

***The Wide World of Community Grant
Opportunities:
Leveraging Grant Funding and Partnerships to
Improve Military Installation and Community
Resilience***

October 29, 2024

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Association of Defense Communities (ADC)
Installation Innovation Forum 2024 (IIF24)

Outline

- **Identifying projects that can increase installation and community resilience**
- **Overview of the diverse grant opportunities**
- **Tips in applying for these grants**
- **Examples of installation and community projects**

How Do You Identify Projects that Can Increase Installation and Community Resilience ?

- **Identify potential projects that support installations and communities in their ability to function given diverse hazards, threats, and risks including**
 - Natural hazard, cybersecurity, and terrorist threats
- **Key installation and community functions include**
 - Military missions (e.g. deployment) and installation and community operations
 - Emergency response activities
 - Critical infrastructure operations
 - Community support services, e.g., schools, hospitals, and community centers that support the public including service members and their families
- **Assessing relevant installation and community documents, e.g.,**
 - Installation Climate Resilience Plans (ICRPs) energy and water, master plans
 - State and local hazard mitigation plans
 - Regional and local land use, transportation, and watershed plans
- **Discussions between community and installation managers and planners about priority resilience needs**

Installations Experience Diverse Impacts from Natural Hazard Events and Resilience Projects Can Help Reduce These Risks

Damage to Facilities

Buildings



Mission Impacts



Loss of Life and Injuries



Roads and Other Transportation Infrastructure



Which project types can increase installation and community resilience from such potential damage?

Emergency Response & Installation Operational Recovery



Energy Infrastructure



Water Infrastructure



Base Operations Support (BOS) Recovery



Natural Resources & Environmental Damage



Adapted from Figure 1.1 in B. E. Lachman, et al., "Valuing Army Installation Resilience Investments for Natural Hazards," RAND, RR-A2382-1, 2023.

Sample Questions Installations and Communities Can Ask Themselves Regarding Natural Hazards Risks and Possible Project Types

- **What are key critical infrastructure elements needed to keep the installation and community functions operational? Such as**
 - Roads, rail lines, water ways, and airports
 - Emergency Operation Centers, community centers and emergency shelters
 - Drinking water, wastewater, electrical, other energy, and communications system components
 - Schools, hospitals, and emergency shelters that support service members and their families and community members who work on the installation
- **Do these key systems have basic resilience investments already given local and regional hazard threats and emergency needs?**
 - Back-up power and use of strong building codes in key facilities
 - Investments in basic hazard mitigation measures (e.g. flood resilience) for high-risk local hazards, especially if there has been damage in the past
- **What are the longer-term resilience needs given the risks?**
 - Drought and heat resilience given climate change trends
 - Ecosystem resilience to support installation training needs

For more info see: Monica Gregory and Ayesha Mehrotra, "How Cities Can Approach and Fund Critical Infrastructure Resiliency," NLC, Jan.8, 2024; B. E. Lachman, et al., "Valuing Army Installation Resilience Investments for Natural Hazards," RAND, RR-A2382-1, 2023; and Kristin Van Abel, et al., "Extreme Weather and Climate Hazard Impacts on Energy and Water Utilities," RAND, 2024.

Overview of the Diverse Grant Opportunities

- **\$1.2 trillion Infrastructure Investment and Jobs Act of 2021**
 - To address climate crisis and strengthen the nation’s resilience, this Act includes billions of dollars in diverse federal agency grants going to communities
- **Examples of non-DoD federal agencies with relevant grants**
 - Federal Emergency Management Agency (FEMA)
 - U.S. Bureau of Reclamation
 - U.S. Department of Agriculture (USDA)
 - U.S. Department of Energy (DOE)
 - U.S. Department of Interior (DOI)
 - U.S. Department of Transportation (DOT)
 - U.S. Environmental Protection Agency (EPA)
- **DoD relevant grants include**
 - DoD Office of Local Defense Community Cooperation (OLDCC) grants, e.g.,
 - Defense Community Infrastructure Program (DCIP)
 - Readiness and Environmental Protection Integration (REPI) grants
- **Sentinel Landscapes funding: DoD, USDA, DOI, and FEMA**
 - Defense, agriculture, and conservation communities working together on landscape conservation and climate resilience goals
- **State, local, industry, and NGO grants**
 - National Fish and Wildlife Foundation (NFWF)

