The Army continues to make great strides with its Net Zero Installation Strategy to create “Net Zero” installations worldwide by fiscal 2030. By focusing on five main areas of sustainability — reduction; re-purpose; recycling and composting; energy recovery; and disposal — net zero installations will consume only as much energy or water as they produce and eliminate solid waste to landfills.

The office of the Assistant Secretary of the Army for Installations, Energy and Environment (ASA (IE&E)) developed a strategy for installations to be net zero, based on “net zero energy,” “net zero water” and “net zero waste,” all striving toward sustainable installations. The Army hopes to create a culture that recognizes the value of sustainability measures in terms of financial, mission capability, quality of life, local community relationships and preserving the Army’s future options.

In 2011, the Army chose pilot installations to begin the initiative, including net zero energy installations, net zero water installations, and net zero waste installations, with two integrated net zero installations (meeting energy, water and waste goals). These pilot installations are working to achieve net zero by 2020, and will become the centers of energy and environmental excellence, showcasing best practices and demonstrating effective resource management. The ASA (IE&E) will then identify an additional 25 installations in each category.
in FY14, who will strive to achieve net zero by FY30.

“The Army has identified six net zero pilot installations in each of the energy, water and waste categories and two integrated installations striving towards net zero by 2020,” notes Katherine Hammack, Assistant Secretary of the Army for Installations, Energy & Environment. “This is a significant step in addressing the Army’s sustainability and energy security challenges. Striving for net zero is operationally necessary, financially prudent, and critical to our mission.”

Hammack points out that these pilot installations have already begun the programmatic environmental analysis and planning process for the Army’s Net Zero Installation Strategy. Specifics for projects and initiatives will be determined through a programmatic environmental analysis, which will include public engagement and stakeholder outreach.

A net zero energy installation produces as much energy on site as it uses, over the course of a year. The Army’s pilot net zero energy installations are: Fort Detrick, Md.; Fort Hunter Liggett, Calif.; Kwajalein Atoll, Republic of the Marshall Islands; Parks Reserve Forces Training Area, Calif.; Sierra Army Depot, Calif.; and West Point, N.Y.

Additionally, the Oregon Army National Guard volunteered to pilot a unique and challenging Net Zero Energy Initiative, which includes all of its installations across the state. This strategy will be included in the environmental analysis.

A net zero water installation limits the consumption of freshwater resources and returns water back to the same watershed so as not to deplete the groundwater and surface water resources of that region in quantity and quality over the course of a year. The pilot net zero water installations are: Aberdeen Proving Ground, Md.; Camp Rilea, Ore.; Fort Buchanan, Puerto Rico; Fort Riley, Kan.; JB Lewis-McChord, Wash.; and Tobyhanna Army Depot, Pa.

A net zero waste installation reduces, reuses and recovers waste streams, converting them to resource values with zero landfill over the course of a year. The Army’s pilot net zero waste installations are: Fort Detrick; Fort Hood, Texas; Fort Hunter Liggett; Fort Polk, La.; JB Lewis-McChord; and USAG Grafenwoehr, Germany.

Two installations volunteered to be “integrated net zero” installations: Fort Bliss, Texas, and Fort Carson, Colo. A net zero installation is comprised of three interrelated components: net zero energy, net zero water and net zero waste.

Hammack points out that as centers of environmental and energy excellence, these installations participate in the Net Zero Installation Strategy programmatic environmental planning process, showcase best management practices and demonstrate effective resource management. Further, they will establish a framework of reduction, re-purposing, recycling and composting, energy recovery and disposal to guide them towards achieving net zero in an environmentally responsible, cost-effective and efficient manner.

As part of the pilot, the installations participate in monthly conference calls and share experiences and lessons learned in newsletters and military and industry conferences. These installations also participate in a programmatic environmental analysis and integrated planning process that will inform future decisions regarding impacts to resources throughout the Army’s initiative. Public participation is an integrated part of the process and part of the environmental planning process.

