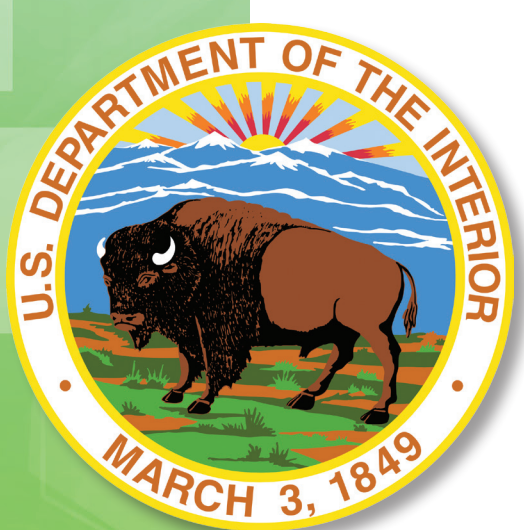


Federal Energy and Water Management AWARDS 2013



Selectively placed advanced window technology (above) and plenty of daylighting (below) create a comfortable and energy efficient interior space for visitors and staff.



Shannon Blackburn, Mary Crist, Kim Forrest Beth Ludvigsen, Bob Parris U.S. Department of the Interior, U.S. Fish and Wildlife Service San Luis National Wildlife Refuge Complex Los Banos, California

The U.S. Fish and Wildlife Service completed its first net-zero energy Leadership in Energy and Environmental Design (LEED) Platinum-certified building in FY 2012 at San Luis National Wildlife Refuge Complex. During the first year of operation, the 16,500 square-foot Headquarters and Visitor Center produced 352 billion Btu via nine solar photovoltaic arrays totaling 59.2 kilowatts. Structural insulated panels; a cool roof; abundant daylighting achieved with tubular daylighting devices, clerestories, skylights, and operable low-e glazed windows; passive and evaporative cooling; and energy-efficient lighting yield energy performance better than 30 percent compared to an average building.

Low-flow and waterless plumbing fixtures reduce water use by 35 percent and save 396,000 gallons annually. Xeriscaping, native plants, limited drip-irrigation, and stormwater containment conserve water outdoors. Low-volatile organic compound (VOC) carpets, paints, and adhesives provide a healthy indoor work environment. Many building elements are composed of recycled materials including countertops; ceiling tiles; wallboard; wheat straw cabinetry; fly ash in the concrete; and certified sustainably harvested lumber, with 90 percent of construction waste recycled. Dynamic, interactive exhibits highlight the facility's green features for an estimated 150,000 visitors annually.