



2022 ANNUAL REPORT

**ARMY RESERVE INSTALLATION
MANAGEMENT DIRECTORATE**

SUSTAINMENT AND RESILIENCY DIVISION

LETTER FROM THE DIRECTOR

As we reflect on the events of 2022, our vision for sustainable and resilient facilities, lands, and infrastructure could not be more crucial. We will always face manmade threats like kinetic cyberattacks that target control systems and cause physical damage to our infrastructure. Along with those manmade threats, our readiness is vulnerable to the effects of climate-related weather extremes including drought, wildfires, hurricanes, tornadoes, and flooding.

Through long-term strategic planning, the Army Reserve Installation Management Directorate (ARIMD) prioritizes initiatives to harden and secure our facilities and operations to ensure we can consistently accomplish the mission. As the Army and Federal Government's focus looks to combat climate change, the Army Reserve continues to implement resilience technologies while increasing sustainability. Achievements in 2022 include:

- Decreased Energy Use Intensity (EUI) at six out of 10 commands.
- Produced 49,264 Metric Million British Thermal Units (MMBtu) of renewable energy – that's enough to power 1,048 American homes for one year!
- Diverted over 25 thousand tons of non-hazardous solid waste (NHSW) from landfills.
- Executed nearly \$14.5 million in the National Roofing Program (NRP), which included the replacement of 30 facility roofs across 14 locations.
- Launched a multi-phased infrastructure acquisition plan to start an electric vehicle program and transition non-tactical vehicles (NTV) to an all-Battery Electric Vehicles and Plug-In Hybrid Electric Vehicles (PHEV) fleet.
- Received five federal energy and water management awards for achievements at three Army Reserve organizations.

I would personally like to thank the dedicated Directorates of Public Works (DPW) staffs, as well as staff sections and engaged stakeholders at the Army Reserve-funded installations, the Readiness Divisions (RDs), and the Mission Support Command (MSC). Our Sustainment and Resiliency Division (SRD) programs and initiatives would not be successful without your hard work and profound commitment to supporting our Soldiers and the future of the Army Reserve.

For more information on SRD initiatives, please visit www.usar.army.mil/Sustainability.

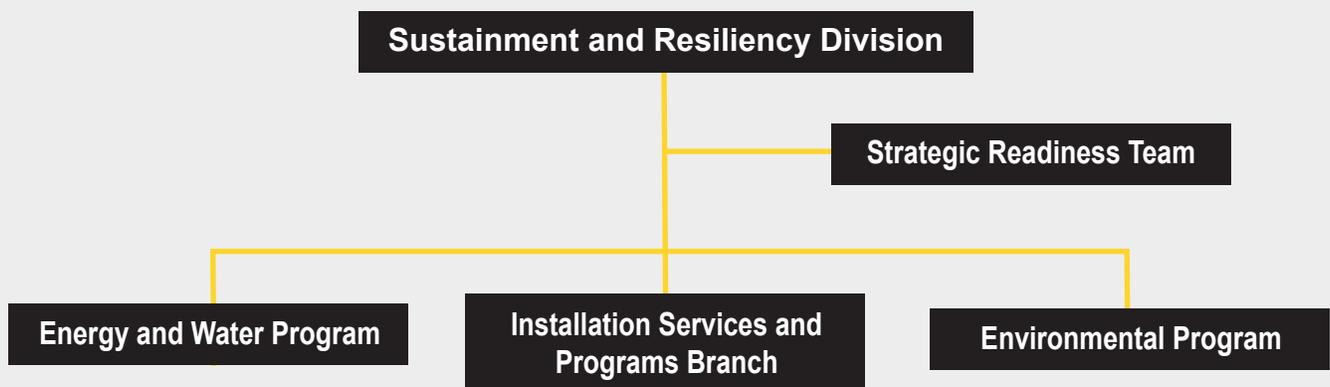


Martin J. Naranjo
Colonel, U.S. Army
Director, Army Reserve Installation
Management Directorate

STATE-OF-THE-ART | SUSTAINABLE | RESILIENT LANDS FACILITIES INFRASTRUCTURE

SRD plans, programs, and resources Army Reserve-funded installation services, establishing policies and guidance as they relate to sustainable and resilient facility operations.

- 04** 2022 At a Glance
- 06** Letter from The Chief
- 07** Strategic Readiness Team (SRT)
- 11** Energy & Water Program
- 15** Environmental Program
- 20** Installation Services and Programs Branch
- 31** Driving Culture Change



2022 AT A GLANCE

RESILIENCE [ri-zil-yuhns]

The ability to anticipate, respond to, and recover from utility service disruptions.

Energy microgrid projects are being planned and implemented in California, Puerto Rico, Wisconsin, and Texas.

DIVERSION [di-ver-zhen]

The act of minimizing solid waste generation through source reduction, recycling, reuse or composting.

The Army Reserve diverted 25 thousand tons of NHSW from landfills in 2022.



SUSTAINABILITY [suh-stey-nuh-bil-i-tee]

A Sustainable Army Reserve enables readiness to meet the social, environmental, and economic interests of Army Reserve communities now and into the future.



STRATEGIC

[stre-te-jik]

Of great importance within an integrated whole or to a planned effect

Over 700 strategic short-term projects were tracked in 2022 across Army Reserve-funded installations and sustainability programs.

AWARD

[a-ward]

Something that is conferred or bestowed especially on the basis of merit.

The Army Reserve received three Secretary of the Army Energy and Water Management Awards and two Department of Energy Federal Energy and Water Management Awards in 2022.



INNOVATION

[i-ne-va-shen]

A new method, idea, or product; the action or process of innovating.

The Army Reserve produced 49,264 MMBtu of renewable energy in FY22 and continued progress on moving to an all electric NTV fleet by FY27.



ALL HANDS ON DECK: A LETTER FROM THE CHIEF

RESILIENCE

CLIMATE CHANGE

MODERNIZATION

The Army and Department of Defense (DOD) are working rapidly towards numerous climate goals that increase resilience while balancing affordability. With the 2021 releases of the Army Climate Strategy and Executive Order 14057 (Catalyzing Clean Energy Industries and Jobs), the entire federal government has been called to partner together, leverage emerging technologies, and explore ways to bridge gaps in partnerships and policies. But what will it really take to meet greenhouse gas (GHG) reduction goals and why is this important to Army Reserve readiness?

Achieving goals like 100% carbon pollution-free electricity, 100% ZEV acquisition, net-zero building emissions, and having climate-resilient infrastructure and operations is going to require an all-hands-on deck approach. The DOD is taking an integrated approach to resilience and GHG reduction – prioritizing initiatives by resilience impacts. Striving together, pushing the bounds of technology and scaling it to affordability, will take everyone – including evolution in public and private industries and demand from the general public for greener products and services such as clean energy.

It is also going to take a robust workforce that is focused on sustainability and acquiring the skills needed to maintain and enhance technologies into the future. That's why SRD brings together Soldiers and Civilian employees from across the Army Reserve enterprise on a regular basis through various forums for mission resilience and sustainability training to ensure we cultivate and retain top talent.

Through long-term holistic strategic planning efforts, the SRD plans, prioritizes, and invests as a climate-informed and data-driven organization. As weather extremes continue to increase, so does the threat it poses to our Soldiers and the mission. While we cannot control mother nature, we can certainly control the way our facilities and infrastructure perform and withstand climate-related natural disasters. Through resilience and sustainability initiatives, the Army Reserve will maintain the ability to safely utilize training lands and state-of-the-art facilities, maintain continuity of critical operations, and facilitate rapid mobilization and response when it counts the most. The Army Reserve will also help mitigate the effects of climate change and reduce GHGs in the process – a win-win situation for all.

