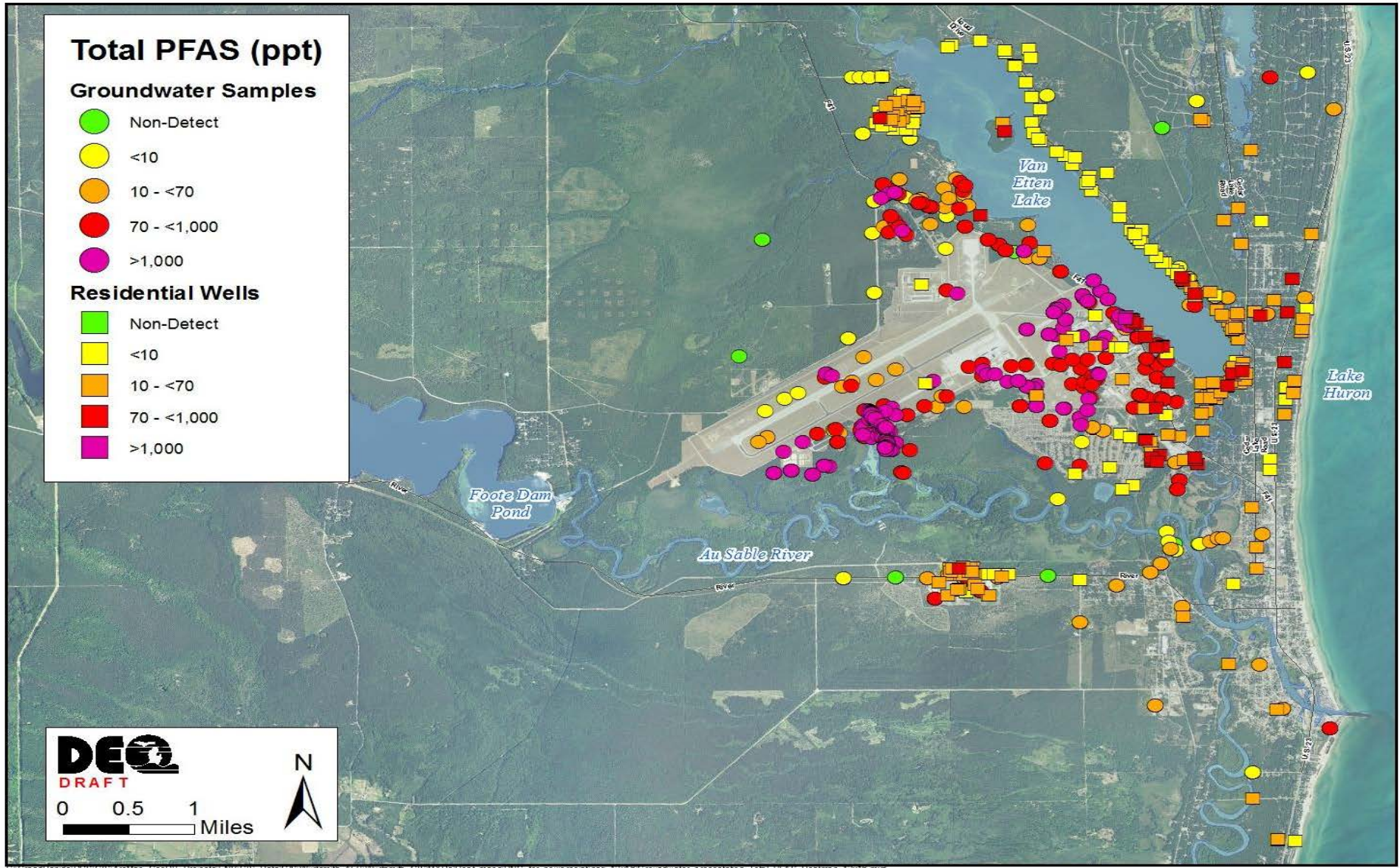
GROUNDWATER AND
RESIDENTIAL SAMPLING
RESULTS PFOA + PFOS

FORMER WURTSMITH
AIR FORCE BASE
IOSCO COUNTY,
MICHIGAN





Groundwater TotalPFAS



G:\GrandRapids\DCS\GIS\ArcMap_GeODB_Projects\ENV\GIS_Data\GIS\Wurtsmith_AFB\Wurtsmith_GISMXDs\Heat_map\IPNG_for_powerpoint\png_12x16\Groundwater_presentation_Total_PFAS_Heatmap_12x16.mxd