Sources include: <https://www.ncsl.org/state-federal/infrastructure-investment-and-jobs-act>; <https://www.whitehouse.gov/wp-content/uploads/2022/05/BUILDING-A-BETTER-AMERICA-V2.pdf>; and <https://sentinellandscapes.org/>

FEMA Hazard Mitigation Assistance (HMA) Grants

- HMA grants provide funding to reduce the loss of life and property from natural hazards. Examples of HMA grants include:
 - **Hazard Mitigation Grant Program (HMGP)**
 - **HMGP Post Fire (HMGP-PF)**
 - Building Resilient Infrastructure and Communities (BRIC)
 - Flood Mitigation Assistance (FMA)
- **State hazard mitigation office (SHMO) as the grant applicant for local governments sets the priorities for HMGP and HMGP-PF funds, not FEMA**

Sample Eligible Activity	Eligibility for Mitigation Projects			
	HMGP	HMGP-PF	BRIC	FMA
Structure elevation	Yes	Yes	Yes	Yes
Mitigation reconstruction	Yes	Yes	Yes	Yes
Safe rooms	Yes	Yes	Yes	No
Wildfire management	Yes	Yes	Yes	No
Generators	Yes	Yes	Yes	No
Innovative mitigation projects	Yes	Yes	Yes	Yes
Project scoping/assistance	Yes	Yes	Yes	Yes

Main source: FEMA, "Summary of FEMA Hazard Mitigation Assistance (HMA) Programs," factsheet, Feb. 2023.
https://www.fema.gov/sites/default/files/documents/fema_hma-program-fact-sheet_022023.pdf

Sample Grants for Flood Resilience Projects

Grant Name	Sample Projects that It Can Help Fund
<p>NRCS Emergency Watershed Protection Program (EWP) provides technical and financial assistance to help local communities</p>	<ul style="list-style-type: none"> • Debris removal from stream channels and road culverts • Reshaping eroded streambanks • Correcting damaged or destroyed drainage facilities • Repairing water management structures, e.g., levees
<p>EPA Sewer Overflow and Stormwater Reuse Municipal Grant (OSG) funds planning, designing, and constructing state and local infrastructure</p>	<ul style="list-style-type: none"> • Combined sewer overflow (CSO) issues • Sanitary sewer overflow (SSO) problems • Stormwater management projects
<p>FEMA HMA grants including FMA, BRIC, HMGP and HMGP-PF</p>	<ul style="list-style-type: none"> • Flood risk reduction measures • Dry floodproofing non-residential buildings • Bank stabilization • Floodplain reconnection and restoration
<p>OLDCC DCIP grant for states, territories, and communities to undertake infrastructure enhancements to support military installations</p>	<ul style="list-style-type: none"> • Replace/upgrade sewer water main • Replace well water collector line • Replace stormwater management infrastructure

Sources include: National Resources Conversation Service (NRCS) Emergency Watershed Protection Program <https://www.nrcs.usda.gov/programs-initiatives/ewp-emergency-watershed-protection>; EPA OSG <https://www.epa.gov/cwsrf/sewer-overflow-and-stormwater-reuse-municipal-grants-program>; HMA grants https://www.fema.gov/sites/default/files/documents/fema_hma-program-fact-sheet_022023.pdf; and OLDCC Defense Community Infrastructure Program (DCIP) grants <https://oldcc.gov/defense-community-infrastructure-program-dcip>

