



NATIONAL PARK SERVICE

Environmental Audit Program

EnviroCheck Sheet

Energy and Water Conservation
June 2002 Update

ENERGY AND WATER CONSERVATION

The Department of Energy (DOE) estimates that the use of energy efficient products and practices can produce energy cost savings at federal facilities of 25 percent or more. Energy and water efficiency is not only cost effective, but also environmentally responsible. Reduced energy consumption can reduce annual greenhouse gases by 11 million metric tons of carbon dioxide (CO₂). If all federal agencies used water and energy efficient products and practices, the federal government could save over \$900 million per year on energy costs and \$240 million per year on water costs.

Water is often considered the cheap utility, not worthy of consideration for conservation. However, water use is costly in many ways:

- It requires energy for pumping, heating and cooling;
- It depletes aquifers;
- It requires chemicals for treatment;
- It generates point and non-point source wastewater which must be disposed; and
- It requires staff to operate treatment and wastewater treatment systems.

The NPS, with its mission of resource conservation, and its position as a public educator, has a special obligation to maximize the opportunity for, and demonstrate environmental leadership in, energy and water conservation.

Auditor's Guidelines:

Records to Review

- Purchasing orders
- Pollution Prevention Program
- Data from energy & water audits
- Energy management plan
- Annual fuel consumption records
- Contract specifications for new construction

Features to Observe

- Plumbing and lighting fixtures
- Solar panels
- Boilerplate information on hot water heaters and furnaces
- Lights and faucets in vacant buildings
- Conservation measures (insulation, auto shutoff switches)
- Vending/soda machines
- Office/kitchen equipment
- Washers & dryers
- Alternate fuel vehicles

Persons to Contact

- Purchasing officer
- Auto mechanic/
maintenance personnel
- Park energy manager
- Natural resources staff

DEFINITIONS

Alternative fuel: Any fuel determined to be substantially not-petroleum, and yielding substantial energy-security benefits and substantial environmental benefits. As defined by the National Energy Policy Act (EPAct), alternative fuels are methanol, denatured alcohol and other alcohols, separately or in mixtures of 85 percent by volume or more (or other percentage not less than 70 percent as determined by U.S. Department of Energy rule) with gasoline or other fuels; Compressed Natural Gas (CNG); Liquefied Natural Gas (LNG); Liquefied Petroleum Gas (LPG); hydrogen; “coal-derived liquid fuels;” fuels “other than alcohols” derived from “biological materials;” electricity.

Blackwater: Wastewater generated from toilet flushing. Some jurisdictions include water from kitchen sinks or laundry facilities in their definition.

Cost effective: A payback period of less than ten years using life-cycle costing analyses procedures.

Energy Savings Performance Contracting (ESPC): An alternative financing method in which federal agencies can contract with an energy service company (ESCO) that pays all up-front equipment costs. In exchange, the company shares in the resulting energy cost savings.

Energy Star: US Environmental Protection Agency (US EPA) energy efficiency labeling program for computers and other office equipment. The Energy Star program includes a Green Lights energy efficient lighting program. An Energy Star Building label is being developed. In addition to labeling, the program provides technical support including computer software, manuals, and training.

Federal Energy Management Program (FEMP): DOE Office of Energy Efficiency and Renewable Energy program that provides technical assistance to federal facilities in energy conservation. Assistance includes computer software, technical guidance documents, and partnership opportunities.

Greywater: Wastewater that does not contain toilet wastes and can be reused for toilet flushing and/or irrigation with simple filtration.

Life-cycle cost: Total cost of building/installing, owning, operating and maintaining a building and/or equipment over its useful life (including fuel, water, energy, labor, and replacement component costs), determined on the basis of a systematic evaluation and comparison of alternative building/equipment systems. Used to determine cost effectiveness.

Life-cycle cost analysis: In accordance with Section 401 of Executive Order 13123, federal agencies shall use life-cycle cost analysis in making decisions about their investments in products, services, construction, and other projects to lower the Federal Government’s costs and to reduce energy and water consumption. Where appropriate, agencies shall consider the life-cycle costs of combinations of projects, particularly to encourage bundling of energy efficiency projects with renewable energy projects. Agencies shall also retire inefficient equipment on an accelerated basis where replacement results in lower life-cycle costs. Agencies that minimize life-cycle costs with efficiency measures will be recognized in their scorecard evaluations.