MDEQ Field Events

- Residential Well Sampling – Colbath & River Road Areas
- Addressing Foam
- Plume Modeling Report
- Surface Water Sampling

MDEQ

Field Events

(Continued)

- Groundwater Flow Monitoring
- Well Drilling
- Fish Sampling
- Deer Herd Sampling

Link to State of Michigan, Wurtsmith Web Page Contact Information

http://www.michigan.gov/som/0,4669,7-192-45414_45929_83470---,00.html

Robert Delaney

delaneyr@michigan.gov

517-284-5085



**Former Wurtsmith AFB
FY18 Projects, Programming and Updates
12 April 2018**

PROJECT	DESCRIPTION	STATUS UPDATE	PROJECTED COMPLETION
New GAC treatment system <i>*Aerostar</i>	New treatment system will combine the Arrow Street and Benzene Plant influent streams and treat PFOS/PFOA using GAC treatment	Construction work began 2 April 2018	August 2018
Supplemental Site Investigation <i>*AmecFW</i>	SSI sampling will gather additional data to build on initial site inspection work. SSI work will define plume locations, potential movement and understand plume fate	Phase II sampling begins in May and will include areas 1,2,7 and 15	Phase 1: July 2019 (includes 2017 and 2018 fieldwork)
Influent/ Effluent monitoring	PFOS/PFOA Influent/Effluent monitoring for Mission Street, Arrow Street and Benzene Plant PTS	With current contract scope and funding we sampled once in 2017 and once in 2018	TBD
Mission Street discharge mitigation	PTS Discharge Mitigation for PFOS/PFOA above surface water discharge limit	PRD process for FY19 – contingent on funding	TBD
Remedial Action, Operation and Monitoring <i>*Bay West</i>	Central Region Performance Based Remediation. Ongoing remedial operations, monitoring, optimization, site closures and five-year review	Ongoing	Bay West contract completion: June 2021 (follow-on PBR)
LF30/31 remedy enhancements	Incorporating recommendations from complex site investigation	PRD (<i>Program Requirements Development</i>) process for FY19	TBD – contingent on funding
LF30/31 Hydraulic Gradient Control	Hydraulic Gradient Control to Prevent Leachate Migration. Feasibility study for phytoremediation	PRD process for FY19 – contingent on funding	TBD
Remedial Action Site SS072 <i>*Bay West PBR</i>	Full-scale Enhanced Bioremediation implementation to treat PCE contamination	Ongoing	Initial injection following system construction (2018), plus every 2 years



AIR FORCE CIVIL ENGINEER CENTER BASE REALIGNMENT AND CLOSURE PROGRAM

WHERE TO FIND WURTSMITH RESTORATION PROJECT INFORMATION...

AFCEC Website

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

The AFCEC website is an official Air Force website managed by the Air Force Installation and Mission Support Center's Public Affairs Office.



Online

The public site delivers news and information on AFCEC and the work the agency does to advance the Air Force mission, including Base Realignment and Closure.

The BRAC Program webpage includes sub pages for all BRAC installations. The Former Wurtsmith Air Force Base page provides historical background on Wurtsmith, base closure and ongoing environmental restoration work. All information on this site is Air Force-produced and cleared for public release.