Paul Wirt
Chief, SRD



STRATEGIC READINESS TEAM KEEPS EYE ON THE BIG PICTURE

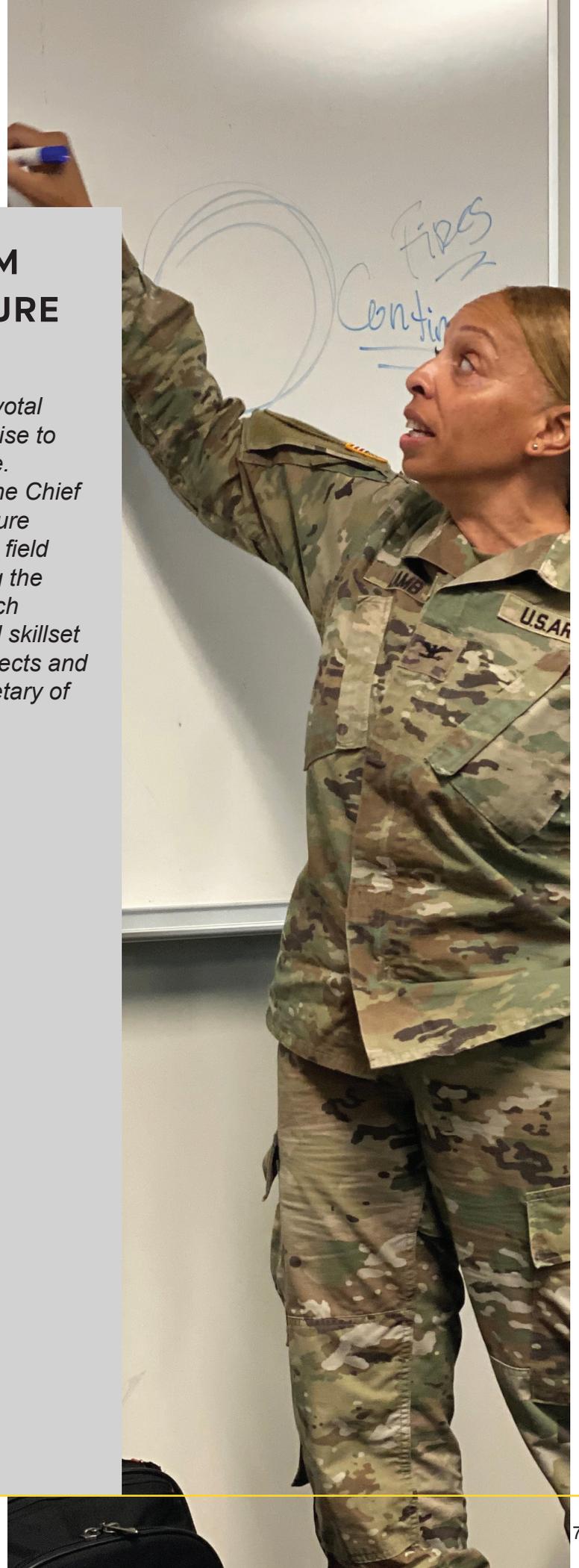
The Strategic Readiness team (SRT) plays a pivotal role in facilitating initiatives and providing expertise to ARIMD and across the Army Reserve enterprise. Distinctively seated to serve from the Office of the Chief Army Reserve (OCAR), the SRT's ability to nurture relationships across various staff sections in the field and at headquarters proves invaluable, enabling the team to ensure a holistic and consistent approach across the Army Reserve. The SRT has a broad skillset that moves the needle on a wide breadth of projects and strategies and ensures alignment with the Secretary of the Army's primary objectives.

TEAM MEMBERS

Heather Brown | SRT Lead
heather.n.brown37.ctr@army.mil

Kisha Patton | Sustainability Planner
kisha.d.patton.ctr@army.mil

Ashley Bradford | Strategic Communicator
ashley.m.bradford.ctr@army.mil



SUSTAINABLE STRATEGIC PATHS TO ENHANCE RESILIENCE

The SRT embraces the Secretary of the Army's first primary objective of putting the Army on a sustainable strategic path by addressing the needs of SRD programs and Army Reserve-funded installations through strategic planning. Increasing sustainability into the future while enhancing readiness for today could not come at a more critical time. Increased extreme weather amongst other threats requires an agile Army Reserve that can adapt and mitigate the risks associated with climate. Achievements in 2022 to put Army Reserve programs and installations on sustainable strategic paths included:

- Facilitating internal strategic plan development and In-Progress Reviews (IPRs) for the Army Reserve Solid Waste Implementation Strategy (SWIS), Army Reserve Energy and Water Resilience Strategy (EWRS), and Army Reserve Environmental Strategy (see program sections for detailed updates).
- Facilitating external strategic plan development and IPRs at Devens Reserve Forces Training Area (RFTA), Fort Buchanan, and Fort Hunter Liggett/Parks RFTA. Additionally, the SRT conducted two Strategic Planning All Hands (Devens RFTA and FHL/Parks RFTA) to educate new command team members and personnel on the importance of long-term strategic planning, alignment to higher headquarter priorities, and the benefits of plan integration.
- Consulting with the 1st MSC on organizational challenges and developed a tool for the command to better evaluate the level of support required to determine a strategic path ahead.
- Conducting meetings with the Army Reserve Careers Group (ARCG) to review existing long-term strategy materials, leading planning exercises at an ARCG off-site to identify gaps, and providing guidance on the importance of accountability using action plans and IPRs.



BUILDING POSITIVE CLIMATES ACROSS THE ARMY RESERVE

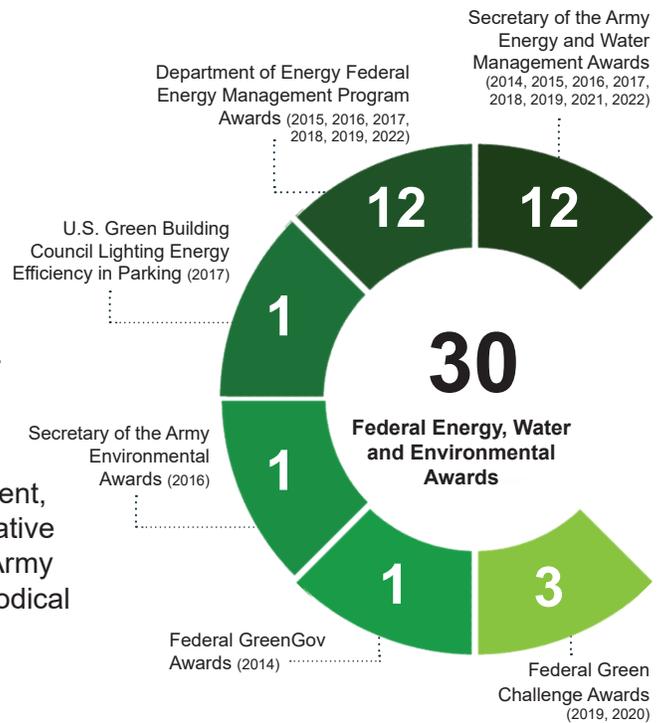
The Secretary of the Army prioritizes building positive climates and so does the SRT. The SRT is instrumental in facilitating senior leader engagement through participating and/or assisting in the planning and execution of various annual forums. These events are mission critical to enabling data-informed decisions and the readiness of the Army Reserve. Events in 2022 included:

- **RD Commanding General Synch:** The SRT educated new Army Reserve commanding generals on the process SRT used to guide the development of the Army Reserve RD Unified Strategic Plan. The results of the plan were codified in Army Reserve Regulation 10-1 which outlines the organizational structure and functions of the RDs.
- **Senior Commander / Garrison Commander (SC / GC) Conference:** The SRT was heavily involved in planning and facilitating the 2022 SC / GC Conference. The forum gathers key Army Reserve leaders including the Director for Resources, Installations, and Materiel, Deputy Commanding General, Commanders, and senior OCAR/U.S. Army Reserve Command (USARC) staff to review performance trends, discuss policy and procedure, synchronize funding, and develop strategic and operational efforts.
- **Senior Sustainability Council (SSC):** The SRD leverages engagement through the Army Reserve SSC, which guides the implementation of our objectives and promotes the integration of sustainable and resilient processes into all functional areas of the enterprise. The council is a tiered council comprised of stakeholders at all levels of the enterprise — from senior leaders to program managers.
- **Association of the United States Army (AUSA) Annual Meeting Installations Assembly Area (IAA):** The SRT managed ARIMD's participation in the IAA booth at the AUSA Annual Meeting in Washington, DC from 10-12 October. Hosted by the Assistant Secretary of the Army for Installations, Energy, and Environment, the booth provided attendees a forum to meet leaders and subject matter experts on the Army Installations Strategy, climate change, Soldier and Family readiness, installation modernization/futures, energy and water resilience, environmental stewardship, Army housing construction and maintenance, and other functions contributing to Total Army Readiness.

