

Air Force Installation & Mission Support Center



Wurtsmith Restoration Advisory Board Meeting

22 Jul 2020

AFCEC/CIB



Former Wurtsmith AFB RAB Agenda



Welcome

- Introductions
- Stakeholder updates

Presentations

- USAF Status of PFOS/PFOA Treatment

BREAK

- USAF Remedial Investigation Plan
- USAF Interim Actions

Presentations (cont.)

- Community RAB Elections
- Action Item Review
- Announcements

RAB Business

- Public may provide three-minute verbal comments

Public Comment



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RAB Rules



- | | |
|-----------|------------------------------------------------------------------------------------------|
| 01 | Respect on 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 different 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. |



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Stakeholder Updates

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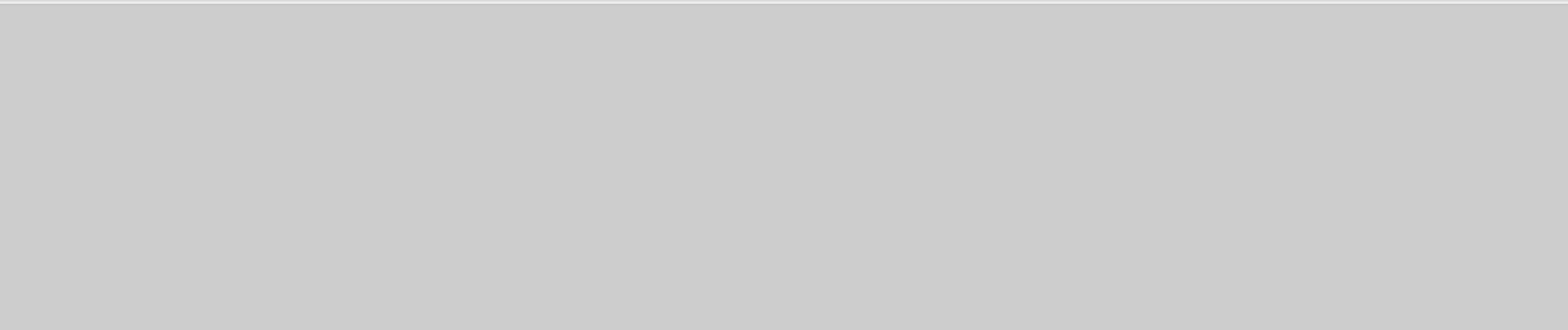
Former Wurtsmith AFB RAB Stakeholder Updates



- **Remedial Investigation/Interim Remedial Action contract**
 - **Awarded 14 Jul 20**
 - **The detailed plan/schedule will be briefed at the Oct 2020 RAB**
- **Fourth 5-Year Review in work**
- **Relative Risk Site Evaluation Worksheets will be released shortly**
 - **Public Notice**
 - **Loaded to the Administrative Record**