Illustrative Project Types that Benefit Community and Installation Resilience

Project Type in the Community	Benefits to the Installation and Community	Potential Grant Sources
Back-up generator/power at a local library or community center	Power may be out for days after a disaster and these facilities often serve as emergency shelters for community and military families in the community	<ul style="list-style-type: none"> • FEMA Public Assistance • FEMA HMGP, HMGP-PF and BRIC grants • DOE Office of Electricity grants
Safe room at local schools in area with tornado/high wind risks	Protects military and community children and community members from tornado and other strong wind events	<ul style="list-style-type: none"> • FEMA HMGP and BRIC grants • U.S. Department of Housing and Urban Development's Community Development Block Grant (CDBG)
Wildfire mitigation project to conduct prescribed burns and defensible space	Help prevent future wildfires from growing into mega-wildfires and spreading throughout the community and onto the military installation	<ul style="list-style-type: none"> • FEMA HMGP, HMGP-PF & BRIC grants • USDA Forest Service Community Wildfire Defense Grant Program • NFWF Longleaf Pine Stewardship Fund
Technical assistance to help local governments adopt and enforce stronger building codes	Many communities have outdated building codes. Adopting and enforcing stronger building codes and standards helps to increase community resilience for future building construction	<ul style="list-style-type: none"> • FEMA HMGP and BRIC grants • DOE Resilient and Efficient Codes Implementation (RECI) grant • HUD Community Development Block Grant (CDBG) Program

Sources include: DOE: <https://www.energy.gov/energy-storage-grand-challenge/funding-opportunities>, <https://www.energycodes.gov/RECI>, and <https://www.energy.gov/eere/funding/what-types-eere-funding-exist>; HUD CDBG: https://www.hud.gov/program_offices/comm_planning/cdbg; Community Wildfire Defense Grant Program: <https://www.fs.usda.gov/managing-land/fire/grants/cwdg> and NFWF: <https://www.nfwf.org/programs/longleaf-landscape-stewardship-fund>

Practical Tips in Applying for Grants

- **Research and re-check eligibility and grant requirements**
 - Know the mission of the provider(s) of the grant
 - Review the details of past project winners
 - Make sure you are using the latest information since many agencies update grant Notice of Funding Opportunities (NOFOs) every year
 - Reach out and ask questions of the sponsor and past winners
 - Also look for non-competitive grants
- **Have patience because these processes take time**
 - Federal agency oversight procedures
 - More technically complex and ambitious projects will take longer, especially those with multiple partners*
- **Think outside the box with respect to the**
 - Types of projects
 - Potential funding sources and how to combine different funds together, e.g., consider state grants

* For more info see: Beth E. Lachman, et al., "Military Installation Public-to-Public Partnerships: Lessons from Past and Current Experiences," RAND, RR-1419, 2016.

Three Installation and Community Project Examples

- **Ellsworth AFB, SD energy resilience grant project**
 - Lorie Vega, Deputy, 28th Mission Support Group, Ellsworth AFB, SD
- **Fort Moore, GA and communities leverage diverse grants to help rural communities and the installation**
 - J. Scott Pippin, Fort Moore, GA, IGSA Partner, The University of Georgia
- **California Energy Commission (CEC) funding for electric vehicle (EV) charging infrastructure at Naval Base San Diego and other California installation**
 - Charles A Swasey Howell, Installation Energy Manager, Naval Base San Diego

Ellsworth Air Force Base (AFB)

- **Location**

- Outside city of Box Elder, SD
- 10 miles East of Rapid City, SD

- **Mission/Infrastructure**

- Largest B-1B combat wing
- 5,356 acres of land
- 500 homes; 9 dormitories for 886
- 13,500' runway

- **Physical Impact**

- 2nd largest employer in SD
- 10th largest school district

- **Growing: designated first B-21 main operating base (MOB)**

- 38 re-use and new construction projects
- Estimated population increase during 2025-2041 - 4,064



