

WASHINGTON STATE PARKS

2004 ANNUAL SUSTAINABILITY PROGRESS REPORT

Section I: Agency Information, Policy, and Goals

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Sustainability Policy Statement

Policy - The Washington State Parks and Recreation Commission (State Parks) is committed to fulfilling its responsibilities under Executive Order 02-03. State Parks will strive to model the principles of sustainability: in stewardship of its natural, cultural, historic, and recreational resources; in construction and renovation of its new and existing facilities; in fleet management; and, in the day-to-day operations of carrying out its mission.

The Washington State Parks and Recreation Commission, management, and staff are dedicated to providing recreation resources to Washington's citizens while preserving the resources of today for the generations of tomorrow. The plan will institutionalize sustainability as an agency value, thus enabling a continuation of service to citizens and preservation of resources into the distant future.

Background - State Parks manages a diverse system of 120 developed parks and several recreation programs, including boating and winter recreation. The 91-year old park system

receives nearly 46 million visitors a year and ranks fourth in the nation in day-use attendance, 10th in overnight attendance, and 47th in state budget expenditure per visitor.

State Parks developed its sustainability plan in 2003. The long-term plan created by the team extends to the year 2013, and was submitted to the Governor's Statewide Sustainability Coordinator in September 2003.

Long-Range Goals

1. Institutionalize sustainability by changing the agency's culture.
2. Raise employee awareness of sustainable practices in the work place.
3. Minimize energy and water use.
4. Shift to clean energy for both facilities and vehicles.
5. Shift to non-toxic, recycled, and remanufactured materials in purchasing, construction, renovation, and regular maintenance procedures where possible and available.
6. Expand markets for environmentally preferable products and services through purchasing practices, recycling programs, and other means.
7. Reduce or eliminate waste through recycling programs and other means.
8. Preservation and protection of natural, cultural, and recreational resources.

Section II: Reporting on Objectives - Success Factors, Barriers, and Challenges

2004 Accomplishments, organized by Long-Range Goals of State Parks Sustainability Plan:

Goals 1 & 2 - Institutionalize sustainability by changing the agency's culture and raise employee awareness of sustainable practices in the work place.

State Parks appointed a Sustainability Coordinator in the fall of 2003. In the spring of 2004, the agency created a Sustainability Team to support the goals of State Parks Sustainability Plan.

In the past year, sustainability components have been added to the agency's strategic and operational planning documents including strategic benchmarks, balanced scorecards, and to the Director's Contract with the Commission. Elements of sustainability practices have also been added to some agency MDPPs and EDPPs.

A copy of the Sustainability Plan was made available to all agency staff in January 2004. Training on sustainability has been attended by a number of staff and regional trainings are being developed for classes this fall.

State Parks sent representatives to each of four workgroups created by the Governor to address the threat of global warming. As described in further detail later, State Parks involvement in the four workgroups raised the awareness of sustainability issues in regards to green building, green energy, paper management, and fleet management.

Several goals from State Parks' 2003 Sustainability Plan are being addressed in a few statewide programs and at several parks (see details in appendix A), including: promoting pollution prevention and public awareness of pollution prevention programs; staff and facilities modeling sustainability to visitors; and, building sustainability components into public information, education, and marketing programs.

Goal 3 - Minimize energy and water use.

Where practical, each park and every office will reduce energy use by 15 percent by 2013:

In 2004, the Southwest Region office installed a geothermal heating and cooling system. This heat pump system has saved money and created an improved work environment for staff.

In partnership with Puget Sound Energy and two other smaller utilities, State Parks conducted 38 Energy Audits in 2004. Energy efficient lighting upgrades have been completed in 18 parks, with others working on funding needed to complete upgrades recommended by the audits.

Ten parks have Photovoltaic (PV) solar collectors in use. Three parks are working on permits and studies for wind-powered turbines to be installed in 2005. At Grayland Beach State Park, a 10,000 watt wind turbine will generate all power needed for the park's restroom and generate negawatts*, providing income back to the park. Funding comes from partnerships with Grays Harbor Public Utilities District (PUD) and a federal program.

* Amory Lovins of The Rocky Mountain Institute invented the concept of "negawatts" so that utilities and governments could compare the cost of conservation measures against the cost of increasing power production. Negawatts represent power saved from one application that is made available to another application. A reduction of negative-watts, represents a measure of energy saved by use of energy efficient products or conservation.

Where practical, each park and every office will reduce water use by 2013:

A number of parks reported water conservation programs that work to identify and eliminate waste of water (as described in further detail in appendix A).