Former Wurtsmith AFB RAB Stakeholder Updates



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

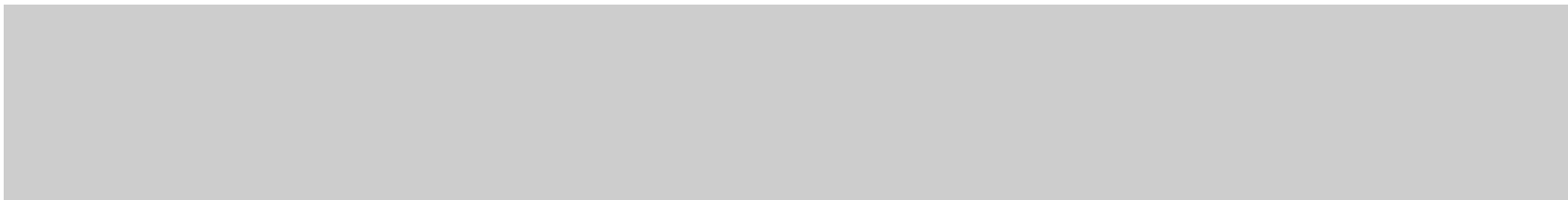
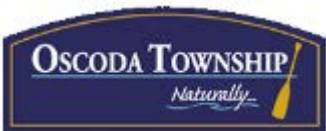
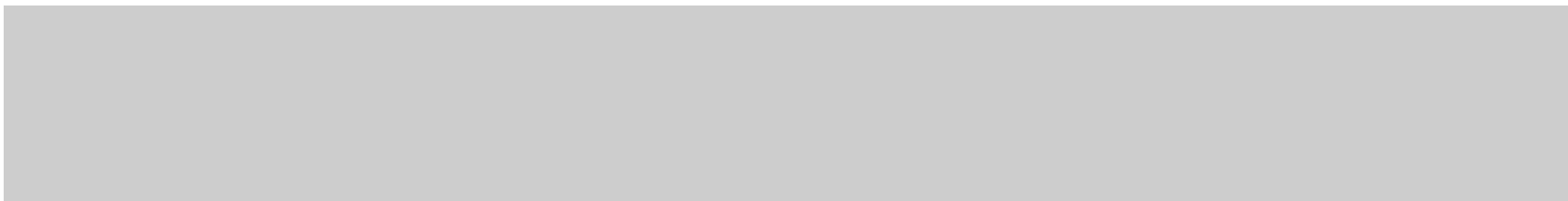
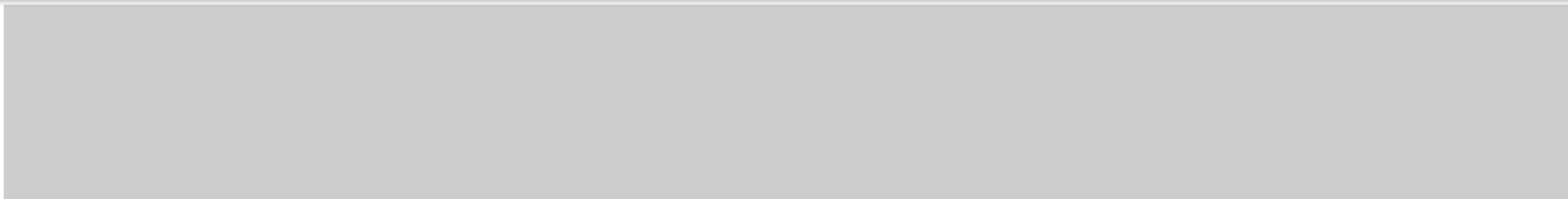


Community
RAB Members

- “NOW” and it’s Community RAB members engagements with public, officials, others
- Community RAB efforts on remediation, restoration and engagement with public



Former Wurtsmith AFB RAB Stakeholder Updates





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PFOS/PFOA Treatment Status



- **Status of Existing PFAS Treatment Systems**
 - **Mission Street Pump and Treat System (Mission PTS)**
 - **Central Treatment System (Central TS)**
 - **Fire Training Area-02 (Fire Training-02)**
- **Fire Training-02 History**
 - **Original goals**
 - **Effectiveness of plume control**



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Mission PTS Status



- **Operational since Dec 2019**
- **Ion Exchange Resin System**
- **Treated over 43 million gallons since start-up**
- **Flow rate approx. 190 gallons per minute (gpm)**
- **Operational run time >95%**
- **PFOS, PFOA, and PFHxS effluent: <4 nanograms/liter (ng/L)**



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Central TS Status



- **Operational since Aug 2018**
- **Granular Activated Carbon System**
- **Treated over 206 million gallons since start-up**
- **Flow rate approx. 250 gpm**
- **Operational run time >95%**
- **PFOS, PFOA effluent: < 4 ng/L**



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Fire Training-02 Status



- **Operational since April 2015**
- **Granular Activated Carbon System**
- **Treated over 619 million gallons since start-up**
- **Flow rate approx. 250 gpm**
- **Operational run time >95%**
- **PFOS/PFOA effluent: < 4 ng/L**