- **ARIMD Forum Redesign:** In support of continual improvement and optimization of operations, SRT facilitated a deep dive into the purpose and outcomes of each forum within the infrastructure planning process (IPP). The session allowed ARIMD to make better-informed decisions on the frequency, participation, and order in which the forums should be executed to best serve the IPP.
- **Senior Leader Briefs:** The SRT consults and provides content support for high visibility briefings to include 101 presentations to staff section Commanders, Energy & Water Annual Command Brief to the secretariat, briefs on hot topics such as climate for the Chief of Army Reserve, strategic planning in-briefs to new Command team staff, and more.

The SRT fosters a positive climate through the ownership of ARIMD's semi-annual appreciation program. Created by the SRT in 2020, the program highlights excellence and esprit de corps in the Army Reserve DPW community. The objective of the program is to recognize DA Civilians and Military Personnel from the field who may not meet all the criteria for external federal awards, but who provide exceptional performance and service to the mission of the organization. Chosen recipients receive recognition for exceptional engagement in their respective programs, developing innovative ideas, minimizing resource use while promoting efficiency and resiliency, and being team players who develop and foster strong partnerships with colleagues.

The SRT also has extensive expertise in assembling competitive federal award narratives and packages. Conducting research, narrative development, data assessment, graphic design, subject matter expert collaboration, and iterative review coordination with Army Reserve senior leaders and Army staff sections (e.g. DCS, G-9) requires a strategic and methodical approach unique to the SRT. Since 2014, SRT support has resulted in 30 awards and recognitions of numerous Army Reserve-funded installations, RDs, and the MSC.



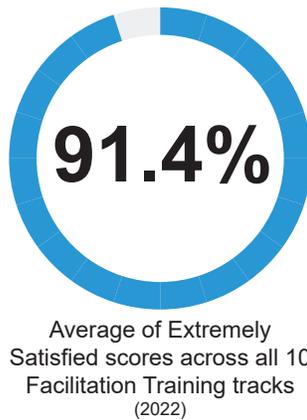
RETAINING TALENT THROUGH CONTINUING EDUCATION



To further develop the skills of junior personnel and shape future Army Reserve leadership, the SRT created a four-day Facilitation Training to provide personnel with the skills necessary to prepare properly, engage their audience, record information accurately, manage dysfunction, build consensus, and develop clear paths forward in facilitated sessions. The training includes a mentor track wherein senior leaders lead a discussion on their respective professional journeys and offer professional advice on career advancement and being a great leader and team player. In 2022, the SRT provided Facilitation Training to personnel at Devens RFTA and Parks RFTA (including staff from Fort Hunter Liggett and the 63rd RD).

Internal to SRD, the SRT co-coordinated and participated in a reboot training for the Army Reserve Energy & Water Team with an outside consultant which consisted of tackling prominent communication tendencies that make professionals seem confusing, complicated, and disorganized. Tacked on to the off-site training, the SRT

“ The Facilitation Training was a hit! Each participant had nothing but great things to say about the course and the instructors. Participants have been sharing their experience and recommending the training to others. The training is worth the effort and is of great value for the overall Team. Profound investment in our people! We greatly appreciate ARIMD providing such excellent training. Lt. Col. Trent Colestock, Devens RFTA Garrison Commander ”



“ The team recently conducted Facilitation Training at PRFTA. The attendees expressed how much they enjoyed the training and felt that although some were hesitant to attend, they came out of the training with tools they can apply in their personal and professional lives. Lt. Col. Marisol Chalas, Parks RFTA Garrison Commander ”

facilitated two days of meetings and exercises with the team to focus their organizational structure for Headquarters Department of Army (HQDA), Army Reserve leadership, SRD, and their internal team. Additional focus included proper level of ownership and approval authority and small group exercises to identify and clarify the roles and responsibilities of the full team, focus areas (Control Systems, Operations, and Projects) within the team, and each team member.

Additionally in 2022, the SRT spearheaded planning efforts for the 2023 ARMRS Training. ARMRS Training is a regularly conducted mission critical training event that covers topics such as the Army Climate Strategy, energy resilience, water resilience, solid waste diversion, environmental quality, real estate, and real property. The courses of instruction provide over 200 attendees from across the enterprise with practical skills essential to perform current strategic objectives related to sustainability. In addition, the training enables strategic integration across all Army Reserve-funded Installations, RDs, and the 9th MSC to ensure mission assurance and readiness; thereby avoiding costs, ensuring energy and water resilience, and protecting training lands.

TELLING THE ARMY RESERVE STORY



The SRT’s strategic communications services offer Army Reserve-funded installations, RDs, and the MSC comprehensive communications support that fulfills action plans. As an internal and external resource, the SRT provides a hands-on approach in numerous initiatives across the division and the Army Reserve creating a framework for a consistent voice and alignment. By supporting ARIMD, partnering with field managers, and collaborating with Army Reserve public affairs officers, there is an increased ability to leverage a wider audience to forge critical partnerships, integrate efforts, support recruitment and retention, and ultimately, tell the Army Reserve story.

The SRT strategic communication services include publication opportunities through the ownership of the Army Reserve’s SRD Snapshot bi-monthly newsletter. The SRT also contributes content for the Army Reserve website and annual At A Glance publication, and to external publications such as Army Engineer Magazine. The production of other bespoke collateral is available by request of the field or SRD and can include a wide variety of custom brochures, flyers, invitations, training materials, posters, web icons, and graphics.

Additionally, the SRT highlights the Army Reserve’s story through national observance campaigns. Tool kits complete with messaging, talk points, graphics, and other support tools are created and provided to Army Reserve-funded installations, RDs, and the MSC for use across the enterprise to ensure increased awareness and education on important topics. For more information on observances, please see pg. 31.

ENERGY & WATER PROGRAM

Vision

An Army Reserve that is fully energy and water resilient to support the warfighter, enable multi-domain operations, and protect the homeland.

Mission

Dynamically resilient infrastructure supporting readiness, mobilization, and deployment of Army Reserve Forces.

TEAM MEMBERS

Maj. Sean Gardner | SRD Deputy
sean.s.gardner.mil@army.mil

Clete Schaper | Resiliency Program
william.s.schaper.ctr@army.mil

Dave Ashley | Energy Analyst
robert.d.ashley14.ctr@army.mil

Eric McKay | EBCS Sustainment
eric.t.mckay.ctr@army.mil

Joe Foriska | Project Execution
joseph.j.foriska.ctr@army.mil

Curt Phillips | HQ Resource Efficiency
curt.phillips@lindahreed.com

Kimberleigh Fedi | Operations Tracking
kimberleigh.n.fedi.ctr@army.mil



LINES OF EFFORT

Army Reserve Energy & Water Program Lines of Effort:

- 1. Governance and Collaboration:** Reliable leadership engagement at all levels, integrated with operational staff, enabling input to drive policy and resources toward state-of-the-art resiliency initiatives to the Strategic Support Area.
- 2. Knowledge Management and Workforce:** A properly staffed, proficient installation management workforce which leverages dynamic data repositories and reliable information platforms; the embodiment of a unified and integrated culture.
- 3. Infrastructure Modernization:** Modernized, efficient, and affordable USAR infrastructure that can withstand, respond to, and recover rapidly from disruptions.

ENERGY AND WATER PERFORMANCE: GETTING BACK TO BUSINESS POST PANDEMIC

Even though the Army Reserve realized a small increase in EUI (4.1% compared to FY21), six out of 10 Army Reserve-funded installations/RDs/MSCs realized a decrease. In fact, Fort Buchanan and the 9th MSC had double-digit decreases. In similar fashion, the total energy consumption had a slight increase of 4.4% in FY22 as compared to FY21. However, seven of the 10 Army Reserve-funded installations/RDs/MSCs saw a decrease in total energy consumed.