Life cycle assessment: The comprehensive examination of a product’s environmental and economic aspects and potential impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use, and disposal.

LEGAL REQUIREMENTS

Federal

The Energy Policy Act of 1992 (EPACT) (Public Law 102-486, 106 Stat. 2776),

This statute provided for improved energy efficiency. It includes provisions to allow for greater competition in energy sales and amendments to the Federal Power Act.

Executive Order (EO) 13123 - Energy Efficiency and Water Conservation at Federal Facilities.

EO 13123 includes the following goals that may be relevant to NPS facilities:

- **Greenhouse Gases Reduction.** (Sec. 201) Through life-cycle cost-effective energy measures, each agency shall reduce its greenhouse gas emissions attributed to facility energy use by 30 percent by 2010 compared to such emissions levels in 1990. In order to encourage optimal investment in energy improvements, agencies can count greenhouse gas reductions from improvements in non-facility energy use toward this goal to the extent that these reductions are approved by the Office of Management and Budget (OMB).
- **Energy Efficiency Improvement.** (Sec. 202) Through life-cycle cost-effective measures, each agency shall reduce energy consumption per gross square foot of its facilities, relative to 1985, excluding facilities covered in section 203 of this order, by 30 percent by 2005, and 35 percent by 2010. No facilities will be exempt from these goals unless they meet new criteria for exemptions, to be issued by the Department of Energy (DOE).
- **Renewable Energy.** (Sec. 204) Each agency shall strive to expand the use of renewable energy within its facilities and in its activities by implementing renewable energy projects, and by purchasing electricity from renewable energy sources. In support of the Million Solar Roofs initiative, the Federal Government shall strive to install 2,000 solar energy systems at Federal facilities by the end of 2000, and 20,000 solar energy systems at Federal facilities by 2010.
- **Petroleum Usage.** (Sec. 205) Through life-cycle cost-effective measures, each agency shall reduce the use of petroleum within its facilities. Agencies may accomplish this reduction by switching to a less greenhouse gas-intensive, non-petroleum energy source, such as natural gas or renewable energy source; by eliminating unnecessary fuel use; or by other appropriate methods. Where alternative fuels are not practical or life-cycle cost-effective, agencies shall strive to improve the efficiency of their facilities.
- **Source Energy.** (Sec. 206) The Federal Government shall strive to reduce total energy use and associated greenhouse gas and other air emissions, as measured at the source. To that end, agencies shall undertake life-cycle cost-effective projects in which source energy decreases, even if site energy use increases. In such cases, agencies will receive credit toward energy reduction goals through guidelines developed by DOE.
- **Water Conservation.** (Sec. 207) Through life-cycle cost-effective measures, agencies shall reduce water consumption and associated energy use in their facilities to reach the goals set under section 503(f) of this order. Where possible, water cost savings and associated energy cost savings shall be included in Energy Savings Performance Contracts and other financing mechanisms.

Executive Order 13148 - Greening the Government Through Leadership in Environmental Management.

Section 207 of this EO establishes goals for “Environmentally and Economically Beneficial Landscaping.” Under this EO, each agency is directed to “strive to promote the sustainable management of Federal facility lands through the implementation of cost-effective, environmentally sound landscaping practices, and programs to reduce adverse impacts to the natural environment.”

Executive Order 13149 - Greening the Government Through Federal Fleet and Transportation Efficiency

Section 201 of this EO sets goals for “Reduced Petroleum Fuel Consumption.” Each agency operating 20 or more motor vehicles within the United States shall reduce its entire vehicle fleet’s annual petroleum consumption by at least 20 percent by the end of FY 2005, compared with FY 1999 petroleum consumption levels.

Federal Acquisition Regulation (FAR)

The FAR incorporates the purchasing targets of EPACT and EOs 13123 and 13149 into the federal procurement process.

DOI Departmental Manual, Part 752, Energy Management Program and DOI Acquisition Policy Release (DIAPER) 97-2, Environmental Contracting Initiatives

Outlines requirements for departmental bureaus and offices to meet department-wide energy conservation goals and EO 13123.

Department of Interior and National Park Service Policy

Greening the Interior: Strategic Plan for Greening the Department of Interior Through Waste Prevention, Recycling and Federal Acquisition, issued May 2000. The Strategic Plan outlines goals, implementing strategies, and management controls to satisfy the requirements of EO 13101 and to further focus DOI facilities towards more sustainable design and operations. The Strategic Plan specifies targets and benchmarks related to energy conservation.