Parks use of native plants for landscaping has increased in 2004. Eastern Region's annual training program in November 2004 will have a special class on this topic. Water usage can be reduced by the introduction of native plants. Establishing native plants can take from 2 to 3 years. Once established the plants need for watering is reduced or eliminated. State Parks Eastern Region is developing a partnership with Washington State University Cooperative Extension and Chelan County PUD to create a native grass demonstration site at Wenatchee Confluence State Park, with a goal of using a 2 to 3 acre site in 2005.

Two parks are researching reuse of storm water for irrigation and one island park has a rain water collection program in use.

Goal 4 - Shift to clean energy for vehicles and motorized equipment.

State Parks' vehicle use goal for 2013 is to have all of the agency's fleet (vehicles and motorized equipment) using 35 percent alternative fuels, and 100 percent of the fleet's sedans be alternative fuel vehicles. In 2003 and 2004, State Parks moved towards this goal by adding 8 alternative fuel sedan-vehicles to the fleet and explored the use of bio-diesel at some locations. This fall State Parks' first alternative fuel truck, a Ford Escape for the Puget Sound Region office. Currently, seven percent of State Parks' fleet is made up of alternative fuel, road-legal vehicles.

State Parks' Fleet Manager has started developing new standards and budget requests to purchase sustainable automobiles, boats, snowmobiles, mowers, and other motorized equipment. However, due to budget shortages, most of these plans cannot move forward at this time. State Parks continues to have many very old vehicles that are costly to run and hard to replace. See Section IV for more data about fleet size and age.

Goal 5 - Shift to non-toxic, recycled, and remanufactured materials in purchasing, construction, renovation, and regular maintenance procedures where possible and available.

It is State Parks' policy to train staff in sustainable values related to purchasing. State Parks' Purchasing Manager has taken a leadership role in both learning and teaching others about sustainable practices. Individuals are routinely directed to the Washington Office of General Administration's (GA's) internet resources when purchasing products. GA's preferred purchasing manuals and environmental products and services lists help agency staff achieve the agency's sustainability goals while complying with state purchasing requirements.

Staff is encouraged to use efficient lighting products such as low-mercury content fluorescent lamps, electronic ballasts, and compact fluorescent light bulbs.

In 2004, State Parks required staff to use, at a minimum, 30% post-consumer, recycled, chlorine-free paper. Headquarters is already using 100% post-consumer, recycled, chlorine free.

State Parks encourages the use of car/van pools for agency activities statewide. Free bus passes are provided to Headquarters' staff, as part of a partnership with city transit system and state government. Vans at Headquarters and region offices are used for group travel and agency trip reduction goals. In 2004 the agency purchased two buses. One is for transporting large groups to Commission meetings, and the other, assigned to Cape Disappointment State Park, is for transportation related to the national celebration of the Lewis and Clark Expedition.

With funding from the Washington State Department of Ecology (Ecology), State Parks has a successful and growing recycling and litter control program that includes promoting recycling, reducing litter, and cleaning up illegal dump sites on agency property. Although State Parks manages a grant from Ecology in the amount of \$45,000, State Parks needs at least twice that amount to adequately fund field needs.

Parks enrolled in the Leadership in Energy and Environmental Design (LEED) certification program with the U.S. Green Building Council in 2004, and is using its principles for planning new construction and renovation, but not the certification program at this time. Because most standards relate to larger office buildings, and LEED certification comes with additional costs, the principles will be used, but State Parks will not pursue certification of any buildings at this time.

Goal 6 - Expand markets for environmentally preferable products and services through purchasing practices, recycling programs, and other means.

With the help of GA, State Parks is working to use environmentally friendly products, services, and activities. State Parks has been using recycled plastic picnic tables for over 6 years, we estimate about 50% of our parks have switched over from wood tables.

A number of parks reported innovative progress in locating and purchasing environmentally preferable products and services when not available from GA (as described in further detail in appendix A).

Goal 7 - Reduce or eliminate waste through recycling programs and other means.

State Parks' Sustainability Plan maintains that, where practical, each park and facility will establish a recycling program for newspaper, cardboard, office paper, aluminum cans, glass, and plastic; and, where practical, each park will establish programs for chemical substitution and reduced packaging. Many parks have moved forward in this area, but overall we have many opportunities to do much more in the coming years.

State Parks partnership with Ecology helps fund both litter clean-up and recycling in parks. 50% of our parks have recycling programs. In 2004, recycling containers were purchased for several parks that are working to expand their programs. Volunteers provide valuable time and effort removing litter in parks. Our major barrier is the lack of local service to remove the recycled material in many parts of the state.