Ellsworth AFB Energy Resilience Grant Project

- **Project to increase the resilience for Ellsworth AFB's and Rapid City Regional Airport's grids**
 - DOE \$2.2M grant to install a 75Kw battery as a resilient backup energy source for a key radar site
- **Partners besides the base and city are**
 - West River Electric Association (WREA)
 - National Rural Electric Cooperative Association (NRECA)
 - Saft/GoElectric, an energy storage company
 - Pacific Northwest National Lab
 - Sandia National Laboratories
 - South Dakota School of Mines and Technology
- **Innovative battery energy storage system (BESS) technology**
 - Demonstrate and test the technology for rural areas with extreme temperatures

Project Funded by a Combination of a Federal Grant, Cooperative Funds, and a Tax Credit

- **DOE Office of Electricity Energy Storage Program \$2.2 million grant**
- **National Rural Electric Cooperative Association (NRECA) Rural Energy Storage Deployment Program (RESDP) funding**
 - Supports NRECA's goal of deploying BESS for resiliency at rural critical infrastructure served by electric cooperatives
- **West River Electric Association (WREA) receives a Direct Pay Investment Tax Credit**
 - For a stationary battery energy storage installation
 - Credit in the Inflation Reduction Act
- **Research organizations' contributions**

Lessons Learned from Ellsworth AFB's Grant Experiences

- **Be creative: pursue multiple sources of funding for the project**
- **Have patience: building a broader coalition of support for the project important, but it took 5 years**
- **Be flexible: you will have unexpected changes such as policies, supply chain, and codes**
- **Build a solid cadre of SMEs: they will be critical to overcoming any obstacles**
- **Expand on the collaboration: build on the foundation created by the partnership**

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Fort Moore, Georgia

- **Fort Moore is located in 3 mostly rural counties**
 - Muscogee County GA
 - Chattahoochee County GA
 - Russell County, AL
- **Largest adjacent cities**
 - Columbus, GA 206,922
 - Phenix City, AL 36,617
- **Large training installation with over 130,900 training acres including**
 - Maneuver Areas
 - Live Fire & Ranges
 - Numerous large, medium and small Mission Training Complexes
- **Contains longleaf pine ecosystem**
 - With threatened and endangered species
- **Fort Moore houses more than 26,305 people**
 - Family Housing: 11,507
 - Barracks: 1,838
 - Trainee Barracks: 12,960

Regional Economic Impact
\$4.75 Billion Annually



Fort Moore and Communities Leverage Grants to Help Rural Communities and the Fort

- **Over 20 years the Fort Moore Army REPI program has protected over 37,000 acres to preserve rural areas, habitat, species, & military training with diverse grants & partners**
 - With 85% in fee ownership by TNC and the State of Georgia, and the rest with permanent conservation easements
- **River Valley Community Compatible Development (RVCCD) Project created the “The River Valley Community Compatible Development Plan” to help rural economies and character and the installation**
 - By promoting sustainable economic development, land uses compatible with the military mission, and natural resource protection in the region
 - For 6 counties: Marion, Chattahoochee, Stewart, Taylor, Talbot, and Russell
 - Partners include: the fort, University of Georgia, state agencies, DoD, USDA, The Nature Conservancy (TNC) and U.S. Fish & Wildlife Service (FWS)
- **Over \$2 million grant for improvements in Lumpkin, GA, pop. 923**
 - Downtown streetscaping that increases pedestrian safety and enhances existing green space surrounding the city’s historic courthouse
 - A downtown park designed to provide outdoor recreation for a predominately low-income community