During FY20 and FY21, the Army Reserve saw operational tempo (OPTEMPO) curtailed significantly because of the Covid-19 pandemic shut-down and subsequent max telework. OPTEMPO began returning to pre-pandemic levels in FY22, although partial telework is the new normal. Comparing the FY22 energy data to pre-pandemic year (FY19), the Army Reserve experienced a 2.5% decrease in EUI and 3% decrease in total energy consumption this year.

The Army Reserve's potable water use increased by 6.3% in FY22 compared to FY21, and potable WUI increased by 6.5%. This was largely driven by occupancy returning to pre-COVID levels and Operation Allies Welcome at Fort McCoy, which increased the installation's population by more than 100%. Comparing the FY22 water data to pre-pandemic year FY19, the Army Reserve experienced a 10.8% decrease in WUI and 11.5% decrease in total water consumption this year.

REPLENISHING POWER THROUGH RENEWABLE ENERGY



The Army Reserve recognizes the critical role that renewable energy plays in sustainability and resilience, producing 49,264 MMBtu of renewable energy in FY22 – that's enough to power 1,048 American homes for one year! In FY22, the 9th MSC produced 28.6% of their electricity needs through renewable energy – a full 5.5% increase. Fort Hunter Liggett and Fort Buchanan produced 18.7% and 18.5%, respectively, of their electric needs from renewable energy. Parks RFTA added a 2-MW solar photovoltaic (PV) array, which came online at the end of Q2 and yielded renewable energy production totaling 15.9% of the site's total energy usage.

Installation Energy and Water Plans (IEWPs) and Comprehensive Energy and Water Evaluations (CEWEs) HQDA guidance has prioritized completing IEWPs for all Army Reserve-funded installations, RDs, and the MSC by FY22. IEWPs are crucial for identifying and implementing energy and water security projects at critical facilities to help ensure mission success during times of disruption. The IEWP includes goals, strategies, tasks,

timelines, funding mechanisms, and responsible parties for the next five years of energy and water management. To date, the Army Reserve has completed IEWPs at Fort McCoy, Fort Buchanan, Fort Hunter Liggett, Parks RFTA, and the 63rd, 81st, 88th, and 99th RDs. In FY22, IEWPs were completed at Devens RFTA and the 9th MSC. Looking ahead to FY23, the Energy & Water Program will assist with IEWP completion at six more locations at the RDs that support critical missions.

CEWEs were a key part of the required IEWP assessments at the RDs. CEWEs evaluate building energy and water efficiency opportunities in the areas of building envelope, controls, lighting, heating, ventilation, air conditioning, domestic hot water, plug loads, plumbing fixtures, and irrigation systems. In FY22, the CEWE program evaluated 2.5 million square feet and identified \$12 million in energy and water projects at critical facilities. Lighting, plumbing upgrades, and building controls re-tuning produced the largest opportunity for investment and savings. All Army Reserve-funded installations met requirements to evaluate 75% of energy use every four years.

DEVELOPING MICROGRIDS TO DELIVER ENERGY RESILIENCE



The Army Reserve is proactively taking steps to meet Army Climate Strategy goals and increase resilience in regions that are prone to climate-related weather extremes including wildfires, droughts, hurricanes, earthquakes, and cyclones. Both Fort Hunter Liggett and Parks RFTA continued with the construction of two microgrid projects in 2022. These projects will enable the installations to operate independent of the commercial grid in the event of an outage. Other microgrid projects are planned at many Army Reserve facilities including the 63rd RD Headquarters, Fort Buchanan, Fort McCoy, Puerto Nuevo Army Reserve Center, and Army Reserve Centers in Texas.

The Army Reserve's first fully-functioning microgrid at Pele U.S. Army Reserve Center in American Samoa was recognized with two 2022 federal energy management awards. The 9th MSC's \$2.1 million Energy Resilience and Conservation Investment Program (ERCIP) project included 325-kW roof-mounted PV, a 345-kWh battery, and incorporated the existing 300-kW generator. In the first 12 months of continuous operation, the project generated 483MWh of electricity, reduced utility costs by 48%, and offset 300 tons of carbon dioxide (CO₂) emissions. This was accomplished despite many obstacles, including logistics in working in the South Pacific, Covid-19 restrictions, and difficulties with utility interconnection agreements.

ENTERPRISE BUILDING CONTROL SYSTEM (EBCS) AND METERING PROGRAM

At the end of FY22, the Enterprise Building Control System (EBCS) was connected to 144 buildings. In FY22, the Army Reserve executed \$3 million of EBCS tasks, including upgrading the hardware or software for more than 160 Java Application Control Engines (\$1.7 million), assessing the integration readiness of nearly 200 buildings (\$750,000), and fully integrating 25 buildings into the EBCS (\$500,000). These efforts enabled the EBCS program to award an additional \$2.5 million in control upgrades and EBCS integration tasks across 46 additional buildings to be completed in FY23. Controls optimization efforts using EBCS identified over \$12 million of CEWE measures with approximate estimated annual savings of 50K MMBtu/year and \$1.53 million/year and are tracked for implementation with new CEWE mandates from the Energy Act of 2020. The EBCS program developed a decision-making tool integrating available utility consumption data, metering data, and building automation system (BAS) data to inform strategic planning to meet Army Climate Strategy's target of BASs in 90% of buildings where cost effective.

The EBCS program continued to make progress towards tailored innovative solutions to optimize building control systems for efficiency improvements and operation cost reduction. In FY22, the EBCS program piloted a Control Scoring tool turning massive data into user-friendly actionable information using EBCS trend data. This tool is set up to be deployed on the EBCS server – available to all Army Reserve buildings connected to EBCS. This tool supports operations and maintenance (O&M) applications and streamlined quality assurance and quality control of contracted work for EBCS integration, new construction, and control upgrade projects, and to guide building control system optimization funding prioritization to maximize return on investments. The EBCS program also piloted real-time optimization at four EBCS buildings, validating solutions to minimize simultaneous heating and cooling and enhance economizer performance. The EBCS program submitted a proposal to the Environmental Security Technology Certification Program for at-scale deployment of real-time building optimization.

The Army Reserve continued to make progress towards merging the EBCS and the Army Reserve Metering Program. These two separate systems have similar equipment, and over time, these two programs will be treated as one to simplify system architecture, coordinate sustainment activities, and optimize investment. The Reserve Army Metering program has completed \$6.2 million of work over the past three fiscal years to increase our overall metering posture. The Army Reserve has a total of 1,254 advanced meters installed, of which 826 are reporting to the meter data management system (MDMS).

The Army Reserve is actively prioritizing new facilities and continuing to repair meters and communication to offline and failed devices. Additionally, the Army Reserve continued leveraging the U.S. Army Engineering and Support Center Huntsville for new metering installation and annual maintenance and sustainment requirements. This included communication troubleshooting, equipment repair, system upgrades, database sustainment, and software patches. These efforts are critical as maintaining operational meters helps the Army Reserve to monitor usage data in near real time – resulting in a timelier identification and repair of water leaks. Devens RFTA's efforts to effectively and routinely monitor meter data resulted in the installation cutting over two million gallons of water use by the end of Q1 FY22 – a 44% reduction in annual water consumption resulting in a cost avoidance of \$16,500.

FACILITY-RELATED CONTROL SYSTEMS (FRCS)

Threats to our homeland's security, such as advanced cyberattacks, target Army Reserve Centers and installations to attempt disruption of utilities and other building control systems to limit our ability to project combat power. To counter this threat and strengthen our critical facilities and infrastructure, in FY22, ARIMD began full, on-site FRCS inventories with the assistance of a cybersecurity specialist contractor. ARIMD prioritized installations and on-site FRCS inventories, which have been conducted at two Army Reserve sites. In a similar manner, activities have been planned at additional Army Reserve locations.

2022 ARMY RESERVE ENERGY MANAGER TRAINING WORKSHOP

Army Reserve Energy & Water Program personnel, along with Energy and Water Managers and Resource Efficiency Managers from across the nation, gathered for a full-day training while at the 2022 Energy Exchange conference. Over 55 attendees discussed prioritizing complex resilience projects, funding requirements, new and emerging technologies, future training topics, and collaborated in small groups to share ideas and best practices on topics such as climate change and EVs.