Riverside State Park purchased a special container for holding oil that has been illegally dumped in the park. They also host an annual city-wide clean-up of Centennial Trail.

As part of the national Shore Patrol, all ocean beach parks have large annual litter clean-up days. The events are funded with help from Ecology, region offices, and local communities. In 2003, 27,000 pounds of waste was removed. An additional 33,620 pounds of litter was removed from our ocean beaches in 2004.

A few parks have composting programs (see appendix A) for food waste, grass clippings, and other organic debris. Both Fort Casey and Moran State Parks have educational/interpretive trails to educate guests about composting. Several island-parks have composting toilets.

Ecology provided 45,000 free *Litter and It Will Hurt* car litter bags that were distributed to all parks in May 2004.

State Parks' Sustainability Team plans to release an educational fact-sheet this fall to help staff understand why we need to recycle fluorescent lamps. Also, the team will teach staff how to use the required statewide fluorescent lamp recycling contract GA has provided.

Goal 8 - Preservation and protection of natural, cultural, and recreational resources.

In 2004, four parks were designated as Model Stewardship Parks (sustainable practices demonstration parks) as part of our Centennial 2013 Plan and agency's stewardship strategic benchmark. These Model Stewardship Parks will model sustainable practices to park visitors and to other parks.

State Parks created a Resource Stewardship Certification Program 1996. The goal of the program is to provide staff training designed to enhance their ability to make informed resource management decisions. Upon completion of the program, staff has a greater awareness of and ability to identify, interpret, and protect the natural, cultural, and recreational resources in its care. The program requires courses in each subject area and the completion of a Stewardship Project.

In both 2003 and 2004, the Resource Stewardship Certification Program graduated 12 new stewards annually. 71 agency staff is officially enrolled in the Stewardship Certification program, and 39 have been certified in the program since 1996.

Approximately 57% of the agency has taken courses offered by this program. This year, State Parks' sponsored, or corroborated, training will affect 78 external staff from 10 different agencies including tribal, federal, state, and local jurisdictions.

Other agencies are looking to State Parks to provide expert-level training in methods of historic preservation and strengthening stewardship visibility within their own staff.

State Parks has developed a comprehensive natural resources policy that is currently in final review. The Washington State Parks and Recreation Commission will be asked to approve the policy at its regularly scheduled December 2004 meeting.

Representative Sustainable Practices Goal Reporting

Table 1. Quantitative data as reported in a survey of 20 topic areas of sustainability practices. The table ties park accomplishments to the eight plan goals of the sustainability plan. This table is a summary of the information in Appendix A. Targets listed below are from last years 2003 Sustainability Plan. The 2005 goal represents the Sustainability Team's focus for the coming year. Some targets will be adapted, based upon the single year accomplishments and a reassessment of what is possible.

Initiative	Survey Results	Target	2005 Goal
GOAL 1 and GOAL 2: INSTITUTIONALIZE SUSTAINABILITY/ RAISE EMPLOYEE AWARENESS OF SUSTAINABLE PRACTICES AT WORK			
SUSTAINABILITY EDUCATIONAL PROGRAMS FOR GUESTS	10% of our parks and regions reported Sustainability Education programs for guests. However, the Sustainability Team believes the number is higher and is increasing due to Sustainability goals.		Increase to 30%
SUSTAINABILITY EDUCATIONAL PROGRAMS FOR STAFF Also links to goal 5	8% of the parks and regions reported staff education programs on sustainability. Eastern Region staff training in November 2004 will include 2 sustainability classes. Agency's Stewardship section hosts Resource Stewardship Certification Program, which provides training designed to enhance staff's ability to make informed resource management decisions. In 2004 the program graduated 12 new stewards. Our goal for 2005 is to graduate 14 new stewards.	12 staff certified	Increase to 30%
OTHERS SUSTAINABILITY PROGRAMS	6% of our parks reported others programs. Fort Casey partners with local school district where rangers visit schools providing educational programs.		Increase to 15%