Three panels made the pilot installation recommendations from the 100 self-nominations (53 energy, 23 water, and 24 waste) received from 60 highly motivated installations managed by the Army National Guard, Army Materiel Command, Installation Management Command, Medical Command, Space and Missle Defense Command and the U.S. Army Reserve Command.

Installations that self-nominated for the pilot Net Zero Installation Initiative, but were not identified, were highly encouraged to continue to strive toward net zero learning from the net zero journey of the pilot installations. In fiscal 2014 another 25 installations in each category will be asked to self-nominate to achieve net zero.

“I am amazed at the progress Army installations have already made to reduce energy and water consumption as well as waste generation,” says Hammack. “We will all monitor the journey these installations embark on to reach the final net zero goal.”

A father and son enjoy the great outdoors at Shelbyville Lake, Ill., one of the hundreds of lakes run by the U.S. Army Corps of Engineers, the nation’s stewards of the environment.
As the main stewards of our nation’s natural resources, the U.S. Army Corps of Engineers (USACE) uses environmental sustainability as a guiding principle, and will be a driving force in helping the Army reach its net zero goals.

“The Department of Defense (DoD) is looking at new ways to tackle our nation’s ever-growing energy crisis and ways to become a more sustainable, efficient and environmentally responsible agency,” says LaDonna Davis, USACE Southwestern Division Public Affairs. “Today, DoD is looking toward its own organizations to take on the challenge within its own installations.”

Davis points out that the USACE strives to protect, sustain and improve our natural and man-made environment. “A series of public laws and Executive Orders since 2005 have reinforced the Corps commitment to energy conservation and environmental sustainability,” she says.

The Corps’ team is working diligently to strengthen our nation’s security by building and maintaining America’s infrastructure and providing military facilities where service members train, work and live. The Corps is also researching and developing technology for war fighters while protecting America’s interests abroad by using its engineering expertise to promote stability and improve quality of life.

Today, the USACE hosts more than 370 million visits annually at its 422 lake and river projects in 43 states, and has approximately 37,000 dedicated civilians and soldiers delivering engineering services to customers in more than 90 countries worldwide. Visitation has steadily increased in recent years resulting in increased demands on USACE resources and facilities, and this upward trend is forecasted to continue.

“We are energizing the economy by dredging America’s waterways to support the movement of critical commodities, and providing recreation opportunities at our campgrounds, lakes and marinas,” according to USACE. “And by devising hurricane and storm damage reduction infrastructure, we are reducing risks from disasters. Our men and women are protecting and restoring the nation’s environment including critical efforts in the Everglades, the Louisiana coast and along many of our nation’s major waterways. The Corps is also cleaning sites contaminated with hazardous, toxic or radioactive waste and material in an effort to sustain the environment.”

The USACE Recreation Strategic Plan, which was launched in 2012, seeks to transform and reposition the recreation program while maintaining its role as a major federal, water-based recreation provider.

The plan identifies a set of ongoing or potential actions to include:

• A regional look at providing facilities and services.
• New and innovative types of partnerships.
• Increasing opportunities for volunteers to support the delivery of recreation to the public.
• Adjusting opportunities and facilities mix to meet demand within projected budgets.
• Improving communications and public outreach.
• Building on USACE’s unique relationship with the military to support their readiness and resilience.
• Promoting environmentally sustainable behavior.
• Preserving public access to the water.
• Improving efficient delivery of recreation services.
• Enhancing community-based stewardship opportunities at USACE Projects.
• Identifying the need for revised authorities and policies.

The plan allows USACE to continue to provide places for people to enjoy safe and accessible water-based recreational opportunities; protect valuable public land and waters resources; build healthy communities by engaging the public in outdoor activities; and become an attractive partner to collaborate with communities and stakeholders.

“We are proud of the long history of recreation services that USACE has provided to the public,” says Michael G. Ensch, chief, Operations & Regulatory Community of Practice, USACE. “In order to continue to do that in a quality manner in the future, we must be flexible and adaptable. This plan provides our managers, districts and regions the guidance to move in the right direction.”

Camping at the Dam West Recreation Area at the USACE-managed Carlyle Lake in Illinois.