State and Local

It is important to check with state and local authorities on regulations affecting energy management. Over 25 states have adopted the American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE) Standard 90.1. This Standard establishes energy efficiency for buildings and equipment in new construction. Many states, such as California and its Energy Code, have more stringent requirements.

SYSTEMATIC APPROACH TO ENERGY AND WATER CONSERVATION

A systematic approach is the best means to ensure compliance with statutory and regulatory requirements and maximize the identification and implementation of energy and water conservation opportunities. An effective energy and water conservation may include the following:

1. **Contact the Regional Energy Coordinator.** Coordinators can provide:
 - Technical assistance to the park in conducting audits and providing NPS-specific suggestions on opportunities and lessons learned;
 - Information on project financing and partnering opportunities and coordination in NPS-wide energy conservation initiatives; and
 - Information on other NPS and non-NPS sources of assistance and tools.
2. **Conduct Energy and Water Use Audits.** The parks need a baseline to assess current performance and identify realistic energy and water conservation opportunities. Work with your Regional Energy Coordinator on these audits.
 - The parks should tabulate:
 - Energy use and costs over several years, breaking out building and equipment use and fuel types when possible; and
 - Water use and wastewater generation rates and costs over several years breaking out use by building and operation when possible.

- The parks should conduct a walk-through to identify energy using equipment and practices, and water using and wastewater generating practices. At a minimum, park personnel need to check energy efficiency ratings, water conservation ratings, and how buildings and equipment are operated and maintained.
 - More sophisticated energy and water use audits can be conducted by qualified personnel. The local utility may conduct an audit of the park as a public service. FEMP has also partnered with NPS on audit projects within the NPS. (FEMP has developed WATERGY, a computer spreadsheet program that can be used to model water conservation and associated energy savings for a park. WATERGY is a spreadsheet model that uses water/energy relationship assumptions to analyze the potential of water savings and associated energy savings. The spreadsheet allows input of utility data (energy and water cost and consumption data for the most recent twelve months) and facility data (number and kind of water consuming/moving devices and their water consumption and/or flow rates). It then estimates direct water, direct energy, and indirect energy annual savings, as well as total cost and payback times for a number of conservation methods. To download this spreadsheet, go to <<http://www.eren.doe.gov/femp/resources.html>> and click on Analytical Software Tools. Information gathered using a tool such as WATERGY can be used to identify energy and water use reduction opportunities, see item number three, below.)
3. **Identify Reduction Opportunities.** The parks can use the audit information to identify energy and water use reduction opportunities including equipment and operational changes. Key considerations include:
- Identification of no-capital/operational changes such as:
 - Tuning up and maintaining equipment so that they operate more efficiently;
 - Adjusting thermostat settings, installing programmable thermostats, reducing unnecessary lighting, closing windows and doors, educating employees (e.g., encourage use of the stairs instead of elevators); and
 - Fixing plumbing and equipment leaks, developing procedures to ensure leaks are discovered/fixed quickly and making sure water is not left on unnecessarily.
 - Use of life cycle cost and other economic analysis methods to properly assess the total cost (capital and operational) of new equipment and practices.
 - Use of a systems approach since some projects can generate secondary effects and savings, for instance:
 - Switching to energy efficient lighting can reduce cooling loads in a building; and
 - Switching to water conserving showerheads will reduce water heating requirements and heating costs.
 - Use of renewable and alternative fuel energy sources which are environmentally preferable.
4. **Develop and Implement Conservation Plans.** Energy and water conservation measures should be implemented in accordance with a strategy that cost effectively addresses (1) what can be done, (2) when it should be done, and (3) how it will be financed. Individual projects are good but energy conservation is often most effective when conducted systematically.
5. **Track Performance.** Tracking at the facility/park is necessary to determine cost effectiveness of energy management and equipment changes and to identify where further improvements can be made. Month-to-month tracking and recordkeeping provides the level of information necessary to identify performance levels based on seasonal variation and occupant loads.

Conservation Opportunities

Opportunities to conserve energy and water exist when equipment is old or inefficient, improperly operated (e.g., operated when a building is not occupied), improperly maintained or oversized. Opportunities also exist through changes in employee practices. Some typical opportunities are listed in the attached “Energy Efficiency and Renewable Energy Opportunities at Parks” table on page 7, below.