Initiative	Survey Results	Target	2005 Goal
GOAL 3: MINIMIZE ENERGY AND WATER USE			
ENERGY AUDITS	31% of our parks have had an energy audit completed in the past year – some provided by local utilities and others were done by park staff (a few used GA's online audit forms).	2004 audits 10%	Increase to 41%
ELECTRIC ENERGY UPGRADES	15% of our parks reported upgrades to efficient lighting systems.	2004 upgrade 10%	Increase to 36%
ENERGY REDUCTION PROGRAMS	15% of parks reported energy reduction programs (i.e., use lights less and improved lighting equipment).	Reduced 15% by 2013	Increase to 30% total reduction programs
WATER METERS	Only 6% of our parks reported using meters. The Sustainability Team thinks the number is higher. Many parks have wells and do not use meters.		Increase to 10%
ON-DEMAND WATER HEATERS	42% of our parks reported using on-demand water heaters. However, Sustainability Team thinks the number is higher.		Increase to 55%
WATER REDUCTION PROGRAMS Also Links to goal 8	20% of our parks reported water reduction programs. The total number of parks in Eastern Region that use irrigation is not available this year.		Increase to 50%

Initiative	Survey Results	Target	2005 Goal
GOAL 4: SHIFT TO CLEAN ENERGY FOR BOTH FACILITIES AND VEHICLES			
RENEWABLE ENERGY	8% of our parks reported using renewables and/or developing studies and siting plans to add wind or solar power in FY 05. One park, Grayland Beach, is receiving 80% funding assistance from a local utility and federal government for a wind turbine, planned for 2005.		Complete installation at 3 parks/ increase to 20%
ALTERNATIVE FUEL & ALTERNATIVE VEHICLES	7% of our parks and 2 region offices have been using alternative fuel vehicles for the past 3 years, including 4 Toyota Prius sedans. In September 2004, State Parks ordered our first alternative fuel truck, a 2005 Ford Escape.	By 2013 35% of fleet use alt. fuel	Increase to 20% of fleet
SMALL VEHICLES IN PARK: ATV, UATV, GATOR, ETC.	50% of our parks use ATV and UATV. Bikes are in many parks also State Parks' Law Enforcement Program plans to add more bikes in 2005.		Increase to 65%
GOAL 5: SHIFT TO NON-TOXICS IN PURCHASING, CONSTRUCTION, RENOVATION, AND REGULAR MAINTENANCE PROCEDURES			
ENVIRONMENTALLY PREFERRED PRODUCTS (EPP)	14% of our parks reported use of EPP – this number might be higher. However, only these parks replied to survey 8-04.		Increase to 50%
USE CHIPPERS DON'T BURN BRUSH	The majority of parks use chippers, <u>as available</u> , from the regions. The major barrier is funding to buy chippers for more parks.	All parks	All parks have access to chippers

Initiative	Survey Results	Target	2005 Goal
GOAL 6: EXPAND MARKETS FOR ENVIRONMENTALLY PREFERABLE PRODUCTS AND SERVICES			
	See Goal 5 description, above.		
GOAL 7: REDUCE OR ELIMINATE WASTE THRU RECYCLING AND OTHER PROGRAMS			
RECYCLING	50% of our parks have recycling programs and some accept several types of materials. Of the 120 developed parks statewide, the majority recycle aluminum cans at least.		Increase to 60%
FLUORESCENTS RECYCLED	2% of our parks and Headquarters have started using GA contractor to recycle lamps. A number of barriers in this area need addressing.		Increase to 50%
FIREWOOD PROGRAM	35% of our parks have firewood programs.		Increase to 50%
SOLID WASTE REDUCTION	<p>3% of our parks reported solid waste reduction projects in the past year. Some are funded by Ecology litter program. Volunteers help with litter. Totals are not collected by area of work for volunteers - see recap on volunteer hours in appendix A. Haz-Mat dumps in parks are not tracked.</p> <p>25% of our parks provide guests biodegradable plastic bags to clean-up and dispose of their pet's waste.</p>		<p>Increase to 10%</p> <p>Increase to 35%</p>

Initiative	Survey Results	Target	2005 Goal
COMPOSTING	21% of our parks have composting programs. The number includes 19 island-parks with composting toilets using solar PV powered fans and other parks that compost organic materials like leaves, grass, wood-waste, etc.	37% compost park material	Increase to 35%
PACK-IT-IN-PACK-IT-OUT	17% of our parks reported Pack-it-Out programs. The Sustainability Team believes the number is higher. 2 parks are expanding this program to reduce cost of garbage collection.		Increase to 25%
GOAL 8: PRESERVE & PROTECT NATURAL, CULTURAL, & RECREATIONAL RESOURCES			
	Agency policy requires that all projects/practices are reviewed before implementation to preserve and protect natural, cultural, and recreational resources.		

Section III: Communication and Education

The agency's Sustainability Plan states that a variety of communication tools will be used to convey sustainability messages to employees, park visitors, and stakeholders. In 2004, education has been the key method of communication used by sustainability program staff and teams.

