

## Department of the Interior Receives Four Federal Energy and Water Management Awards

Every year, the Department of Energy's Federal Energy Management Program (DOE FEMP) recognizes outstanding federal sustainability achievements through the Federal Energy and Water Management Awards competition. In Fiscal Year (FY) 2016, the Department of the Interior won four such awards. These award winners include cutting-edge, efficient buildings; innovative contracting approaches; and forward thinking programmatic initiatives.

The Department's four award recipients are as follows:

**Bureau of Land Management** – The Bureau of Land Management (BLM) received a Program Award for their Sustainability Inspection Compliance Assessment – Safety, Health and the Environment (SI CASHE) program. BLM developed this program in FY 2013 to address the energy and water conservation requirements of law and executive order and incorporate the Guiding Principles for High Performance and Sustainable Buildings (Guiding Principles) into its building inventory. The SI CASHE process includes not only inspection but identification, corrective action, implementation, and training. The inspection team audits the building, identifies its deficiencies, and gives recommendations for compliance. The deficiencies are recorded and resources are provided for repairing the deficiencies and bringing the building into compliance with the Guiding Principles and other energy reduction mandates. At the same time, the team conducts training on site for local personnel on how to identify and correct deficiencies using agency resources. The program enabled the BLM to incorporate the Guiding Principles into 18% of its building inventory in FY 2015 and achieve a 34.5% reduction of its energy use intensity from the FY 2003 baseline.



**SI CASHE Inspection Team. Left to Right: Andy Roberts, Steve Cole, David Campbell, Chuck Svoboda, and Ken Morin. Credit: BLM.**

**Bureau of Reclamation** – The Provo Area Office (PAO), Utah, received a Project Award for a comprehensive retrofit that greatly reduced energy and water consumption at the facility. In response to a sustainable building assessment, the PAO implemented a suite of energy and water conservation measures over the course of four years that resulted in a 47% reduction in energy use, a 46% reduction in water use, and a 47% reduction in carbon dioxide emissions per year. The project included the installation of a 24 kilowatt (kW) solar photovoltaic (PV) system, which

can provide up to 25% of the building's electricity needs; xeriscape landscaping with drip irrigation and moisture control sensor; a rainwater harvesting system; direct digital control heating, ventilation, and air conditioning system and duct upgrades; new plumbing fixtures; and lighting efficiency upgrades. As a result of these efforts, the PAO declared 100% conformance to the Guiding Principles in September of 2015.



**Solar Panels at Provo Area Office. Credit: USBR.**

**Fish and Wildlife Service** –The Port Louisa National Wildlife Refuge, Iowa, received a Project Award for its Leadership in Energy and Environmental Design (LEED) Gold-rated Headquarters and Visitor Contact Station. The facility has numerous energy efficient, sustainable strategies including, passive solar architecture, superinsulation, a cool roof, abundant daylighting, and LED lighting with occupancy sensors and timers. The building's remarkable energy performance is at least 56% better than an average building. Renewable energy systems, including a 15-ton geothermal heat pump, two solar hot water collectors, and a 25 kW PV system, contribute to an ultralow carbon footprint. On an annual basis, the building avoids 104 metric tons of greenhouse gas (GHG) emissions, equivalent to taking 22 cars off the road. Approximately 46% of the total



**Port Louisa NWR Headquarters and Visitor Contact Station. Credit: FWS.**

building materials' content was manufactured using recycled materials, while low volatile organic compound carpets, paints, and adhesives provide a healthy work environment for employees. Efficient water fixtures conserve almost 11,000 gallons of potable water annually. Landscaping with native plants eliminates irrigation, and four rain gardens direct storm water to artificial wetlands.

**National Park Service** – The National Park Service National Capital Region (NCR) received a Contracting Award for their Energy Savings Performance Contract (ESPC). On September 24, 2014, the NCR awarded Siemens Government Technologies Phase I of a multi-phased ESPC to help the region meet energy reduction, renewable energy, and water conservation goals, and make significant reductions in GHG emissions. Phase I has a project value (not including financing) of approximately \$29 million with a 23-year performance period beginning after July 2016. The geographic proximity of parks within the region allowed the NCR to take an innovative contracting approach to the ESPC by creating one large project at the regional level. This allowed the NCR to bundle projects across the region, include every park in the ESPC, and achieve the greatest amount of energy savings possible. After the contract was awarded, the NCR created an ESPC team that included at least one staff member from each of the 16 parks and six NCR staff members. Given the vast scope of energy conservation measures at all the regional parks, it was decided to create three phases of the ESPC project. Phase I of the project was completed on March 31, 2016. Phase II and Phase III will be separate task orders scheduled to be awarded in 2016.



**Solar Panels at Manassas National Battlefield. Credit: NPS**