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Questions



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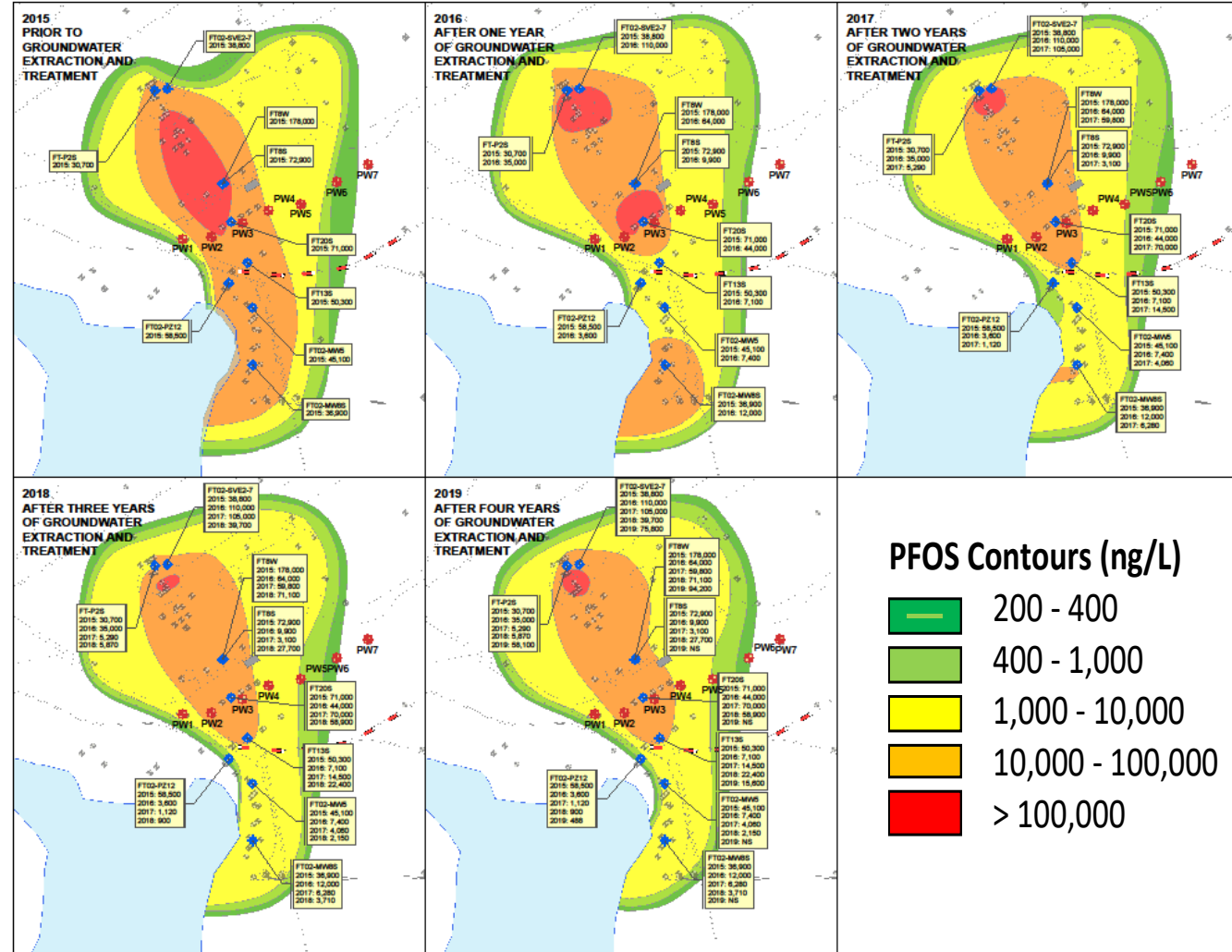
Fire Training-02 History



- **Interim pump and treat system (PTS) installed April 2015**
- **Implemented as a Time-Critical Removal Action not the final remedial action**
- **Designed to address 2009 EPA Provisional Health Advisory (HA) of 200 ppt for PFOS and 400 ppt for PFOA**
 - **7 extraction wells capture groundwater**
 - **Two 20,000 lbs. Liquid GAC treatment vessels**
 - **Effluent discharges via 6 infiltration galleries**
 - **Effluent criteria for PFOA and PFOS is 40 ng/L and 20 ng/L, respectively**



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- Interim PTS substantially treated the PFOS/PFOA plume and significantly cut off migration
- Expanded Site Inspection (ESI) evaluated the PFOS/PFOA at the new Lifetime HA of 70 ng/L; there is a larger area of PFOS/PFOA to be addressed
- The ESI recommended a remedial investigation to further delineate the suspected PFOS/PFOA source area and to expand the existing treatment system