Fort Moore and Community Projects Funded by Diverse Grants and Donations

- **Over the years the Army REPI program has used a combination of federal, state, local and private grants and donations including funds from**
 - OSD REPI, TNC, and Georgia DNR
 - Chattahoochee Fall Line Conservation Partnership (CFLCP)
- **River Valley Community Compatible Development (RVCCD) Project funded by**
 - DoD OLDCC funding
 - University of Georgia state funds matched the OLDCC grant
- **Lumpkin, GA, park project was funded by Georgia Office of Planning and Budget Grant Program**
 - The funding actually came from the COVID-19 economic American Rescue Plan of 2021

Lessons Learned from Fort Moore's Grant Experience

- A **proactive approach** to compatible development planning was important as it opened diverse funding opportunities
- Incorporating **implementation activities** into the planning process, including monitoring diverse funding opportunities including from the state, helped identify the grant opportunities
- The **trusted relationship** with the state **land grant university** helped the community apply for the grant
 - Local government lacked the capacity to apply
 - The University of Georgia provided technical assistance to develop the projects and complete the grant application
- In-depth **community engagement** showed how community interests aligned with the military needs
 - Made for more compelling funding proposals

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Naval Base San Diego Annex Level



Demographics

- **Over 200 Tenants:**
 - 62 Warships
 - ESG-3
 - LCS / LTF
 - SMWDC
 - Naval Medical Center San Diego
 - Southwest Regional Maint. Center
 - Defense Logistics Agency
 - Mariner Skills Training Center
- ~ 5,000 Family Housing Units & ~ 5,000 UH units
- 32K Active Duty + Reserve / 9K DoD Civilians / 17,000 DoD Contractor Workers
- Total: 43,500 DoD Affiliated personnel + 60K non-DoD affiliated personnel (DBIDS)

Challenges

Increasing Capacity & Capability

- Increase to 68 ships by FY 31
- 4 of 12 “berthing” piers past service life
- Growing Repair/Maintenance Demand
- Electrical infrastructure stressed
- Constrained to current footprint (UH, Parking)
- Balancing mission with being “good neighbor”
- Located adjacent to and within the greater downtown San Diego Area

Partnership Between the Navy and CEC for Electric Vehicle (EV) Charging Infrastructure

- **California Energy Commission (CEC) provided the Navy with two types of funding**
 - \$414,000 Navy Electric Vehicle Pilot Program at Naval Base San Diego (NBSD)
 - \$1,500,000 Electrification Blueprint Studies at multiple bases
- **Navy Electric Vehicle Pilot Program**
 - Procuring and installing 10 Level 2 and four Level 3 chargers at NBSD for charging both personal and government vehicles
 - Privately owned vehicle (POV) station allows community visitors and base workers to charge their own vehicles
- **Electrification Blueprint Studies are regional planning for EV charging infrastructure at 6 installations**
 - NBSD, Naval Base Ventura County, and Naval Air Station Lemoore
 - Marine Corps Base Camp Pendleton, Marine Corps Air Station Miramar and Marine Corp Air Ground Combat Center 29 Palms

Navy Long-Term Strategic and Regional Approach for Funding Acquisition from CEC

- **Funding was facilitated because of a partnership relationship**
- **In 2021, Navy Region Southwest and CEC signed an MOU to partner on mutual energy and water concerns**
- **These partners established an on-going working relationship and agreed to have**
 - Monthly conference calls
 - Semi-annual in-person meetings to discuss California energy and water related issues
 - Foster collaboration in support of the energy and water goals of the Navy, California, local communities, and the nation

Lessons Learned from Navy Using State of California Project Funds

- **Establishing a partnership between Navy leadership and the CEC helped facilitate funding for multiple projects (Benefits across multiple Installations)**
- **Acquiring state funds was a shorter timeline and process, compared to pursuing DOE Federal Energy Management Program (FEMP) grants and other funding**
- **Internal Navy collaboration and coordination between the region and bases important for project success**
- **Identifying stakeholders and supporting local requirements**
- **Defining roles and responsibilities during contract execution, construction, and completion**
- **Don't underestimate: projects and programs will require personnel time and resources**

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Questions ?

