



# **FORT LEONARD WOOD MILITARY INSTALLATION RESILIENCE REVIEW**

## **Committee Kickoff Meeting**

September 16, 2024



# WELCOME AND INTRODUCTIONS

- Project Team

BENCHMARK

MARSTEL  DAY

Kimley»»Horn

WHITE & SMITH, LLC  
PLANNING AND LAW GROUP

- Committee Members

# MIRR OVERVIEW

- Military Installation Resilience Review
- Merges previous OLDCC programs into one broader program - JLUS/Compatible Use Studies + Resilience Studies
- OLDCC grant funding to local sponsor (MRPC)
- Requires nomination by installation.



**U.S. Department of Defense**  
Office of Local Defense  
Community Cooperation

# MIRR PROGRAM GOALS

- A cooperative, ***community-driven planning effort*** that leverages the capabilities and strengths of state and local governments to address resilience and encroachment risks;
- Protect and ***enhance the public health, safety, and general welfare*** of those living and working near an active military installation.
- Protect and ***enhance military readiness*** and defense capabilities while supporting continued community economic development;
- Enhance civilian and military ***communication and collaboration.***

# DEFINING RESILIENCE

- The capacity to withstand or to recover quickly from difficulties.
- The ability of a system / organization to withstand changes in its environment and still function.
- The adaptive capacities of communities and societies to manage change and adversities over time.
- The ability of buildings and infrastructure to absorb impacts without suffering complete failure



# INSTALLATION RESILIENCE FACTORS

FACTORS THAT ARE LIKELY TO IMPAIR THE CONTINUED OPERATIONAL UTILITY OF LOCAL MILITARY INSTALLATIONS.



## Extreme Natural Events

- Avalanche
- Drought
- Earthquake/ Seismic Concerns
- Landslide
- Lightning
- Tsunami
- Volcanic Activity
- Wildfire



## Water Supply

- Capacity
- Availability
- Contamination
- Salt Water Intrusion



## Flooding

- Tidal Surge
- Coastal Flooding
- Inland Flooding
- Riverine Flooding



## Land Use/ Development

- Air Quality
- Cultural Resources
- Environmental Justice
- Housing Availability
- Gate Access
- Light Pollution
- Encroachment
- Transportation
- Foreign Investment/Proximity
- Spectrum Encroachment
- Maritime Encroachment



## Severe Weather

- Extreme Temperatures
- Severe Thunderstorms
- Hurricane/ Tropical Storm
- Snow/Ice Storms
- Tornado



## Military Operational Impacts

- AICUZ/RAICUZ/RCUZ
- Airborne Noise
- Industrial Noise
- Artillery Noise
- Security
- Convoy Transportation
- Safety (explosives)



## Land Degradation

- Coastal Inundation
- Erosion
- Forest Health
- Invasive Species
- Permafrost
- Sea Level Rise
- Subsidence



## Infrastructure

- Stormwater
- Wastewater
- Water
- Telecommunications
- Electrical
- Gas



## Species & Habitat Concerns

- Critical Habitat
- Rare, Threatened, Endangered Species
- Special Species of Concern
- Invasive Species
- BASH



## Energy

- Renewable Energy Siting
- Compatibility
- Microgrid
- Energy Redundancy
- Energy Security