- RAB Documents: agendas, minutes, presentations, training materials, etc.
- Air Force press releases/articles
- Project fact sheets
- Frequently Asked Questions
- Informational materials
- Photos/videos
- Announcements
- Administrative Record link
- Local Redevelopment Authority information and contacts

Administrative Record

<http://afcec.publicadmin-record.us.af.mil>

The AR is the Air Force's official storage location and legal record for documents that form the basis for selecting a Comprehensive Environmental Response, Compensation and Liability Act, or CERCLA, response action. The database is organized by military site and includes sortable search filters to refine results. All documents include an AR number on the cover sheet. The AR is updated monthly by the Air Force as final documents are published.

- Public notices
- Official documents with public comments
- Proposed plans/work plans
- Records of Decision (RODs)
- Minutes from decisional BRAC Coordination Team Meetings
- Select draft reports
- Final Reports: Preliminary Assessments, Site Inspections, etc.

Information Repository

Robert J Parks Library: 6010 N Skeel Ave.

The Air Force maintains a local IR of hard-copy documents for public access at all BRAC installations. The IR includes the same documents as the AR, as well as:

- Monthly BCT meeting agendas and minutes
- Draft documents of public interest
- RAB Documents: agendas, minutes, presentations, training materials, etc.

Local



Congress of the United States
Washington, DC 20515

April 18, 2018

The Honorable John W. Henderson
Assistant Secretary of the Air Force for
Installations, Environment and Energy
1665 Air Force Pentagon
Washington, DC 20330

The Honorable Lucian Niemeyer
Assistant Secretary of Defense for
Energy, Installations and Environment
3400 Defense Pentagon, Room 5C646
Washington, DC 20301-3400

Assistant Secretary Henderson and Assistant Secretary Niemeyer:

Residents living near former Wurtsmith Air Force base (Wurtsmith) have had their groundwater and surface water contaminated by per- and polyfluoroalkyl substances (PFAS) from the use of aqueous film forming foam (AFFF) by the U.S. Department of Defense (DOD). We ask that the DOD use this year's funding to prioritize stopping additional contamination of groundwater and surface water coming from Wurtsmith.

Exposure to PFAS has been linked to cancer as well as thyroid, kidney, liver, heart and reproductive problems. In the Fiscal Year 2018 Consolidated Appropriations Act, Congress increased funding for environmental remediation at BRAC bases by \$54 million, increasing the program to \$310 million. In the accompanying committee report, it states specifically that the Secretary of the Air Force should prioritize clean up at PFAS contaminated sites. While we recognize there is a significant backlog of environmental remediation projects, the DOD should focus its funding on sites, such as Oscoda, Mich., that Congress intended.

In 2016, the U.S. Environmental Protection Agency (EPA) established new lifetime health advisories for two types of PFAS—perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). In addition, pursuant to state law¹, the state of Michigan's cleanup criteria for groundwater for the protection of drinking water was established January 10, 2018. Furthermore, the state of Michigan has water quality standards which apply to surface waters, and also to groundwater venting to surface waters. Michigan regulations² specify that water quality standards shall be met in *all* waters of the state. The DOD must comply with Michigan's water quality standards and cleanup criteria, and must stop the movement of contamination from the former base into groundwater and surface waters near Wurtsmith.

The DOD is currently installing granulated activated carbon (GAC) filter systems in two locations where water is treated and returned to surface waters. However, according to extensive sampling conducted by the Michigan Department of Environmental Quality (MDEQ), there is still a significant volume of PFAS contamination in the groundwater on the former base and

¹ Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

² Part 4 Rules, Water Quality Standards (of Part 31, Water Resources Protection, of Act 451 of 1994)

flowing off-base in groundwater and entering surface water. Additional treatment of the contaminated groundwater, including additional GAC filter systems, is needed. The DOD should purchase and install additional GAC filter systems to treat the groundwater and ensure it is complying with Michigan's laws to prevent further contamination from Wurtsmith.

