DoD currently lacks a comprehensive approach for evaluating energy systems at the community scale that considers the integration of energy supply and demand to achieve optimized solutions for the entire community. The DoD installation planners address energy systems for new facilities and facilities undergoing renovation on an individual facility basis without consideration of energy sources, renewables, storage, or future generation needs. Taking a holistic approach for the entire installation enables DoD to identify synergistic energy solutions, with a long-term outlook presented as a roadmap, that meet or exceed the energy reduction goals and at a lifecycle cost below that resulting from projects implemented through traditional methods. Identifying this savings opportunity for DoD, ESTCP funded a project that demonstrated a holistic energy master planning (EMP) concept and Net Zero Planner (NZP) tool at two defense installations: the U.S. Military Academy (USMA) at West Point, NY, and the Portsmouth Naval Shipyard (PNSY), Kittery, ME.
JOINT ESTCP/NAOC TRAINING ON UX-ANALYZE
In conjunction with the National Association of Ordnance Contractors, ESTCP has sponsored a series of training classes on the recently-released version 9.2 of Geosoft’s UX-Analyze analysis software. The methods and procedures that form the basis of UX-Analyze were developed over the years by SERDP and ESTCP Principal Investigators working on classification as applied to munitions response, referred to as Advanced Geophysical Classification. The first training class was held in Denver, CO, the week of June 19th. A second class was presented in Washington, D.C., the week of July 11th. Both classes were fully booked within several days of opening registration, so additional classes are being explored. MORE

RESOURCE CONSERVATION AND RESILIENCY (RCR) ENGAGES WITH RESEARCHERS AT THE ECOLOGICAL SOCIETY OF AMERICA CONFERENCE
The Resource Conservation and Resiliency (RCR) team engaged one of its key research communities by participating in the 102nd annual Ecological Society of America (ESA) conference, August 6-11, in Portland, OR.

Dr. Kurt Preston, the recently established RCR Program Manager, spoke to 150+ attendees as part of a Federal Research Roundtable. In addition to his presentation, SERDP and ESTCP engaged participants one-on-one by answering research questions each day of the conference at their booth. SERDP and ESTCP’s participation in this event is key to bringing the best research to the forefront to meet DoD’s needs and drive support for DoD capabilities at minimum cost and maximum benefit. Thousands of attendees attended the event and each one may possess critical insight and ability to conduct research to answer DoD needs. As a result, it is important for the programs to continually provide outreach to as many researchers as possible to ensure a high number of quality applicants each year. Furthermore, attendance in the technical sessions by Dr. Preston provided critical understanding and technology transfer in the DoD of the current state of science in the ecology arena. MORE
ZIRCONIUM OXIDE PRETREATMENT FOR MILITARY COATING SYSTEMS

The U.S. Army Research Laboratory (ARL) continues to demonstrate zirconium pretreatment technology as a replacement for existing aluminum and steel pretreatments at military depots. A third demonstration of the zirconium oxide technology, using PPG Industries X-BOND™ 4000 zirconium pretreatment, was carried out at Anniston Army Depot. Previous demonstrations, under ESTCP Project WP-201318, were conducted at Letterkenny Army Depot and Marine Depot Maintenance Command-Production Plant, Albany.

The Anniston demonstration included a deoxidation step for aluminum, which was developed to provide enhanced performance in galvanic cyclic corrosion testing. The demonstration showed that, in addition to lowering environmental and personal safety risks, the zirconium process reduces the number of steps to pretreat steel parts. Unlike the incumbent processes, the zirconium pretreatment step is carried out at room temperature, which reduces energy requirements.

SERDP AND ESTCP PROGRAM UPDATE

SERDP project selections for FY18 are complete and all the proposers have been notified. Forty-two Core projects have been selected to start next year pending approval by the SERDP Scientific Advisory Board (SAB). In addition, 18 SERDP Exploratory Development (SEED) and Limited Scope projects will be started in FY18. As has been true the past several years, there is some uncertainty about the final SERDP budget for next year, so a number of SERDP proposals have been placed on hold. A decision on those proposals will hopefully be made early in FY18.

ESTCP selection meetings for all five Program Areas are scheduled for the second half of September so that selections can be in place early in the fiscal year and the contracting process can begin once funds are available.

Planning for the SERDP and ESTCP 2017 Symposium continues. Details on the technical sessions are being finalized and posted to the Symposium website. Please visit the Symposium website for the most current information and to register.