# MIRR PROCESS AND SCOPE

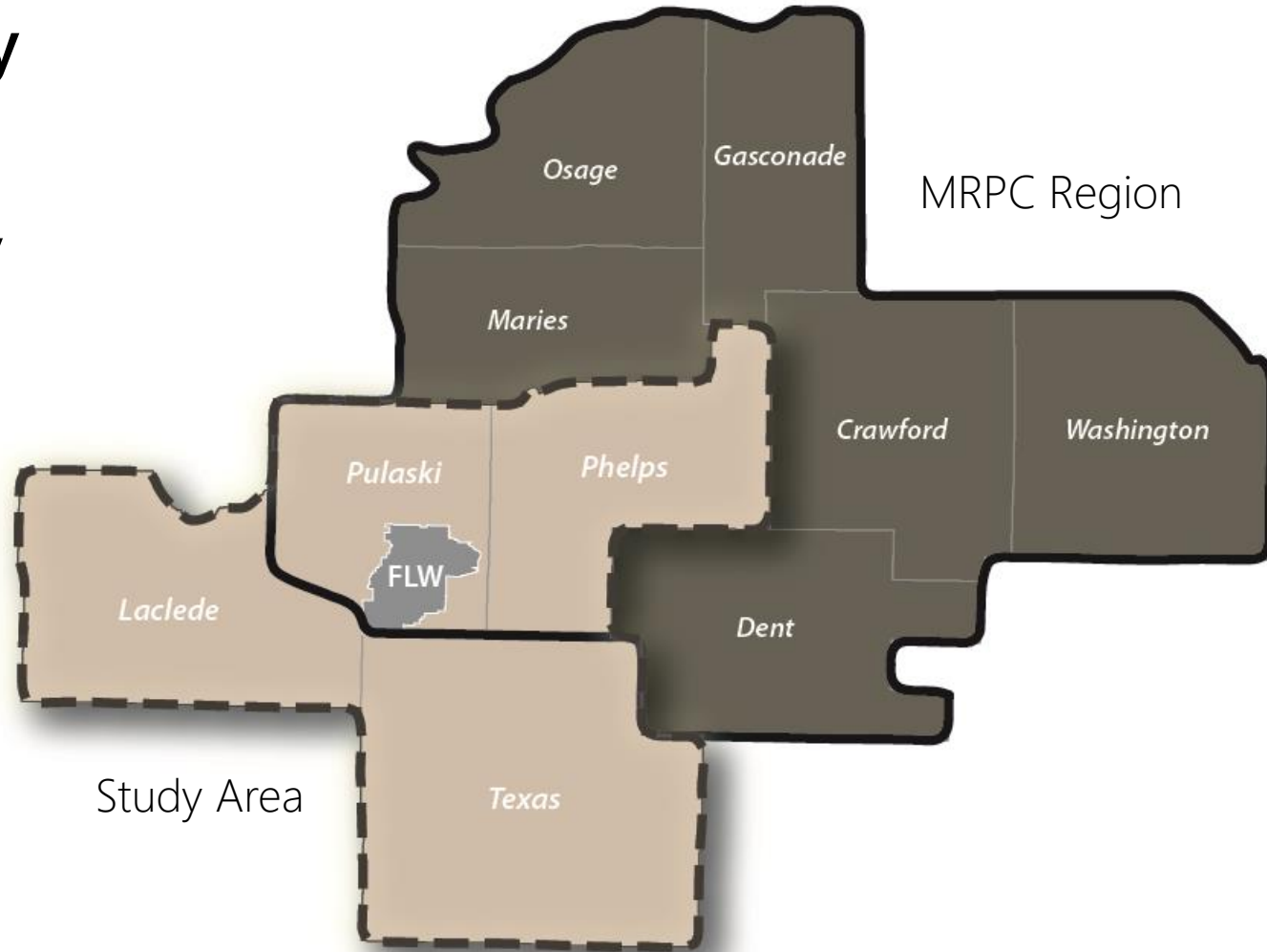
- **Installation / Community Engagement**
  - Executive & Technical Committee guidance
  - Local and regional partners (government and private sector)
  - Fort Leonard Wood agencies and directorates
- **Priority Sector Analysis**
  - Review plans, studies, and data
  - Key informant interviews
  - Document resilience factors
  - Develop consensus on priority sectors for analysis

# MIRR PROCESS AND SCOPE

- **Threats & Vulnerabilities Analysis**
  - Identify / Map Threats and Hazards
  - Vulnerability Assessment
  - Identify site-specific solutions and implementation strategies
  - Assess feasibility of solutions and prepare implementation plan
- **Final Report**
  - Draft report and implementation plan prepared
  - Reviews by Committees, FLW, MRPC, OLDCC
  - Final report prepared
  - Final presentations

# MIRR STUDY AREA

- Laclede County
- Phelps County
- Pulaski County
- Texas County



# MIRR PROJECT TIMELINE

**Kickoff**

August 2024

**Completion**

August 2025



**Committee & Stakeholder Engagement**

**Priority Sector  
Analysis**

September –  
November 2024

**Threats &  
Vulnerabilities  
Analysis**

December 2024 –  
May 2025

**Draft & Final  
Report +  
Presentations**

June –  
August 2025

# PROJECT OUTCOMES

- Recommendations to address identified threats and vulnerabilities through implementation of:
  - *Plans*
  - *Policies*
  - *Programs*
  - *Partnerships*
  - *Capital Projects*
- Enables the installation, community partners, and private sector to seek follow-on funding for major initiatives through OLDCC and other federal / state funding sources.

