

National Park Service
2002 Environmental Achievement Awards
Winner

Kent Bullard

Offshore Maintenance Supervisor, Channel Islands National Park

For several years, Kent Bullard has been a champion of many environmental causes at Channel Islands National Park. His commitment to preserving natural resources is demonstrated through his efforts in the following areas.

Solid Waste Management/Recycling

When Kent's attempt to negotiate a contract with the city waste hauler to increase the Park's number of dumpsters was unsuccessful, he decided to work with an independent recycling service that will sort through the materials in certain dumpsters and recover an estimated 90 percent of the recyclable materials from them. Additionally, Kent investigated, applied for, and received a "Recycling at Work" grant from the National Park Foundation to acquire recycled content picnic tables, benches, and signage on three of the Park islands.

Biodiesel

In 1998, the Park's vehicle and boat fleets were annually using over 50,000 gallons of diesel fuel. That year, Kent read an article on biodiesel fuels and began seeking funding to substitute traditional diesel with this more environmentally-friendly alternative. Since then, the Park's Pacific Ranger, two mainland forklifts, a diesel generator, a dock crane, and a 58 foot boat all operate on biodiesel. The Ventura Harbor boatyard also sells biodiesel for both the Park and public use. As a result, the Park has used over 10,600 gallons of biodiesel.

Compressed Natural Gas (CNG) Vehicle Program

Despite the fact that its fueling infrastructure was not equipped to handle CNG, Channel Islands requested and received four CNG vehicles from GSA in 1996, making it the only Park to acquire CNG vehicles that year. Kent secured a used CNG fuel maker from the gas company and in FY 01 the Park secured funds to upgrade the pumping facility and add fuel storage capacity. Today, 45 percent of the Park's mainland vehicles operate on CNG.

Education and Outreach

Kent recognizes that lessons learned from his successes and failures can help others improve their environmental performance and thus increase the scope of his impact. Therefore, he makes a concerted effort to reach out to others. He helped construct, write, and maintain the NPS Renew web site for the Green Energy and Environmental Leadership Programs and continues to update and add new content. He has traveled to give presentations on biodiesel use, sustainability, energy management, and

photovoltaics. In June 2000, the Partnership for Biodiversity sent him to the Galapagos Islands to evaluate and recommend sustainable practices. Kent designed programs for evapo-transpiration sewage treatment, fuel storage, renewable energy, and recycling.

Solar Energy

In January 2002, Kent designed, sized, and installed a 2.4 kW photovoltaic system on East Santa Cruz Island to provide power for two new employee residences. In keeping with his commitment to share his knowledge, Kent installed the PV system in the form of a four day mini-workshop for one new Channel Islands employee and one trainee from the Santa Monica Mountains National Recreation Area. This was the 74th PV installation at the Park, bringing its total PV capacity to 32.4 kW. As a result, the Park is saving 40,000 gallons of petroleum fuel annually and preventing 476 tons of carbon dioxide, 11.5 tons of nitrous oxides, and 1140 pounds of sulfur dioxides.



Solar panels on East Santa Cruz Island

Water Management

Because two of the Park's islands are too small to have fresh water resources and must receive water by shipment, opportunities to reduce water consumption on these islands represented a great opportunity to save not only water, but energy and money as well. The installation of low-flush toilets on Anacapa Island reduced the island's water needs by 65 percent. Kent reduced the mainland facilities' water use by 40,000 gallons per year by installing four waterless urinals. Kent's advocacy for this waterless technology has inspired other NPS locations to install these urinals, saving thousands of gallons of water each year.

Kent also pioneered the use of recycled plastic chambers for the septic effluent system. This prevents the costly shipping of gravel to the islands. Although the technology he researched was not approved for use in the state of California, Kent received a conditional use permit from Santa Barbara County to install it. Because of the project's success, eight more systems have been installed in the Park and the technology was allowed to enter the California market.

Other Programs

Kent has also been responsible for implementing programs for re-refined motor oils, green lubricants, wind energy, energy conservation, green cleaning supplies, green office products, electric vehicle utilization, and recycled plastic lumber. Kent's sustainable practices do not end at the work place. His personal automobile is 100 percent powered by biodiesel, and his home's hot water heater and its electrical components are powered by a 2.6 photovoltaic system he installed in August 2001. Kent collects rainwater for gardening and has incorporated deconstructed building materials in his fencing. Overall, Kent's efforts, coupled with his commitment to educating others, have been hugely effective in reducing the environmental impact of Channel Islands National Park.