New Products/Equipment Purchase and Facility Design/Construction

Federal facilities must purchase products that promote energy efficiency. For example parks must:

- Purchase equipment that meets energy efficiency requirements specified in EOs and the FAR;
- Purchase Energy Star computers and office equipment;

- Purchase equipment in the top 25 percent of their class in energy efficiency or 10 percent more efficient than the minimum level that meets DOE standards. The General Services Administration (GSA) and Defense Logistics Agency (DLA) have catalogs and schedules of products that meet these requirements; and
- Incorporate energy efficiency, renewable energy sources, and sustainability concepts with NPS building construction and rehabilitation. NPS tools include the manual “Guiding Principles of Sustainable Design” and “A Sustainable Design and Construction Database.”

Concessionaires and Contractors

Concessionaires, contractors and other contracted operations/services operating in the parks are required to complying with elements of this check sheet. The parks need to verify that these operators are considering energy conservation in facility and equipment designs, work plans, and operating plans.

SUCCESS STORIES

Acadia National Park uses solar panels and hyperbolic solar collectors for domestic water heating and building heating, adjustable flush low flow toilets, and no flow urinals.

Assateague Island National Seashore has incorporated portable restrooms and changing rooms that use solar panels for water pumps and odor control.

Kennesaw Mountain National Battlefield Park has installed low flow motion sensing water fixtures in its new restrooms.

FOR MORE INFORMATION

- DOT Alternative Fuel Data Center, <<http://www.afdc.doe.gov/>>
- NPS Sustainable Energy and Resource Conservation Central. <<http://www.nps.gov/renew>>
- Greening the National Park Service web page, Department of Energy resources <<http://www.nps.gov/renew/doe.htm>>
- DOI Energy And Water Conservation Pollution Prevention Plan Strategy. <<http://www.doi.gov/oepc>>
- EPA Energy Star Program. 1-888-STAR-YES (Hotline), <<http://www.epa.gov/energystar.html>>
- Waterwise Web Site. <<http://www.waterwise.org/>>
- American Water Works Association Web Site. <<http://www.awwa.org/>>
- Federal Energy Management Program (FEMP), 1-800-363-3732 (Help Line) or <<http://www.eren.doe.gov/femp>>
- Park Facility Web Site. <<http://www.nps.gov/dsc/dsgncnstr>>
- Environmental Building News, <<http://www.buildinggreen.com/products>>
- UNPEPP <<http://www.energypartnerships.org/>>

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Energy Efficiency and Conservation Opportunities at Parks

Lighting

- Replace incandescent bulbs with high efficiency fluorescent bulbs (e.g., compact fluorescent and T-8 fixtures).
- Remove unneeded lamps and extra bulbs in multiple lamp fixtures provided that lighting and safety requirements are not compromised.
- Install occupancy sensors.
- Install more efficient electronic ballasts when replacing failed units.
- Increase natural lighting by installing skylights, solar tubes (light tubes), or by painting walls lighter colors.
- Consider switching to high intensity discharge (HID) lights in large area and outdoor settings.
- Encourage personnel to shut off lights when not needed.

Heating and Cooling Systems

- Service equipment regularly to ensure maximum efficiency.
- Keep interior doors closed between areas where heating and cooling is highly regulated (e.g., offices and warehouse areas).
- Install programmable thermostats and other area/building automated control systems to regulate heating/cooling through the workday and off-hours based on heating/cooling loads.
- Consider paddle fans to help de-stratify warm air in high ceiling rooms.
- Upgrade HVAC equipment to more efficient models as part of a comprehensive strategy for an upgrade, retirement and replacement program. Consider ozone-depleting substance regulations as well as energy management in air-conditioning planning. Size HVAC equipment after having determined other load reduction opportunities.
- Consider renewable energy technologies to provide all or a portion of total heating requirements. Technologies that have already been successful at parks include solar panels and hyperbolic solar collectors for domestic water heating, pool heating and building heating; and slab heating ground source heat pumps for building comfort heating.
- Consider natural gas driven engines and adsorption cooling systems, cooling tower supplements to ground-based systems, and evaporative cooling units as possible energy-efficient alternative cooling technologies.