ENVIRONMENTAL PROGRAM

Vision

The Army Reserve Environmental Program champions proactive environmental stewardship shaping a sustainable tomorrow.

Mission

The Army Reserve Environmental Program ensures continued access to training lands and facilities, minimizes adverse human impacts, and utilizes innovative solutions through an integrated operational approach to the execution of conservation, planning, compliance, and restoration missions.

TEAM MEMBERS

Kelly Dreyer | Team Lead
kelly.a.dreyer.civ@army.mil

Brande Goracke | Environmental PM Forward
brande.l.goracke2.civ@army.mil

Stephen Armstrong | Environmental Due Diligence
Coordinator | stephen.e.armstrong16.ctr@army.mil

Christie Lowery* | Real Estate Support
christie.r.lowery.ctr@army.mil

Eric Torres* | Compliance/Systems Coordinator
eric.m.torres24.ctr@army.mil

Nikki Mauro* | Cultural Resources
nicole.o.mauro.ctr@army.mil

*U.S. Army Reserve Command G-3/5/7 Environmental Branch



LINES OF EFFORT

Army Reserve Environmental Program Lines of Effort:

- 1. People and Partnerships:** Army Reserve Environmental leads the Army with a comprehensive training approach that supports transparent integrated communication and a competent staff.
- 2. Governance:** Army Reserve Environmental sustains current, consistent, and appropriate governance at applicable echelons to execute the environmental mission.
- 3. Operations Management:** Army Reserve Environmental has efficient and measurable operations enabling well-informed decision making supported by reliable data and tailorable management tools.

ENVIRONMENTAL QUALITY STRATEGY SESSION

The Environmental Quality Team, comprised of personnel from both OCAR and USARC, developed the Army Reserve Environmental Strategic Plan using the Army's ISSP process. A three-day in-person strategy session included input from all Army Reserve headquarters Environmental Quality Team members. The effort resulted in the development of three LOEs, multiple Major and Sub-Objectives, and Action Plans that included Short-term Projects (STPs) and Performance Measures. The overall goal and expected outcome for the Environmental Strategy session is to have a cohesive, well developed, and mission ready environmental program to support the Army Reserve. The team will continue to develop Actions Plans over the second and third quarters of FY23.

COMPREHENSIVE ENVIRONMENTAL PROGRAMS THROUGH ENVIRONMENTAL PERFORMANCE ASSESSMENT SYSTEM (EPAS)

EPAS is the Army's audit process used to determine "field-level" environmental compliance to provide commanders with visibility of their subordinate unit's environmental posture and risks. An independent, external EPAS is required every three years. It is conducted by an external contractor so critical metrics can be collected with unbiased analysis to determine guidance, policy, and resource needs. In compliance with Army Regulation (AR) 200-1, the Army Reserve executed an external EPAS at the 99th RD in 2022. The on-schedule assessment evaluated 59 facilities in 13 environmental media areas using regulatory checklists. Contract development to execute EPAS in 2023 with the 88th RD and the 9th MSC is currently underway.

PROTECTING THE PAST INTO THE FUTURE: CULTURAL RESOURCES

The Army Reserve prioritizes the protection of historic properties, cultural items, archaeological resources and collections, and sacred sites. Cultural resource teams across the Army Reserve worked on several projects in 2022 to nurture key partnerships, execute repairs, design and install educational displays, and more. Specific achievements included:

- Memorandum of Agreement (MOA) with the Illinois State Historic Preservation Office (SHPO) – The MOA is for the proportionate mitigation of demolishing the storm flooding damaged Civilian Conservation Corps-era Bridge at the Joliet Training Area. Other alternatives were also examined, but ultimately the SHPO concurred that continuous reinvestment to repetitively repair damage to the bridge was a poor use of funding for a structure that was a safety hazard and not mission supporting. Through effective and meaningful consultation, the 88th RD avoided over \$500K of immediate repair and long-term maintenance costs for a climate change impacted historic structure.
- Water Main Replacement at Fort Douglas, Utah – The 88th RD Cultural Resources Team conducted extensive consultation and reporting with the Utah SHPO in support of the \$3.7M water main replacement at Fort Douglas. The team's early involvement and development of archaeological monitoring requirements in early project scoping and designs ensured compliance during discovery of 18 cultural resources. Two contributing foundation features were also discovered. Open dialogue and data collaboration with the SHPO aided in the protections of other potential sites and ease of reporting.
- 63rd RD SHPO Programmatic Agreements – The 63rd RD met with SHPO representatives to discuss programmatic agreements for its California, Nevada, New Mexico, Arkansas, Oklahoma, Texas, and Arizona facilities, confirming strong working relationships. The agreements will ensure mission readiness while providing effective and timely management of archaeological sites and historic structures across the RD's seven-state area of responsibility.

- Interpretive Waysides at Fort Des Moines National Historic Landmark – The 88th RD Cultural Resources Team worked on the design and installation of Interpretive Waysides at the Fort Des Moines National Historic Landmark to promote and exercise a higher standard of care for this exceptional property. Fort Des Moines has a rich military history as the World War I site of the Provisional Army Officer Training School. This was the U.S. Army’s first extensive effort to train African American men for military leadership. Fort Des Moines is also recognized as the home of the first Women’s Army Auxiliary Corps, re-designated Women’s Army Corps, after women entered the U.S. Army’s fighting forces.

- Fort McCoy Government-to-Government Relations – Fort McCoy enhanced government-to-government relations with Native American Tribal Nations. Formal letters were mailed to the 34 tribes known to have associations with the Fort McCoy lands to re-establish lines of communications and tribal consultation procedures. Follow on actions led to the planning for the first Tribal Consultation Meeting (virtual) between Fort McCoy leadership and tribal representatives from multiple tribes in October 2022. These efforts will lay the groundwork for seamless and continuing communication between Fort McCoy and local Native American tribes.

- Fort McCoy and Ho Chunk Nation Memorandum of Understanding (MOU) – Fort McCoy’s leadership participated in a signing ceremony with the Ho-Chunk Nation in the spring of 2022 to officially acknowledge and celebrate the renewal of a MOU between the two parties. A formal MOU has been in place between the installation the Ho-Chunk Nation since 1999.



WELDON SPRING ORDNANCE WORKS REMEDIATION

The Army Reserve reached numerous milestones in its part to remediate the Weldon Spring Ordnance Works (WSOW). The WSOW was a 17,000-acre former trinitrotoluene (TNT)/ dinitrotoluene (DNT) manufacturing plant that was operational from 1941-1945. After declaring most of the site excess to its mission, the U.S. Army retained the contaminated production area of approximately 1,655 acres which now makes up the Weldon Spring Training Area (WSTA). Located about thirty miles southwest of St. Louis, Missouri, the WSTA currently is part of the 88th RD. The area is used primarily as an administrative support facility and training site for the Army Reserve. In February 1990, WSTA was part of the Weldon Spring Former Army Ordnance Works placed on the U.S. Environmental Protection Agency National Priority List of uncontrolled hazardous waste sites. The Army owns the WSTA, and the U.S. Department of Energy (DOE), Missouri Department of Conservation, Francis Howell School District, and others now own other portions of the former WSOW site. The remediation of WSOW including WSTA is governed by the Federal Facilities Agreement between EPA Region 7, the Missouri Department of Natural Resources, and DA.

FY22 Accomplishments:

- Completed Five-Year Review Addendum.
- Completed long-term monitoring (LTM) Workplan for new five-year LTM contract.
- Completed annual groundwater sampling event. Conducted maintenance activities including repair of several monitoring well installations, geographic information system mapping of trails leading to springs off-post, and vegetation clearing.
- Replaced monitoring well USGS2A.
- Coordinated with the DOE for their annual inspection on a portion of the WSTA.
- Finalized 2022 Performance Monitoring Report.

Through continued action and partnerships with interested stakeholders, the WSOW site continues to make progress towards meeting agreed upon clean up goals. Once met, this site will support anticipated future land use while continuing to protect human health and the environment.