The MDEQ estimates that in 2018 alone, \$36 million must be spent on remediation at Wurtsmith. Of that money, \$33 million is needed to fund six treatment systems that withdraw contaminated groundwater, treat it using GAC filter systems to remove PFAS, and reinject treated water into the aquifer or discharge to surface water. All six GAC systems would treat the plume that directly contaminates Van Etten Lake in Oscoda near Wurtsmith. One of the six GAC systems would also treat a portion of the plume impacting a children's YMCA camp on the lake.

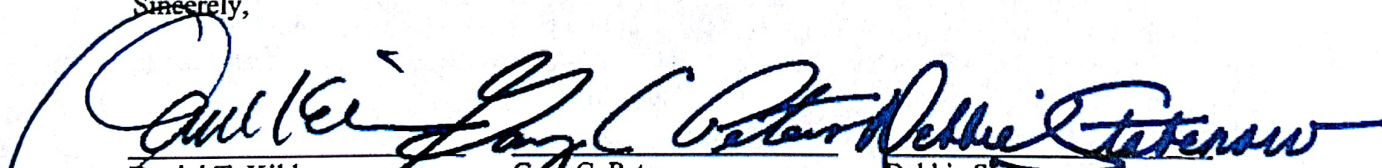
In addition, \$3 million would be used for expansion of a currently planned Air Force treatment system to allow for increased volume of contaminated groundwater to be treated.

Overall, to completely remediate the PFAS contamination at Wurtsmith, the MDEQ estimates it will cost at least \$180 million.

Frequently, we hear concerns from community leaders in Oscoda regarding the contamination's negative impact on the community's economy and housing market. The local tourist industry is losing business because people are afraid of being exposed to PFAS while companies are having difficulty attracting talent for jobs due to concern with safety of the water.

The community of Oscoda had this contamination done to them – it was not the local community's fault. The residents of Oscoda have already suffered through the closure of Wurtsmith, they should not continue to suffer from the DOD's actions. Thus, the DOD must immediately direct funds to stop further contamination of the groundwater and surface water.

Sincerely,



Daniel T. Kildee
MEMBER OF CONGRESS

Gary C. Peters
U.S. Senator

Debbie Stabenow
U.S. Senator

AIR FORCE ACRONYM LIST: WURTSMITH RAB

AF – Air Force

AFB – Air Force Base

AFCEC – Air Force Civil Engineer Center

AFFF – Aqueous Film Forming Foam

AFIMSC – Air Force Installation and Mission Support Center

AR – Administrative Record

ATSDR – Agency for Toxic Substances and Disease Registry

BCT – BRAC Cleanup Team

BEC – BRAC Environmental Coordinator

BRAC – Base Realignment and Closure

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

DERP – Defense Environmental Restoration Program

DoD – Department of Defense

DSMOA – Defense and State Memorandum of Agreement

DW – Drinking Water

EA – Environmental Assessment

EC – Emerging Contaminant

EIS – Environmental Impact Statement

EPA – Environmental Protection Agency

ERP – Environmental Restoration Program

ERD – Enhanced Reductive Dechlorination

ESE – Extended Site Evaluation

FAQs – Frequently Asked Questions

FOUO – For Official Use Only

FTA – Fire Training Area

GAC – Granulated Activated Carbon

GPM – Gallons Per Minute

GW – Groundwater

HA – Health Advisory

IR – Information Repository

IRP – Installation Restoration Program

IX – Ion Exchange

LHA – Lifetime Health Advisory

LUC – Land Use Control

MDEQ – Michigan Department of Environmental Quality

MDHHS – Michigan Department of Health and Human Services

MMRP – Military Munitions Response Program

NEPA – National Environmental Policy Act

NOV – Notice Of Violation

OP – Operating Procedures

OOC – Out Of Cycle

PA – Preliminary Assessment

PAO – Public Affairs Office(r)

