

Apostle Islands National Lakeshore  
Sustainability Best Management Practices  
August 2008

<b>Administrative</b>	
<b>Activity/Item</b>	<b>Best Management Practice</b>
Copiers/Printers	Printers are shared among several users.
	Laser printers are used verses inkjet where possible; ink and toner cartridges are recycled.
	Printing preferences are set for double sided on all documents greater than one page. If single sided printing is required the printer is set for this option to reduce unnecessary copying of a blank side of paper.
Lunchroom	Ceramic plates, bowls, and mugs as well as silverware are available for employee use. Plastic silverware is washed and reused. Coffee mugs are available for use during meetings. Once Styrofoam cups are used up, they will not be replaced.
<b>Communication, Education, and Outreach</b>	
Community	Produce from the Raspberry Island garden is donated to the Red Cliff Elderly Nutrition Program.
	Deer removed from the islands during vegetation management actions are donated to the Red Cliff tribe.
Environmental Education	Alternative and public transportation methods are promoted through the park by Student Conservation Association interns funded by the Ford Motor Company through the National Park Foundation.
	Hiking and kayaking are promoted by an employee stationed at Meyers Beach.
	The summer lecture series features talks related to climate change and related subjects.
	Campfire programs at Stockton Island address sustainability through Leave No Trace Camping.
	Tours of the Hokenson Fishery often discuss how the brothers relied on their resourcefulness and ingenuity in recycling used items and adapting them to their needs.
Island School	Participants in Island School receive education on packaging food using reusable materials when visiting the park, and being "light on the land" including walking single file, and leaving things as they are found.
Leave No Trace	Leave No Trace practices are shared with visitors and well advertised throughout the park. Aspects of this program include plan ahead, pack out what is brought in, minimize campfire impacts, travel and camp on durable surfaces, and leave things as they are found.
Sign Shop	Signs are created onsite which reduces packaging and shipping. Signs are created using recycled aluminum.

<b>Communication, Education, and Outreach con't.</b>	
<b>Activity/Item</b>	<b>Best Management Practice</b>
Safety and Sustainability Committee	The purpose of the sustainability subcommittee is to identify and implement sustainable practices throughout the park. The Safety and Sustainability Committee meets bi-monthly and progress is shared with staff.
Green Team	Members of the park's Sustainability subcommittee participate in a regional green team network supported by the Alliance for Sustainability.
The Natural Step	Decisions are framed within the philosophies of this movement whenever feasible.
Travel Green	The park participates in the state's Travel Green program; the certification is updated annually.
Web site	The web site is used as a venue to identify and share sustainable park practices with employees and the public.
	The parks Sustainability Best Management Practices are posted on the website.
<b>Construction and Maintenance</b>	
Cleaning supplies	Green Works™ cleaning supplies are used in housing units and other buildings.
Hazard trees	Only hazardous trees in Visitor Use Areas are mitigated; trees are cut down with minimum tool methods.
Picnic tables	By 2008 all new picnic table materials or tables are low maintenance/green style.
Restroom cleaning	Green products are used to clean restrooms.
Snow and ice removal	Snow and ice is removed with mechanical means when feasible; environmentally safe melting agents are used.
Sustainable construction	Sustainability is incorporated into construction projects in the park. An example is the Raspberry Island Lighthouse where the park replaced the metal roof, updated the photovoltaic system with improved technology, and replaced the tram diesel motor with a new propane motor. The investment in the lighthouse was protected by landscaping to move water away from the footings and by replacing the outdated lightning protection system.
Recycling of Building Materials	Buildings scheduled for removal are deconstructed and the materials reused whenever feasible.
<b>Energy Management</b>	
Electricity - Islands	Solar panels with battery storage capability are used in all island quarters.
	The first solar electric refrigerator was installed and will be monitored for efficiency. More will be replaced over the next several years as funding allows.
	LED lighting is used at Raspberry Island.
Heating – Islands	All housing units with propane heaters are converted to a lower BTU style.

<b>Energy Management con't.</b>	
<b>Activity/Item</b>	<b>Best Management Practice</b>
Lights – Mainland	Lights are turned off when not in use.
	Compact fluorescents and T-8 lights are used in all park-owned mainland facilities.
	More efficient exterior building security lights will be investigated.
Water – Islands	On-demand hot water heaters are used in island facilities.
	Solar hot water heaters are being investigated.
	Low flow toilets are used on Raspberry Island.
Concession Cruise Boat	Concessioner is encouraged to reduce speed to reduce air pollution.
<b>Purchasing</b>	
Ammunition	All firearm ammunition purchased for use in qualifications involving Law Enforcement and Deer Management operations is green ammunition.
GSA	Whenever possible purchases are made through GSA which contracts with vendors that are either identified as Green or provide Green products.
Soy ink	Soy ink products are purchased and used for printing purposes when possible.
Recycled paper	Recycled paper products are purchased and used.
Alternative Fuels	See “Boating” below.
<b>Recycling and Waste Management</b>	
Hazardous waste	Employees are trained in hazardous materials management and response to spills.
	The park has purchased and stages a trailer with containment materials and an open boat to respond to spills in Lake Superior.
	Batteries of all types are recycled (equipment, marine, radio, vehicle).
	Computer monitors are recycled.
	The park contracts for the proper disposal of hazardous waste antifreeze and oil.
Recycling	Aluminum, glass, paper, plastic, and tin are recycled.
Solid waste	Solid waste is collected and removed from the islands.
Electronic Waste	Electronic media, computer components, and computer peripherals are recycled.
<b>Transportation</b>	
General	Equipment, vehicles, and boats are routinely serviced to maintain peak efficiency.
Automobile	Employees carpool between work stations whenever possible.
	Vehicles are turned off when not in use.
	New vehicle purchases or GSA rentals will be the most efficient vehicles available that will accomplish the needed function of the vehicle. Flex-fuel vehicles are purchased when feasible.

<b>Transportation con't.</b>	
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Boating	Boats are not operated in adverse weather conditions except in emergency situations.
	Boat operators use the most efficient routes for completing work.
	Boat operators plan and schedule trips to reduce redundancy.
	Boats are turned off when not in use. Motors are not idled at docks for lengthy periods of time.
	Fuel and oil discharge is reduced through inspection and maintenance of fuel station equipment and vessel machinery.
	Diesel boats are converted to efficient, low-polluting four stroke gas engines whenever possible.
	Biodiesel fuel is used in the Nenookaasi and the Pelican (the park's only remaining diesel boats).
	Synthetic lubricants are used in all Honda outboard motors.
	Efficient, low-polluting four stroke motors are used in all outboard boats.
	Proper boats are used for the load required. The Pelican is used to haul larger amounts of equipment and supplies thus reducing trips.
	Oil testing is done on engines and transmissions to determine if a change is needed based upon the properties of the lubricants to ensure complete consumption.
Snowmobiles and ATVs	Snowmobiles with 4 stroke engines are used over 2 stroke when feasible. All remaining 2 stroke engines will be replaced.
	Snowmobiles and ATVs are turned off when not in use. Motors are not idled for lengthy periods of time.
Walking	Park employees hike to many work sites upon reaching the islands on a routine basis.
<b>Vegetation Management</b>	
Exotic plants – Integrated Pest Management	Preventative measures include education, boot brushes on docks to remove seeds from shoes and boots, and monitoring susceptible landscapes. Sustainable management options used include aggressive treatment of newly discovered small patches, and hand-pulling.
Restoration	Devegetated areas are restored using native plant species before exotic plants can invade. Removable floating boardwalks are installed in high traffic areas to reduce the need for restoration work.