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Questions



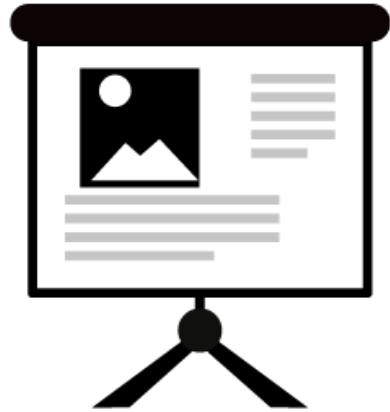
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Break



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Presentation:

USAF Remedial Investigation Plan



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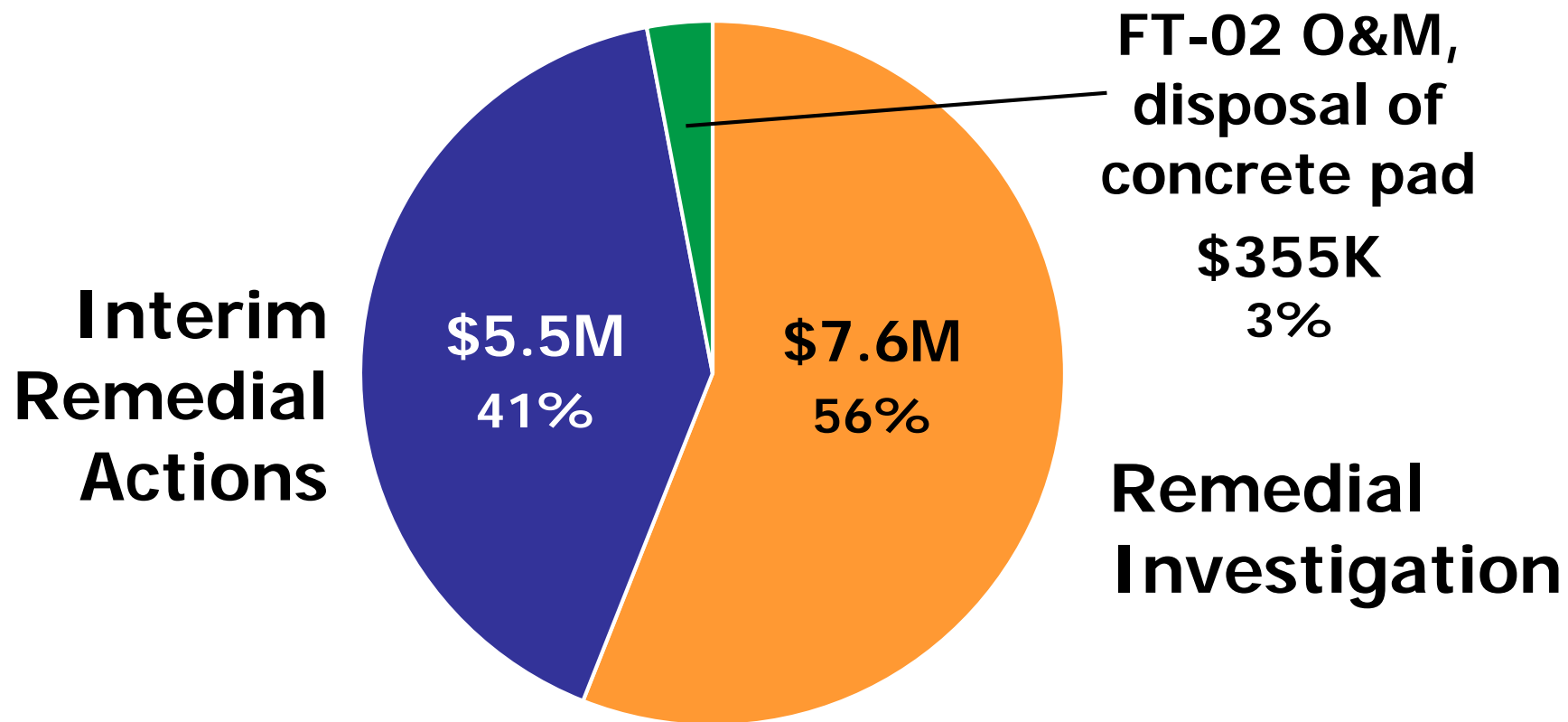