# IMPLEMENTATION EXAMPLES

- **Northern Virginia MIRR:** Establish a Cross-Jurisdictional Interoperable Public Safety Communication System between state and local governments, MCB Quantico, Fort Belvoir, and the Military District of Washington.
- **MacDill AFB MIRR:** Underground power lines on key transportation corridors around the base to limit electricity interruptions and improve post-storm access for base personnel by limiting cleanup time.
- **Lowcountry MIRR:** Raise the elevation of US Highway 21 leading to MCRD Parris Island to limit flooding impacts and maintain access during and after storm events.

# COMMITTEE OVERVIEW

- Executive Committee Composition
- Committee Operations
- Technical Working Group(s)
- Committee Role and Responsibilities

# LISTENING SESSIONS

- Holding in-person sessions September 16-18
- Invitations sent to a broad range of community partners.
- Scheduled sessions include:

## **Fort Leonard Wood:**

DPW Master Planning  
DPW Operations and Engineering  
DPTMS Range Operations  
DPW Environmental  
Logistics Readiness Center

## **Community:**

Ozark Land Trust  
Texas County  
Phelps County  
Rolla Emergency Management  
Texas County Emergency Management  
Missouri Military Advocate  
Missouri Department of Transportation  
Missouri Department of Conservation  
Mark Twain National Forest  
Electric Providers (Lebanon, Laclede, Gasconage)

# REQUEST FOR INFORMATION

- Community data, plans, studies, and reports needed to inform the MIRR.
- Request was sent by MRPC at the end of August.
- Project team and MRPC will begin follow-up with local governments and partner agencies.
- Committee assistance requested to expedite response.

# **PRIORITY SECTOR ANALYSIS**

- Initial step in the development of the MIRR
- Identify topics for further study in the Threats and Vulnerabilities Analysis
- Prioritization based on impact to Fort Leonard Wood mission, host community impacts, and viability of potential solutions at the local / regional level.



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# PRIORITY SECTOR ANALYSIS

- What do you see as the primary risks and vulnerabilities to the installation and community?
- Have studies or plans been prepared to analyze the risk and degree of vulnerability?
- Have potential solutions been developed?

Example: FEMA National Risk Index

County	Risk Index Rating	EAL Value*	Risk Score
<b>Threat: Riverine Flooding</b>			
Laclede County	Moderate	\$1,472,382	80.05
Phelps County	Low	\$340,690	46.52
Pulaski County	Moderate	\$2,464,356	86.99
Texas County	Moderate	\$1,946,965	86.32
<b>Threat: Ice Storm</b>			
Laclede County	Very High	\$1,413,797	96.54
Phelps County	Moderate	\$191,369	76.82
Pulaski County	High	\$778,490	92.97
Texas County	Low	\$23,356	36.71
<b>Threat: Heat Wave</b>			
Laclede County	Moderate	\$1,506,140	95.86
Phelps County	High	\$2,032,773	95.23
Pulaski County	High	\$2,701,255	94.05
Texas County	Moderate	\$739,436	89.53
<b>Threat: Earthquake</b>			
Laclede County	Low	\$1,238,415	84.82
Phelps County	Low	\$1,459,280	85.46
Pulaski County	Low	\$864,077	78.87
Texas County	Low	\$814,762	80.85

# FUTURE COMMITTEE MEETINGS

- Priority Sector Analysis
  - Technical Working Group: October and November
  - Executive Committee: October and November
- Following conclusion of the Priority Sector Analysis, the Executive Committee will likely meet next to receive an update on the initial findings of the Threats and Vulnerabilities Analysis.

# **COMMITTEE MEMBER COMMENTS**



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