Power Generation

- Properly maintain electrical systems to ensure peak performance.
- Replace existing transformers with more energy efficient units.
- Utilize renewable energy sources. Those that have been successfully implemented at parks include photovoltaic and micro-hydroelectric sources. Consider using these sources at main park facilities and remote locations.
- Consider purchasing energy from “green” utility companies, if available.

Office Equipment

- Ensure that Energy Star computers and monitors are purchased in accordance with EO 12844.
- Affirmatively purchase other Energy Star and energy efficient office equipment that meet EPACT and EO 13123 requirements. Purchase properly sized, duplexing copiers with a low energy mode.
- Ensure that equipment is turned off when not being used.

Food Service

- When replacing equipment, choose energy efficient models that meet or exceed EPACT and EO 13123 requirements. Look for equipment that has waste heat recovery technology.
- For high capacity applications like restaurants, purchase multi-stage dishwashers that are more energy and water efficient.
- Turn refrigeration equipment off in the off-season, or when not in use for a significant period of time.
- Adjust temperature settings in refrigeration equipment to be no cooler than necessary.
- When upgrading kitchens, consider energy efficient equipment such as infrared fryers, convection ovens, microwave ovens, and specialized equipment (e.g., pizza ovens).
- Use outside, unconditioned air sources for exhaust hoods, and provide side curtains for cooking areas to limit heat dissipation.

Water Heating

- Replace existing equipment with energy efficient hot water heaters that meet or exceed EPACT and EO 13123 requirements.
- Install renewable energy source equipment such as solar panels, passive solar systems, and geothermal systems. Consider alternative technologies such as air-source heat pump heaters, water-source heat pump water heaters, and waste heat water heaters.
- Reduce hot water temperatures.
- Ensure that hot water heaters are turned off in the off-season or when not in use for a significant period of time.
- Ensure hot water heater and piping are adequately insulated; install heat traps to cut convective heat loss.
- Ensure that hot water heaters are properly sized. Tankless or on-demand hot water heaters eliminate standby heat loss and are convenient for remote locations. (These units may not be efficient in high use situations.)
- Install hot water heaters as close as possible to the point of use to reduce piping heat loss.

Laundry Equipment

- When replacing equipment, choose energy efficient models that meet or exceed EPACT and EO 13123 requirements.
- Purchase horizontal axis washing machines that are more water efficient as well as energy efficient.
- Reduce laundry temperatures as allowable by local code. Use soaps that perform at lower temperatures.
- Ensure that equipment is properly maintained (e.g., empty lint filters and sediment from equipment).
- Encourage users to wash and dry full rather than partial loads.

Building Envelope

- Provide highly reflective surfaces and colors for walls and roofs with a primary cooling load.
- Provide wall shading through the use of overhangs, sun shades, landscaping.
- Maximize insulation in new construction and major renovation to reduce both heating and cooling loads. Consider exterior finish insulation for existing structures.
- Install energy efficient, double paned windows and insulated doors.
- Install weather-stripping and ensure that windows and doors are airtight.
- Ensure that doors and windows are kept closed or are opened to minimize air-conditioning and ventilation requirements.

Landscaping and Building Orientation

- Ensure that site selection and building orientation and their impact on energy requirements are considered in the planning and design of new facilities.
- Consider site grading and its effect on energy requirements in site and building design.
- Use landscaping that provides shade and windbreaks to reduce energy requirements. Also consider minimal site clearance and planting native plant species that may require less maintenance and irrigation requirements.

Water Conservation Opportunities at Parks

Operational Practices

- Fix leaks in plumbing and fixtures such as toilets, sinks, bathtubs, showers, water fountains, water supply lines and irrigation systems. Encourage staff to notify Maintenance of any leaks, running toilets or other problems so that they can be quickly repaired.
- Insulate piping runs so that less water is wasted waiting for hot or cold water at the point of use.
- Serve water only upon request at food service areas. Have concessioners implement a program to launder towels only upon request (note water conservation measures on menus, table tents, and in bathrooms to educate the public).
- Operate clothes and dish washers only with full loads.
- Adjust flush values in gravity toilets to reduce the amount of water used per flush.
- Make staff, concessioners, contractors and the visiting public aware of the importance of water conservation. Encourage them to conserve water (e.g., take showers, turn off the water when soaping up, turn off the faucet when brushing teeth, etc.).
- Encourage maintenance personnel to broom sweep driveways and walkways rather than using a hose. If a hose must be used, use a high-pressure nozzle with a shut off valve.
- Limit pool water circulation to actual pool usage time. Excess circulation can result in higher evaporation rates. Cover pool when not in use if possible.
- Restrict irrigation to mornings (and if necessary evenings and night-time) to decrease water loss from evaporation. Water only when needed and avoid using sprinklers which waste water through evaporation. Use soaker hoses that sweat water directly into the soil and have less evaporative loss. If using a sprinkler, ensure that the water is distributed only on the area requiring watering (e.g., water streams do not extend to sidewalks).
- Wash vehicles less often.