PFAS – Per- and Polyfluoroalkyl Substances

PFCs – Perfluorinated Compounds

PFOS/PFOA – Perfluorooctanesulfonic and Perfluorooctanoic Acids

PM – Project Manager

POL – Petroleum, Oil and Lubricant

PPB – Parts per Billion

PPT – Parts per Trillion

PRD – Program Requirements Development

PTS – Pump and Treat Systems

RAB – Restoration Advisory Board

RAO – Remedial Action Objectives

RI – Remedial Investigation

ROD – Record of Decision

SC – Site Closure

SI – Site Inspection

SSI – Supplemental Site Inspection

TCE – Trichloroethene or Trichloroethylene

TRC – Technical Review Committee

USAF – United States Air Force

VI – Vapor Intrusion

VOCs – Volatile Organic Compounds

WBT – Whole Base Transfer

RAB Survey Feedback Summary

14 April 18 Wurtsmith RAB meeting

MEETING EVALUATION					
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Agenda content was comprehensive and relevant.		2	1	2	
Presenters were effective.		1	2	2	
Satisfied with meeting venue and set-up.			1	3	1
Overall, the meeting was worthwhile.			1	4	

STRENGTHS	IMPROVEMENTS
Lots of encouragement for government agencies to work together	Provide better timeline for complete remediation
Good moderation and forum	Seating around table is too tight
Meetings are improving	Need more info/updates from MDEQ and other agencies
Agenda content was relevant	Deliver full solutions
Open discussion	Action item review should be a priority
Lots of meaningful input	Unanswered action items
Less interruptions during presentations	

Requests/Comments:

1. What other methods are being used to remove these chemicals?
2. Would like to see all data incorporated in maps and presentations
3. Provide timeline for follow-on actions
4. Since restoration activities are so slow, what else can be done to protect people in the community?

Former Wurtsmith AFB Restoration Advisory Board Action Item Tracker
OPEN ACTION ITEMS as of 5/7/18

No.	Date Created	Action Item	Comments/Resolution	Status	Owner	Due Date
13	13-Feb-18	Consider viability of including a conference call option at future RAB meetings.	AF: Conference call option could be exercised in special circumstances as need arises. If so, a meeting room equipped with teleconference capability would be needed.	Open	Air Force (M. Marrs)	6-Jun-18
14	13-Feb-18	Provide GAC Treatment Plant plans to the Oscoda Planning Commission.	AF: A disk with completed design could be provided to the planning board for their records. Need an address to send it to.	Open	Air Force (M. Marrs)	6-Jun-18
16	13-Feb-18	Modify the FY18 Project Summary document by adding out-of-cycle funding requests and other projects.		Open	Air Force (M. McClendon)	18-Apr-18
17	13-Feb-18	Consider placing a boom, or another structure, on Van Etten Creek to capture the foam.		Open	MDEQ (B. Delaney)	18-Apr-18
18	13-Feb-18	Discuss how to integrate CERCLA and NEPA processes when USFS permitting requirements interact with the environmental restoration program at the former Wurtsmith AFB.	AF: DoD determined NEPA does not apply to response actions that fully comply with CERCLA and the NCP. The Air Force will cooperate with USFS for any requirements they have for actions proposed on USFS lands.	Open	Air Force (M. Marrs) and USFS (T. Martoglio)	18-Apr-18
19	13-Feb-18	Inform RAB members about the effectiveness of a resin exchange system (as compared to traditional PFOS/PFOA treatment systems such as GAC filtration).	AF: It is premature to try and present factual information on this. Resin for use for PFCs is in its infancy. It will take several years of experience to be able to provide any reliable information on resin for PFCs. We will provide information as it becomes available. Right now Pease and Reese are using the resin technology and, when case studies are developed from that experience, presentations can be developed.	Open	Air Force (M. Marrs)	18-Apr-18