FORT HUNTER LIGGETT NATURAL RESOURCES



Fort Hunter Liggett stretches over 162,000 acres and contains a variety of habitat types that support over 300 different wildlife species. Tule Elk are one of the many species that call this land home. These elk were nearly extirpated in California after the gold rush, but through partnerships and relocation efforts, they now boast healthy populations. Fort Hunter Liggett started managing elk in 1978 when the first individuals were introduced to the installation. Management continues to this day with the help of the Rocky Mountain Elk Foundation (RMEF). A cooperative agreement was originally signed in 2012, updated in 2021, between the Garrison Commander and the RMEF in efforts to improve elk habitat and provide population monitoring.

On 30 April 2022, a group of eight volunteers from the installation and RMEF teamed up to remove 700 yards of derelict fencing surrounding a reservoir in one of the training areas. This fencing was once used for cattle grazing operations that have since ceased on the installation due to over-grazing and land use conflicts with military training. The old fencing restricted access to critical water resources and posed a threat to the wildlife due to entanglement. This project is one of many that has been accomplished under the cooperative agreement with RMEF. Future potential projects include wildlife guzzler development and maintenance (water catch and retention systems), vegetation management through invasive weed control, and population census efforts.

Fort Hunter Liggett is also home to one of the two remaining populations of Foothill Yellow-legged Frogs (*Rana boylei*) within the Southwestern California evolutionary line. This species is at the highest risk of extinction and is proposed for listing as Endangered under the Endangered Species Act. In 2022, Fort Hunter Liggett collaborated with researchers, funded by the U.S. Fish and Wildlife Service, to test the reintroduction feasibility of the species within the installation. A small sample of eggs were taken from natal streams and translocated to previously unoccupied streams. These eggs were placed in protected enclosures that allowed for monitoring until the metamorphosis process completed. Installation biologists assisted with supplemental feeding and monitoring of the tadpoles until time of release. The project was deemed a success and will support continued efforts for recovery of the Foothill Yellow-legged Frog. Projects like these at Fort Hunter Liggett support the Army goal of biological diversity conservation and ensure sustained use of Army land to meet readiness requirements.



2022 ARMY RESERVE ENVIRONMENTAL UNIVERSE



ADDITIONAL FACTS

- Three completed and four initiated Environmental Assessments.
- 580 Records of Environmental Consideration completed.
- 12 Environmental Conditions of Property for Real Property Exchange, Military Construction and Maintenance and Restoration Army Reserve initiated.
- 20 Grant and Disposal Environmental Conditions of Property initiated.
- 33 Real Estate Actions Validated for USAR Real Estate processing.
- 61 active environmental clean-up sites.



INSTALLATION SERVICES AND PROGRAMS BRANCH (ISPB)

The Army Reserve ISPB enables our facilities to work on any given day, in the face of any given challenge, safely and effectively with the resources they need to achieve their mission. Through the Solid Waste Team, intergovernmental service agreements (IGSA), logistics and engineering funding, and Installation Status Report (ISR) analytics, the ISPB supports a wide range of essential programs.

BRANCH CHIEF

Laura Pirtle
laura.j.pirtle.civ@army.gov

TEAM MEMBERS

Tyrone Cook | Solid Waste Program Coordinator
tyrone.g.cook.ctr@army.mil

Robin Sullivan | Solid Waste Program Technical Advisor
robin.sullivan@pnnl.gov

Neville Jordan | Logistics Services Program Manager
neville.r.jordan.civ@army.mil

Walt Kilmer | Engineer Services Program Manager
walter.l.kilmer.civ@army.mil

Matthew Gilmartin | Intergovernmental Service Agreement Program Manager | matthew.gilmartin@salasobrien.com

Sandra Nichols | Lead Analyst Contract ISR/CLS Support
sandra.l.nichols6.ctr@army.mil

Maria Gonzalez-Martinez | ISR Pacing/Cost & Mission Capacity Support | maria.a.gonzalez-martinez.ctr@army.mil

Earl Foss | ISR Infrastructure Support
earlon.e.foss.ctr@army.mil

SOLID WASTE PROGRAM

VISION

Modernized, sustainable, cost-reducing waste program that protects and enhances the health and readiness of our forces, the environment, and the communities they serve.

MISSION

To implement a cost-effective, integrated, solid waste program that addresses waste generation and reduction at all levels of the material lifecycle and promote a culture of sustainability while supporting operational, maintenance, and logistical readiness throughout the Army Reserve.

LINES OF EFFORT

Army Reserve Solid Waste Program Lines of Effort:

1. **Safe and Healthy Facilities:** An innovative and mature Solid Waste Program with adequate resources, efficient, sustainable, and cost-effective contracts, effective program assessments, and accurate waste generation reporting that ensures resilient, safe and healthy facilities.
2. **Modern Infrastructures and Systems:** The Army Reserve Solid Waste Program is the leader in integrated solid waste management that exceeds DOD goals with an Army Reserve-wide zero waste culture established through a robust set of directives, external partnerships, innovative infrastructure and systems, and Senior Leader emphasis.
3. **Awareness and Culture Change:** Knowledgeable and motivated staff who enable the Army Reserve to exceed diversion goals, optimize resources, and support mission resiliency and sustainability.

TACKLING WASTE DIVERSION



Annual solid waste data is collected from 10 Army Reserve Commands and is reported through the web-based Solid Waste Annual Reporting system known as SWARWeb. Thanks to efforts across the enterprise, the Army Reserve diverted 36% of NHSW in FY22 – 25.2 thousand tons! Moreover, the Army Reserve exceeded the 60% construction and demolition diversion goal with a 72% diversion rate. High performers that exceeded the federal and DOD 40% NHSW diversion metric included the 99th RD and Devens RFTA.

SWIS: ENHANCING THE WAY WE DIVERT WASTE AND MEET GOALS

ARIMD continues to update its SWIS as new requirements such as Executive Order 14057 are released. By design, the SWIS has remained fluid since its inception to ensure new priorities can be set to meet higher headquarter and DOD goals. In FY22, eight short-term projects were completed and new projects were added to assist in combating GHG emissions. The new projects were recommendations from waste characterization reports, which are contractor-generated studies that identify waste streams to determine opportunities to increase diversion from landfills and enhance waste reduction, reuse and recycling strategies, and further develop the SWIS to meet federal goals. Efforts included adding:

- New technologies to better track waste and recycling volume and weight data.
- Integrating solid waste elements with EPAS to identify areas for improvement.
- Drafting a resilience policy to address solid waste management during times of service disruption due to climate-related weather extremes such as hurricanes and wildfires.
- Developing and releasing in-brief training materials to increase staff knowledge and awareness around Army Reserve solid waste management, requirements, and procedures to encourage good habits and best practices.



TURNING WASTE INTO PROFITS

DOD and Army policies require all installations to have or participate in a recycling program. A Qualified Recycling Program (QRP) is a special kind of recycling program that complies with specific statutory, regulatory and DOD requirements to collect and sell authorized recyclable scrap materials directly, retaining the sales proceeds for use as prescribed by law and regulations. Specifically, QRP proceeds cover solid waste management overhead including operations, maintenance, and the purchase of necessary equipment. It can also be used to pay for required program training. Remaining funds, up to 50% of the balance, can be used by the installation for pollution abatement, energy conservation, and occupational safety and health activities. The Family and Morale, Welfare and Recreation (FMWR) on post can also benefit as the remaining balance can be transferred to a non-appropriated account and be spent on FMWR activities.

Both Fort Hunter Liggett and Fort McCoy recycle and sell materials, such as spent brass, through QRPs. Together, these programs generated over \$1 million in FY22.

FINDING SOLUTIONS: EXCESS PALLETS POLICY

According to the EPA, landfills received 12.2 million tons of wood in 2018. The Army Reserve is doing their part to ensure that delivered wood pallets at stand-alone facilities are recycled or reused. ARIMD released a policy in FY22 to provide guidance to commands that do not have QRPs. Thanks to the new policy, Army Reserve facilities are now encouraged to add pallet take-backs into new contracts (and existing where feasible) or coordinate delivery to the nearest QRPs. If those options are not available, Commands are now authorized to donate pallets to local organizations and persons.



LOGISTICS SERVICES

Logistics Services manages a myriad of essential program funding across Army Reserve Centers, RDs, and Army Reserve-funded installations. From Army food service to ammo programs and asset management, Logistics Services manages over \$43.5 million. These funds help ensure Army Reserve programs are appropriately financed to support Soldiers and their logistical needs.