Equipment and System Changes

- Install ultra-low flush (ULF) (1.6 gallon) toilets that meet federal water efficiency standards.
- Install no-flush composting toilets in remote locations.
- Install waterless urinals, where feasible.
- Install low-flow showerheads with a rating of 2.5 gpm that meet federal water efficiency standards.
- Install faucet aerators, flow restrictors in sinks, and in-line flow restrictors.
- Install electronic controls for faucets, toilets and urinals. Set value times as low as possible without compromising performance.
- Locate chilled water systems and hot water heating systems as close to the point of use as possible to reduce temperature change and excess water in lines to be purged.
- Install water and energy efficient horizontal axis clothes washing machines instead of vertical models.
- Specify water and energy efficient air conditioning and heating systems when retrofitting or replacing equipment. Consider air rather than evaporative water tower cooling systems for air conditioning systems. Use recycling systems if evaporative cooling towers are used.
- Recover condensate from chilled water coils and air conditioning units.
- Use recycled (closed loop) cleaning systems in maintenance areas. Use steam versus high pressure cleaning systems to reduce water usage.
- Consider greywater collection and reutilization systems for irrigation and non-consumptive uses.
- Employ xeriscape landscaping. This saves water and educates visitors on native plant species.
- Install rain and fog drip collection systems for water consumption, irrigation or other uses.
- Consider in-park groundwater replenishment of treated wastewater rather than off-site treatment and disposal. The treated and/or “polished” wastewater can be recharged via percolation ponds or injection wells. Wastewater may be polished by pond vegetation (bioretention). Underground Injection Control permits may be required for such discharges.

Business Practices

- Incorporate water conservation requirements and responsibilities into contract language for concessioners, contractors and other third parties operating in the park.
- Incorporate the *Environmentally and Economically Beneficial Landscaping Practices Guidance* into landscaping programs, policies and practices.(EO13148)

This document does not necessarily contain all information needed to determine compliance status.



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CHECKLIST ITEM	PRIORITY	NOTES
<i>Planning and Assessments</i>		
1. The Regional Energy Coordinator has been contacted regarding the potential for energy efficiency and conservation. [EO 13123]	2	
2. An energy audit has been conducted at the park. [BMP related to Agency requirement to implement EO 13123, Sec. 402]	3	
3. Building construction and rehabilitation designs incorporate energy efficiency, renewable energy sources and sustainability concepts. [EO 13123, Sec. 403(b)]	2	
4. There are procedures to verify that contractors and concessionaires are considering energy conservation and renewable energy sources in facility and equipment designs, work plans and operating plans. [EO 13123]	2	
5. An energy efficiency and conservation program plan or strategy has been developed and implemented. [EO 13123]	2	
<i>Training</i>		
6. A demonstrated effort has been made to educate staff on energy efficient practices such as turning off lights, keeping windows and doors closed, etc. [EO 13123, 406(d)]	2	
<i>Implementation</i>		
7. To help ensure that the equipment is operating efficiently, regular maintenance and tune-up programs for energy consuming equipment such as heating and cooling equipment occur. [BMP]	3	
8. Demonstrated efforts have been made to make low or no-capital investments to ensure that buildings and equipment is properly operated and maintained in a manner that maximizes energy efficiency (e.g., weather stripping, properly closing doors and windows and ensuring that vehicles are well-maintained). [BMP]	3	
9. Contracting/purchasing personnel at the park are buying equipment that meets energy efficiency requirements specified in EO 13123, Sec. 403 and the FAR such as: <ul style="list-style-type: none"> • Energy Star computers and office equipment; and • Equipment in the top 25 percent of their class in energy and water use efficiency or 10 percent more efficient than the minimum level that meets DOE standards. [EPACT]	2	

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