Attachment 9

No.	Date Created	Action Item	Comments/Resolution	Status	Owner	Due Date
20	13-Feb-18	Determine agency responsible for addressing sample results that exceed the EPA lifetime HA for PFOS/PFOA at the plumes near the high school.		Open	Air Force (M. Marrs)	18-Apr-18
21	18-Apr-18	Air Force and MDEQ collaborate to put in place interim remedial action to address PFOS/PFOA contamination until pump and treat systems are in place and functioning.	Requested by Arnie Leriche at 18 April 2018 RAB meeting.	Open	Air Force (M. Marrs) and MDEQ (B. Delaney)	TBD
22	18-Apr-18	Provide status of (and release) the MDEQ/MPART report entitled "Modeling of PFAS Plumes Migration and Source."	Requested by Arnie Leriche at 18 April 2018 RAB meeting.	Open	MDEQ (B. Delaney)	TBD
23	18-Apr-18	Air Force and OWAA coordinate to deconflict investigative/remedial activities and airport operations.	Requested by Bill Gaines at 18 April 2018 RAB meeting.	Open	Air Force (M. Marrs) and Mike Munson (OWAA)	TBD
24	18-Apr-18	Describe extent, and sources of, contamination on National Forest system land (specifically Clark's Marsh). Indicate which party was responsible for contaminating Clark's Marsh.	Requested by Tony Martoglio and Tim Cummings at 18 April 2018 RAB meeting (between time 1:56:31 and 1:57:55 on video).	Open	Air Force (M. Marrs)	TBD

Attachment 9

Former Wurtsmith AFB Restoration Advisory Board Action Item Tracker
CLOSED ACTION ITEMS as of 5/7/18

No.	Date Created	Action Item	Comments/Resolution	Status	Owner	Date Completed	Old No.
1	2-Aug-17	The Air Force will develop a Wurtsmith-RAB-specific acronym list for RAB members.		Closed	Air Force	19-Sep-17	n/a
1	2-Aug-17	Properly orient attendees to maps and figures when they are presented at RAB meetings and ensure that they are easily viewable.	This was converted from an AI to a RAB meeting standard.	Closed	All presenters	3-May-18	
2	2-Aug-17	The Air Force will provide an overview of the CERCLA process; explaining the process from site discovery to site closure.		Closed	Air Force	19-Sep-17	n/a
2	2-Aug-17	When presenters discuss the EPA's Heath Advisory for PFOS/PFOA or other regulatory standards, indicate what environmental media they are talking about (ex: groundwater, surface water, soil, air, etc.).	This was converted from an AI to a RAB meeting standard.	Closed	All presenters	3-May-18	
3	2-Aug-17	The Air Force will create a frequently asked questions (FAQ) sheet concerning RABs and the Wurtsmith environmental program for RAB members.		Closed	Air Force	19-Sep-17	n/a
3	2-Aug-17	When presenters discuss PFOS/PFOA levels, convert all measurements into parts per trillion.	This was converted from an AI to a RAB meeting standard.	Closed	All presenters	3-May-18	
4	2-Aug-17	The Air Force will email an electronic copy of the Draft Wurtsmith RAB Operating Procedures to the RAB members.		Closed	Air Force	15-Aug-17	n/a
4	19-Sep-17	Advise RAB members which documents have been added to the AR/IR since the last RAB meeting.	This was converted from an AI to a RAB meeting standard.	Closed	Air Force (M. Marrs)	3-May-18	
5	19-Sep-17	The RAB should request that the next MDHHS public meeting be held in coordination with the November RAB meeting. So if the RAB is scheduled for November 1, the MDHHS should be held on November 2.		Closed	Air Force	13-Feb-18	
5	2-Aug-17	As requested, the Air Force will email a copy of the former Pease AFB RAB Operating Procedures to the RAB members.		Closed	Air Force	15-Aug-17	n/a
6	1-Nov-17	Include revision date on all documents shared with the RAB.	This was converted from an AI to a RAB meeting standard.	Closed	Air Force (M. Marrs)	3-May-18	
6	2-Aug-17	The Air Force will send out a link to the DoD RAB Rule and Handbook and the Wurtsmith BRAC webpages: RAB Handbook: http://www.denix.osd.mil/rab/home/unassigned/rab-rule-handbook/ ; DoD RAB Rule: https://www.gpo.gov/fdsys/granule/FR-2006-05-12/06-4246 ; Air Force Administrative Record: http://afcec.publicadmin-record.us.af.mil/ ; Wurtsmith BRAC webpage: http://www.afcec.af.mil/Home/BRAC/Wurtsmith.asp		Closed	Air Force	15-Aug-17	n/a
7	2-Aug-17	The Air Force will specify points of contact for communicating with the RAB.		Closed	Air Force	15-Aug-17	n/a
7	1-Nov-17	Send meeting presentations electronically to RAB members.	This was converted from an AI to a RAB meeting standard.	Closed	Air Force	3-May-18	