FY22 FUNDING BREAKDOWN

- **Logistics Services: \$43.5 million**
 - **USAR-Funded Installations: \$35.5 million**
 - Laundry and Dry Cleaning
 - Ammo, Retail Supply, Central Issue, and Asset Management
 - Installation Materiel Maintenance
 - Installation Transportation Office and NTVs
 - Army Food Service
 - Unaccompanied Personnel Housing Management and Furnishings
 - **RDs: \$8 million**
 - Laundry and Dry Cleaning
 - Asset Management
 - Installation Materiel Maintenance (Administrative Support)
 - NTVs
 - Army Food Service (Equipment Replacement)

LEVERAGING THE ARMY RESERVE COMMUNITY TO BUILD FUNDING

The success of building Program Objective Memorandum (POM) requirements would not be possible without the Army Reserve logistics community conducting its Annual Logistics POM Workshop. More than 25 logistics management analysts representing HQDA, ARIMD, and all RDs met virtually from 9-11 August. A wide spectrum of logistics topics was discussed — ensuring collaboration and consistency across the enterprise. The OCAR program analysis and evaluation analyst for the Sustainment Program Evaluation Group (SS PEG) also participated.

Workshop accomplishments included:

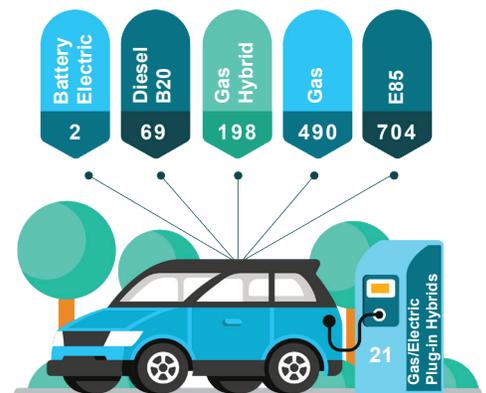
- Successfully developing the requirements for POM 25-29.
- Cross collaboration on continuing challenges and strategic development to address those challenges.
- Identification of duplicate efforts at locations where there is a cohabitation of an RD and an Army Reserve-funded installation.
- A comprehensive review of the ARIMD Annual Funding Guidance for FY23 to generate necessary changes.

VIRTUAL VISITS

Logistics Services conducted virtual site visits with all five Army Reserve-funded installations and the four RDs, along with Army Materiel Command and Army Sustainment Command to discuss projected FY22 execution shortfalls, improvements, projects, and unfunded requests. The virtual visits were conducted over an eight-month time span and provided an opportunity with the field to provide personalized service. This enabled Logistics Services to dig into topics and address issues that required more in-depth discussion and support to ensure mission success.

REDUCING NTV COSTS

To reduce costs and help act against climate change, the Army Reserve is committed to reducing fuel consumption through our NTV fleet. The Army Reserve NTV Fleet Management Program has made huge strides



Army Reserve NTV Fleet

over the past five fiscal years, increasing its number of electric and hybrid vehicles while reducing gas consumption. In 2022, the Army Reserve ZEV NTV inventory continued to see positive change. An additional 107 gas vehicles were added while the E85 sedan fleet was reduced by 124 vehicles.

ELECTRIC VEHICLE PILOT PROGRAM

As climate change and near-peer adversary innovations demand the Army diversify energy sources, the Army Reserve is focused on increasing energy efficiency and resilience. In 2022, a multi-phase infrastructure acquisition plan launched to start an EV program and transition NTVs to an all battery electric vehicle and plug-in hybrid electric vehicle fleet. This will enable the Army Reserve to meet Executive Order 14057 to have 100% zero emission vehicles by the end of FY27.

The Army Reserve partnered with the Defense Innovation Unit (DIU). DIU is a DOD organization that focuses on accelerating the adoption of commercial and dual-use technology to solve operational challenges at speed and scale. The following three DIU pilot program phases were completed by the end of FY22:



- Phase 1 – Solicit proposals
- Phase 2 – Evaluation of proposal
- Phase 3 – Award selection and agreement negotiation

The DIU's pilot program final phase (Prototyping) will encompass the execution of the prototype project with an anticipated period of performance of 18-24 months.

Phase 1 of the Army Reserve EV rollout plan will add 57 vehicles to three facilities and will conclude in FY23. Phase 2 will widely add 1049 vehicles to 101 facilities. Phase 3 will rollout 743 vehicles to 101 facilities, and Phase 4 will add 962 vehicles at the remaining 558 facilities. The future all-electric Army Reserve NTV fleet will include over 2,000 vehicles at 763 total facilities.

ENGINEERING SERVICES

The Army Reserve has 833 locations which require funding for essential services to keep them operational so our Soldiers can safely execute their mission. Our Engineering Services Team manages over \$400 million to fund fire and emergency services, municipal services, engineering services, facility sustainment (maintenance and repair), and demolition to ensure Army Reserve infrastructure is effectively managed.

FY22 FUNDING BREAKDOWN

- **Sub Activity Group (SAG) 131 Base Operations Support: \$126.73 million**
 - **Army Reserve-funded Installations: \$52.25 million**
 - Facility Engineering Services (\$13.32 million)
 - Municipal Services (\$16.54 million)
 - Fire and Emergency Services (\$22.39 million)
 - **RDs and 9th MSC: \$67.35 million**
 - Facility Engineering Services (\$16.68 million)
 - Municipal Services (\$48.86 million)
 - Fire and Emergency Services (\$1.81 million)
 - **Centrally-Managed Funds: \$7.13 million**
 - Facility Engineering Services (\$5.5 million)
 - Fire and Emergency Services (\$1.63 million)
- **SAG 132 Sustainment, Demolition Funding: \$273.7 million**
 - **Army Reserve-funded Installations: \$62.75 million**
 - Real Property Maintenance
 - **RDs and 9th MSC: \$191.09 million**
 - Real Property Maintenance
 - **Centrally-Managed Funds: \$19.86 million**
 - National Roofing Program (NRP) (\$15.58 million)
 - Demolition (\$0.74 million)
 - BUILDER Sustainment Management System (SMS) (\$3.54 million)

BUILDER SMS UPDATE FOR 2022

Since FY17, the Army Reserve, along with all military services, has been hard at work executing the migration to using BUILDER SMS software to assess the condition of facilities to better forecast building infrastructure maintenance. The endeavor is a massive undertaking, mandated by the Office of the Secretary of Defense (OSD), with the implementation of condition assessments completed for 100% of facilities by July 2022. The Army Reserve initiated a contract with U.S. Army Corps of Engineers Mobile District in 2017 to conduct assessments of Army Reserve facilities. In FY22, the Army Reserve completed assessments on 600,000 square feet of facilities. The Army Reserve met the OSD mandate and completed the assessment of the remaining FY22 facilities by July 2022. Going forward, BUILDER SMS data will be updated as facilities are reassessed on a five-year cycle and the data will be used to better predict and anticipate future maintenance requirements and in return, articulate the funding needed to restore and modernize Army Reserve facilities.

PROLONGING THE LIFE OF BUILDINGS THROUGH THE NRP

The NRP launched in 2007 as a lifecycle replacement plan to identify and replace damaged roofs to protect Army Reserve infrastructures more effectively. The program is centrally managed, enabling it to provide cost-effective and reliable contract roof replacements at Army Reserve sites nationwide. In 2022, SRD executed \$14.46 million in the NRP which included the replacement of roofs on 30 buildings at 14 sites. Since 2007, the NRP has invested a total of \$275 million to protect and sustain facilities into the future.

ARMY RESERVE IGSA PROGRAM

In 2021, the Army Reserve revitalized a Public-to-Public/Public-to-Private program to provide dedicated support to RDs, the MSC, and ultimately, Army Reserve Centers. The new IGSA Program leverages the established success of the Army's program but is tailored to meet the unique geographic needs of the Army Reserve by delegating authority to RD Commanders to approve and sign agreements.

