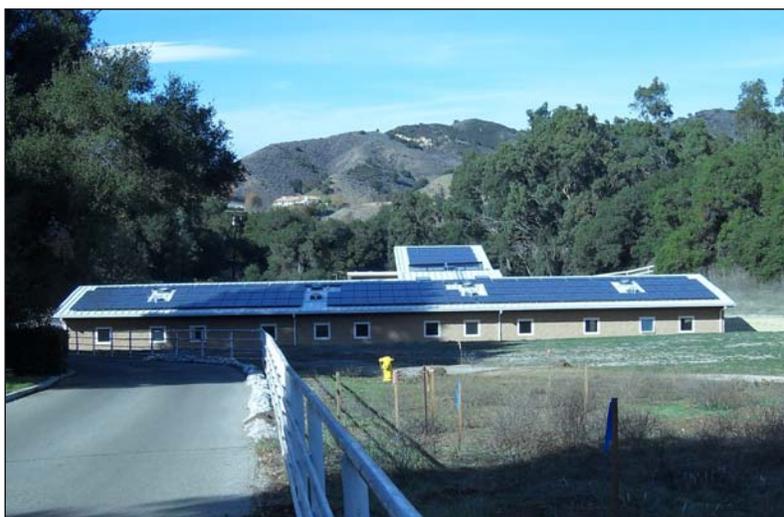


Department of the Interior Receives Three Federal Energy and Water Management Awards

The Department of Energy's Federal Energy Management Program (FEMP) recognizes innovative energy- and water-saving projects, programs, and individuals at its annual Federal Energy and Water Management Awards. The Department of the Interior (DOI) has traditionally fared well in this competition. The FY 2012 competition continues DOI's strong performance, as the Department has received three Project Awards for outstanding achievements in the conservation and efficient use of energy and water. These winning projects help strengthen the nation's energy security and reliability and increase its use of renewable energy sources. They likewise protect the environment by avoiding greenhouse gas emissions, using water efficiently, and containing environmentally-friendly materials. The winning projects also showcase efficiency features that can be replicated, offering visitors the opportunity to learn from site displays and implement similar projects.

Award recipients were honored in a ceremony on Thursday, October 4 at DOI's Sidney R. Yates Auditorium in Washington, DC. The Department's three award recipients are as follows:

National Park Service – The Student Intern Center at the Santa Monica Mountains National Recreation Area in California received a Project Award. The Center was the first grid-tied net-zero energy facility completed in the National Park Service (NPS) system. A 35 kilowatt (kW) photovoltaic (PV) system provides all the energy needs for the building over the course of a year, and surplus PV power also offsets most of the electrical need for an existing



Santa Monica Mountains Student Intern Center

NPS building nearby. The new building is heated and cooled by a highly efficient ground source heat pump system with a unique feature that uses otherwise wasted septic system effluent to increase thermal transmission from the soil to the pipe loops. A solar hot water system provides over 50% of the hot water needs for the facility. Natural daylighting and LED lighting, super-insulation, and a "cool roof" further cut down on energy requirements. These new renewable energy systems avoid greenhouse gas emissions by at least 22.1 metric tons of carbon dioxide equivalent annually, which equates to taking 4.3 cars off the road, saving 51.4 barrels of oil, or eliminating energy use from 1.9 houses for a year. Finally, the facility conserves water through the use of efficient bathroom and kitchen fixtures and landscaping that does not require irrigation.



Audubon National Wildlife Refuge Visitor Center/Headquarters

megawatt-hours (MWH) of renewable power annually. The building was constructed using environmentally friendly, regionally extracted and manufactured “natural” materials, high recycled content, and low VOC-emitting carpets, paints, and adhesives. Low flow WaterSense plumbing fixtures conserve 17,430 gallons of water annually, while water-efficient xeriscaping with native plants and forbs avoids chemical fertilizer use and irrigation.

U.S. Fish and Wildlife Service – Audubon National Wildlife Refuge in North Dakota received a Project Award for its Visitor Center/Headquarters. This new Leadership in Energy and Environmental Design (LEED) Gold-rated building emphasizes energy efficiency, renewable energy, recycled materials, and water conservation. Passive solar architecture and a super-insulated building envelope reduce heating and cooling loads and operating costs. The building is heated and cooled by a geothermal (ground source) heat pump system. With an ENERGY STAR® rating of 87, the building uses at least 40% less energy than an average building. In addition, a net-metered, grid-

tied, pole-mounted 11.04 kW solar PV array produces approximately 21.22

U.S. Fish and Wildlife Service – Neosho National Fish Hatchery in Missouri also received a Project Award for its Visitor Center. The hatchery was established in 1888 and is the oldest operating Federal fish hatchery in existence today. The Visitor Center is architecturally designed to mimic the original headquarters from 1888, which featured similar onion dome and witches hat roof styles. Many energy efficient design strategies were realized in the construction, including passive solar architecture, low-emissivity glazed windows, occupancy sensors, daylight sensors, timers, and dimmers, together with energy-efficient fluorescent, task, and LED lighting. Closed-loop geothermal wells and ground-source heat pumps provide heating and cooling. These energy conservation measures combine to yield energy performance at least 34% better than an average building. Meanwhile, a net-metered, grid-tied, 16-panel 3.36 kW solar PV array on the roof



Neosho National Fish Hatchery Visitor Center

produces 4.818 MWH of renewable electric power. The Visitor Center also has many water saving features. For example, hatchery spring water is used instead of treated potable water for large aquariums, the grounds are landscaped with native plants and forbs, and stormwater containment and drainage swales save even more water. Low-flow plumbing also conserves 28,225 gallons of water annually. Finally, green construction methods that conserved water and energy diverted over 114 tons of on-site generated construction waste from local landfills – an astonishing 80.3% – by reusing, salvaging, and recycling construction materials.