Attachment 9

No.	Date Created	Action Item	Comments/Resolution	Status	Owner	Date Completed	Old No.
8	2-Aug-17	The Air Force will email the Community RAB members requesting interested parties or nominations for the Community Co-Chair position.		Closed	Air Force	15-Aug-17	n/a
9	2-Aug-17	The Air Force will email the RAB members confirming the date, location and other items for the proposed RAB orientation/training on 19 September 2017.		Closed	Air Force	15-Aug-17	n/a
9	1-Nov-17	Send MDHHS presentation to RAB members electronically.	Included as attachment to 1 Nov 2017 RAB minutes.	Closed	MDHHS (C. Bush)	13-Feb-17	
10	1-Nov-17	Clarify for RAB members the PFAS historical timeline, purpose, schedules, and locations of the GAC unit(s) [Arrow St and Benzene pump and treat systems]. Describe the information the Air Force has provided to the community about siting the GAC unit(s).	AF: One GAC treatment plant is in place a FT-02 and has been operating since March 2015. Only other GAC is for APTS and BPTS is scheduled for operation in August this year.	Closed	Air Force (M. Marrs)	3-May-18	
11	19-Sep-17	Community co-chair election		Closed	All	1-Nov-17	n/a
12	18-Jan-18	Specify which documents are available at the information repository and which are available elsewhere (including detailed location/website link); record date that hard copy documents are placed in the information repository.		Closed	Air Force (M. McClendon)	18-Apr-18	
15	13-Feb-18	Determine whether the contractor, which is constructing the GAC treatment plant, will be penalized for construction delays.	There are no liquidated damages built into the contract for the GAC facility. All contracts are reviewed and performance ratings are assigned based upon the contractor's success in meeting milestone dates for Wurtsmith.	Closed	Air Force (M. Marrs)	3-May-18	

Attachment 9

Former Wurtsmith AFB Restoration Advisory Board Action Item Tracker
FUTURE AGENDA ITEMS as of 5/7/18

No.	Agenda Topic	Discussion Points	Timeframe
2	How to apply for Technical Assistance for Public Participation grants	Consider the following elements: support document management at library; video broadcasting RAB meetings; hold additional outreach meetings; include examples of grant scopes/outcomes.	18-Apr-18
4	Document management	1) What types of documents does each stakeholder agency produce (pertaining to environmental restoration of the former Wurtsmith AFB)?; 2) How can RAB members and the public access these documents (e.g., Admin Record, elsewhere online, library, etc.)?; 3) When are such documents generally made available to the public?	18-Apr-18
5	Tiered approach and budget process	Discuss tiered approach by which the Air Force prioritizes investigative and remedial activities. Provide budget update. Consider inviting elected officials to address DoD funding.	TBD
6	Fish tissue sampling in Clark's Marsh	Provide update about fish tissue sampling in Clark's Marsh	TBD
7	Treatment systems for PFOS/PFOA contamination	Provide update on treatment systems the Air Force could employ to mitigate PFOS/PFOA contamination.	TBD
8	Residential well sampling	Identify residential wells the Air Force intends to sample during the upcoming three-year monitoring program.	TBD
9	Incorporating data from other stakeholder organizations	Describe how the Air Force incorporates, reviews, and utilizes data generated by MDEQ or other agencies.	TBD
10	PFOS/PFOA contamination via surface water to Lake Huron	Describe actions to mitigate PFOS/PFOA contamination via surface water into Lake Huron. Describe surface water detections to date. Indicate area that have been tested and additional areas that could be tested. [Note: Reference time 2:23:42 through 2:25:22 of 4/18/18 RAB video.]	TBD