- **FY20 PFAS allocation status**
- **Remedial Investigation (RI) components**
- **Project timeline**



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\$13.5M Allocated





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RI Purpose



- **Delineate the nature and extent of PFAS**
- **Evaluate all applicable environmental media**
- **Assess baseline human and ecological risk**
- **Develop a comprehensive understanding of the fate and transport of PFAS**
- **Implement Interim Remedial Actions when necessary**



- **RI Scoping – Identify data needs for site characterization activities**
 - **Develop data quality objectives (DQOs)**
 - **Update the conceptual site model (CSM)**
 - **Update groundwater model**

- **Site Characterization**
 - **Develop sentinel well program**
 - **Collect groundwater samples (new/existing wells), soil samples, surface water samples, sediment samples**
 - **Assessment of PFAS impacted vadose zones**



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- **Human health risk assessment**
 - **Ecological risk assessment**
- and**
- **Interim Remedial Actions**



Planned Interim Remedial Actions (IRAs)

- **Address plume impacting Van Etten Lake**
 - Determine extraction well locations and install new wells
 - Install additional treatment for the larger volume from new extraction wells

- **Fire Training-02 release affecting Clark's Marsh**
 - Determine extraction well locations and install new wells
 - Install additional treatment for the larger volume from new extraction wells
 - Expand existing infiltration gallery



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Factors Affecting Start up of IRAs



- **Finalize Project Requirements**
 - 3-D location of new extraction wells
 - New piping runs and utility connections
 - Treatment building infrastructure
 - Treatment system equipment
- **Proposed Plan and Interim ROD review period**
- **Design review period**
- **Rights of Way/Access to non-Air Force property**
- **Weather**
- **COVID-19?**



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Questions



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Coming Soon



**Relative Risk Site
Evaluation
(RRSE)
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AFB, Michigan
COMING SOON!**



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RRSE Agenda



- **What is the Relative Risk Site Evaluation (RRSE)?**
- **What is the framework to complete the RRSE?**
- **What restoration sites are required to be evaluated in the RRSE process?**
 - **How is the Contaminant Hazard Factor (CHF) determined?**
 - **How is the Migration Pathway Factor (MPF) determined?**
 - **How is the Receptor Factor (RF) determined?**
- **How is the media relative risk rating determined?**
- **How do I determine the Overall Site Category?**
- **Relative Risk Evaluation Summary and Installation Map**
- **How do I participate as Stakeholder?**



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RRSE Steps



- RRSE Presentations by the first week of August
- RRSE Worksheets posted to AR
- Public Notice – 30 day review



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Questions



Former Wurtsmith AFB RAB Projected Project Timeline



■ Interim Remedial Actions

- Start of designs: 4th quarter 2020
- Start of installation: 2nd quarter 2021
- Completion of installations: 1st quarter 2022

■ Remedial Investigation

- Quality Assurance Plan and Conceptual Site Model: 1st quarter 2021
- Start of fieldwork: 2nd quarter 2021
- Target completion of RI report: 3rd quarter 2022



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Conclusions



- **AF will verify design parameters for interim remedial actions in consultation with Michigan's Department of the Environment, Great Lakes, and Energy (EGLE), finalize work plans for these actions along with the design and installation schedules.**
- **AF will continue to evaluate the need for additional interim remedial actions during the RI to address an imminent threat in the short term, or stabilize a site, or prevent further migration of contaminants.**



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Questions



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RAB Business



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RAB Business



- **New Primary Member and Co-Chair Elections**
- **Action Item Review**
- **Procedures**
- **Community Co-Chair**



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Public Comment

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Former Wurtsmith AFB RAB Public Comment Period



Guidelines

- 01** | Indicate you want to make a comment (follow guidance)
- 02** | Wait until the facilitator states you can start your comment
- 03** | Three minute time limit
- 04** | RAB members will confer after your comment to see if a follow-up action is needed



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Conclusion, Adjournment



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