The Army Reserve IGSA Program is designed to enhance the understanding of the partnership development process across the Army Reserve enterprise and leverage partnerships in an era of reduced resources. These partnerships, formed through IGSA's, greatly support installation services, the mission, and our Soldiers by leveraging capabilities and resources from both the Army Reserve and its communities. IGSA's are formal public-public partnership agreements between military installations and state or local governments for the provision, receipt, or sharing of installation support services. The agreements between Army Reserve and a state or local government are designed to serve the best interests of both parties by improving support services, creating efficiencies, and reducing costs.

In 2022, after a successful pilot in 2021, the Army Reserve drafted an IGSA Handbook and Operations Order that was published in July 2022. The ARIMD IGSA Program Office will manage the oversight, education and outreach, provide template and process guidance, and conduct strategic engagements across the enterprise to facilitate the development of partnerships.

INSTALLATION STATUS REPORT (ISR)

Data matters now more than ever as the Army Reserve focuses on modernizing facilities while balancing affordability and efficiency, and data-driven decisions lead the way. Army Reserve leadership relies on ISR, the Army's database of record for the quality, functional ability, and mission capability of services and infrastructure, to make well informed funding decisions. ISR provides holistic visibility (energy and water security, renewable energy, training, ranges, etc.) and accessibility to facility, sustainable management, and service assessment data. From this collection of data, the Army Reserve can better assess the condition and mission capability of Army Reserve-funded installation assets and identify the funding necessary to improve facilities.

PROGRAM GOALS

1. **Conducting Training:** Provide outstanding remote and on-site training and support to all users at Army Reserve-reporting organizations.
2. **Obtaining Accurate Data:** Ensure Army Reserve reporting organizations are accurately capturing precise information and comments, while the ISR team assists in the quality control/quality assurance process.
3. **Providing Decision-Supportable Information:** Enable leadership to effectively justify requirements and funding using ISR Data.
4. **Keeping Leadership Informed:** Identify division and installation concerns and/or issues that may hinder service, mission, and infrastructure success.
5. **Managing Army Reserve ISR Change Management Program:** Work with ISR users to submit proposed updates to the ISR system to better represent Army Reserve efforts. Additionally, the ISR team serves as a liaison between the Army Reserve reporting organizations and DCS, G-9 Installations staff, as it relates to the ISR database.

ENSURING ISR USER SUCCESS

Because of our commitment to enhance the field's understanding of ISR's functionality and to enhance the user experience, the ISR team continued to bring training to the people by adapting on-site training practices to the virtual environment. In 2022, the ISR team conducted monthly virtual sessions and update meetings for each ISR module (Infrastructure, Cost, Mission Capacity, and Performance) for users across the enterprise. Additionally, the ISR team conducted quarterly virtual training and updates for service owners, Management Decision Evaluation Package (MDEP) managers, and ISR organizational leads. These meetings provided an excellent opportunity for the Army Reserve ISR community to collaborate, share feedback, learn of upcoming ISR changes/enhancements, and gain updates from the HQDA Deputy Chief of Staff (DCS), G-9 Installations, and ARIMD.

COLLABORATING WITH THE NATIONAL GUARD BUREAU (NGB)

Due to the unique operating environment of geographically dispersed facilities across the nation, the Army Reserve partners with Army National Guard counterparts to share ISR best practices. These meetings enable sharing of methods used for collecting and presenting data — partnering together on the Change Management Process for ISR data collection and reporting to better present the Army Reserve and Army National Guard picture. The collaboration fosters streamlining and implementing effective data reporting directly to Army leadership that supports readiness of real property assets, mission capacity, and support services.

2022 ISR GUIDANCE

ISR Annual Guidance was developed by the ISR team and distributed to Army Reserve ISR users. The document acts as an addendum to the DCS, G-9 Installations, ISR Annual Guidance. It provides specific information and guidance relative to the Army Reserve and covers all four ISR modules, roles and responsibilities, specific organizational suspense dates, and contact information for ISR organizational leads and those providing top load information.

QUARTERLY PERFORMANCE MANAGEMENT REVIEWS (PMRS)

As the ISR program continues to evolve, the Army Reserve should anticipate continuous improvement of performance metrics. The ISR program has established a change management process to improve its metrics through annual communities of practice that review metrics for each service. Input from component commands, MDEP managers, and service owners at the RDs and installation level are essential to the development of meaningful metrics.

PMRs provide the opportunity for ARIMD to present quarterly ISR results to provide leadership a view of how well we provide services and infrastructure to Soldiers and their Families. PMRs also demonstrate the Army Reserve's ability to support training and mobilization missions. From ARIMD staff to MDEP managers, service owners, and organizational service leads, a wide aperture of expertise led to successful service objectives to support commands' current mission objectives.

DRIVING CULTURE CHANGE

EARTH DAY

The Army Reserve actively participated in Earth Day. The Army Reserve released a series of messages highlighting the importance of being good stewards in the face of climate change. Army Reserve Earth Day events included:

- Fort McCoy Spring Cleanup for Earth Day – More than 60 members of the community partnered with the installation's DPW to clean up the west side of the cantonment area including common areas and woods. Additionally, Sparta Area High Point students planted 1,000 Jack Pines at Fort McCoy.
- 9th MSC Earth Day Bike Path Cleanup – Soldiers and Civilians from the 9th MSC worked alongside the Sergeant Majors Pacific Association to help clean up a section of the Pearl Harbor bike path in Aiea, Hawaii. Participants worked together to help collect litter and trash along Oahu's longest multi-use path.
- Fort Hunter Liggett Earth Day at The Hacienda – DPW staff hosted informational booths, provided briefs, and a guest speaker to provide awareness around sustainability initiatives.
- Fort Buchanan Earth Day – The installation's DPW Environmental Division coordinated a week-long celebration complete with numerous presentations, an educational table, a ground water sampling demo, a bike path/nature trail groundbreaking, and a reforestation event.
- U.S. Army Reserve Command (USARC) and OCAR Earth Day tables – Environmental Quality Program personnel partnered with Sustainable Sandhills to host Earth Day educational tables at USARC, Fort Bragg, NC. OCAR hosted a table as well, enabling Soldiers and Civilian employees to learn more about what they can do to conserve resources at work and in their personal lives.
- 81st RD Operation Spring Cleanup – Wildcats at the headquarters element spread mulch, removed weeds, power washed, removed debris, and trimmed hedges. Indoors, Wildcats gathered old files for shredding and recycling.

ENERGY ACTION MONTH

The U.S. Army Reserve Energy Action Month campaign was a great success — thanks to the efforts of many including our Army Reserve-funded installations, RDs, MSC, and Army Reserve Centers/facilities. During the month of October, our energy and water initiatives that strengthen the security and resiliency of our facilities and infrastructure were shared across numerous platforms and engagements. Initiatives included:

- 2022 Army Reserve Tri-signed Message from Lt. Gen. Jody Daniels, Chief of Army Reserve (CAR), as well as Army Reserve Command Sgt. Maj. Andrew Lombardo and Army Reserve Command Chief Warrant Officer Patrick Nelligan.
- A radio media tour consisting of 12 interviews that reached over 39 million listeners and had an ad value of nearly \$781 thousand.
- Participation by subject matter experts at events such as the AUSA Annual Meeting Installation Assembly Area, Energy Exchange, and the Installation Innovation Forum.
- CAR participation in a filmed Army senior leader public service announcement.
- Social media campaign across Army Reserve-funded installations, RDs, the MSC, and other Army/Army Reserve organization pages.
- Educational table displays, posters, banners, and digital billboards.

AMERICA RECYCLES DAY

Each year on November 15, the Army Reserve takes part in observing America Recycles Day. The 2022 Army Reserve message highlighted the commitment to meet the requirements outlined in the Army Climate Strategy and Executive Order 14057 Catalyzing Clean Energy Industries and Jobs through Federal Sustainability. In honor of the observance, various activities across the Army Reserve included:

- Paper shredding events at Fort McCoy and Devens RFTA.
- Fort Buchanan partnering with two organizations to recycle old, stored materials into planters.
- 99th RD partnering with a local thrift shop to secure a shopper's discount and encourage donations.



usar.army.mil/sustainability
[@SustainableUSAR](https://twitter.com/SustainableUSAR)