Attachment 9

Former Wurtsmith AFB Restoration Advisory Board Meeting Attendance Tracker as of 4/18/18

Affiliation	Designation	8/2/17	9/19/17	11/1/17	2/13/18	4/18/18
Community RAB members						
Community RAB Co-Chair	Arnie Leriche	✓	✓	✓	✓	✓
Community RAB Member Place 1 (Primary)	Joseph Plunkey	✓	✓	✓		✓
Community RAB Member Place 1 (Alternate)	Daniel Stock	✓	✓	✓	✓	✓
Community RAB Member Place 2 (Primary)	Joseph Maxwell	✓	✓	✓	✓	✓
Community RAB Member Place 2 (Alternate)	Catherine Larive	✓		✓		✓
Community RAB Member Place 3 (Primary)	Cathy Wusterbarth	✓	✓	✓	✓	✓
Community RAB Member Place 3 (Alternate)	Martha Gottlieb	✓		✓		
Community RAB Member Place 4 (Primary)	Matthew Hegwood	✓	✓	✓		
Community RAB Member Place 4 (Alternate)	Martha Gottlieb				✓	
Community RAB Member Place 5 (Primary)	Ryan Mertz		✓	✓		✓
Community RAB Member Place 5 (Alternate)	Daniel Stock					✓
Community RAB Member Place 6 (Primary)	Robert Tasiar	✓	✓	✓	✓	✓
Community RAB Member Place 6 (Alternate)	Irene Dunn	✓	✓	✓		✓
Community RAB Member Place 7 (Primary)	William Gaines	✓	✓	✓	✓	✓
Community RAB Member Place 7 (Alternate)	James Davis	✓	✓			
Community RAB Member Place 8 (Primary)	Jerry Schmidt	✓	✓	✓	✓	✓
Community RAB Member Place 8 (Alternate)	James Davis			✓		
Community RAB Member Place 9 (Alternate)	Daniel O'Connor	✓	✓	✓	✓	✓
Government RAB members						
Government RAB Member: Air Force Co-Chair (Primary)	Matt Marrs	✓	✓	✓	✓	✓
Government RAB Member: Air Force Co-Chair (Other)						
Government RAB Member: Oscoda Township (Primary)	Tim Cummings		✓	✓	✓	✓
Government RAB Member: Oscoda Township (Other)	John Nordeen					
Government RAB Member: AuSable Township (Primary)	Jeff Moss	✓	✓	✓	✓	✓
Government RAB Member: AuSable Township (Other)						
Government RAB Member: Michigan Department of Environmental Quality (Primary)	Bob Delaney	✓	✓	✓	✓	✓
Government RAB Member: Michigan Department of Environmental Quality (Other)						
Government RAB Member: Oscoda Wurtsmith Airport Authority (Primary)	Michael Munson	✓	✓	✓	✓	✓
Government RAB Member: Oscoda Wurtsmith Airport Authority (Other)						
Government RAB Member: Department of Health District #2 (Primary)	Chuck Lichon	✓	✓	✓	✓	✓
Government RAB Member: Department of Health District #2 (Other)						
Government RAB Member: Michigan Department of Health & Human Services (Primary)	Chris Bush	✓		✓		✓
Government RAB Member: Michigan Department of Health & Human Services (Other)					Bill Farrell	
Government RAB Member: USDA Forest Service (Primary)	Tony Martoglio	✓	✓	✓	✓	✓
Government RAB Member: USDA Forest Service (Other)						