State Parks Sustainability Charter Team and Think Tank were both created in June 2004.

The Sustainability Charter Team's purpose is to implement and institutionalize State Parks' Sustainability Plan, develop reports and Sustainability Plan updates for the Governor's office, develop a basic agenda of tasks and milestones to meet our obligations with the State's sustainability effort, and to change the culture at State Parks.

The Think Tank's goal is to identify sustainability issues, provide input to the Sustainability Charter Team, help educate staff on sustainability issues, and support efforts to implement, institutionalize, and change the culture at State Parks.

Electronic communications (e-mail and shared computer drives) have been used to distribute the plan to agency staff. Sustainability Team and Think Tank serve as a communication vehicle reporting agency sustainability goals to staff. Educational information is also provided at regional staff meetings, which has been a good place to provide information about the plans importance.

The Sustainability Team is planning a series of fact sheets (starting fall 2004) to transmit educational information about sustainable practices and emerging technologies to agency staff.

Barriers and challenges are numerous and often slow down our progress. The main barrier that appears at first glance is "we have no money to achieve these goals." Yet, the many ways the "no budget" message is communicated by staff (parks, regions, and headquarters) has demonstrated that the way we communicate and the way we interact within our agency's culture, is perhaps the biggest barrier State Parks must overcome. In reviewing the plan we submitted last year, the Sustainability Team and Think Tank members determined that changing our agency culture and changing how each of us relate to the word "sustainability" is still the first goal before us.

Section IV: Statewide Performance Measures

OFM requested all agencies to report on performance measures in four areas: copy paper use, vehicle miles traveled, fuel purchases, and the average fuel efficiency of vehicles in agency fleet. Information we have available for these topics is provided below.

Copy Paper Use by Quantity and Paper Type

State Parks does not track paper use at this time. A 2004 Directive requires all State Parks' staff to use at least 30% post-consumer, recycled, chlorine-free paper, encourages 100% post-consumer recycled paper when practical, and encourages double-sided printing/coping. Headquarters staff has been using the 100% recycled paper since spring of 2004.

Vehicle Miles Traveled, by Agency Fleet Vehicles as well as Personal Vehicles

Currently, State Parks does not track mileage information. However, our Inventory System provided the following totals for motorized equipment owned by State Parks, effective summer 2004.

Table 2. Motorized equipment inventory, summer 2004.

Agency Total	Equipment Type
41	All Terrain Vehicles (ATV)
8	Backhoes
28	Boats (all sizes)
2	Buses
9	Chippers
6	Dozer Crawlers
4	Excavators
2	Graders
5	Jeeps
9	Loaders
41	Sedans
18	Snow Blowers
6	Snow Cats
27	Snowmobiles
13	Station Wagons
21	SUVs
11	Sweepers
70	Tractors
17	Trail Groomers
517	Trucks (all sizes)
5	Turf Utility Vehicles
32	Universal All Terrain Vehicles (UATV)
33	Vans

State Parks road legal vehicles (cars and small/medium sized trucks) purchased between 1971 and 1995 are 51% of the fleet, per inventory reports. The remaining 49% were purchased between 1996 and 2004.

Only 32% have been purchased since 2000. Because of budget shortages, State Parks keeps vehicles twice as long as GA recommended maximum mileage amount before replacement. The lack of funding to replace vehicles often creates other related costs for upkeep and operation.

Fuel Purchases and Other Vehicle Related Costs

OFM Fastrack system combines numerous types of expenses into few object codes. This accounting practice is a major barrier for reporting on requested details such as power use (gas or electric) and water use. However, the agency is exploring solutions to this tracking problem and the related staff time and funds needed for change. We hope to correct these tracking problems and provide more details in 2005. The total gas costs in object code ES cannot be broken out and/or tracked, except for Voyager card use and sales of fuel at State Parks' Shops. Several parks purchase bulk gas. Headquarters' fiscal staff cannot track these vendors or provide

detailed amounts since these fuel costs are combined with other expenses and not recorded in the ES object code.

Table 3. Travel expenses as reported August 2003 through August 2004.

Object code		past 12 months
EC	Utilities (all)	\$2,583,789
ES	Vehicles	
	Maintenance/Ops	\$ 620,140
ES	Voyager Card	\$ 222,519
ES	Shops Fuel	\$ 12,000
GC	Private Auto Mileage	\$ 32,469

Average Fuel Efficiency of Vehicles in Agency Fleet

State Parks' headquarters' motor pool has 22 vehicles. These vehicles have an average fuel efficiency of 23 miles per gallon (mpg) in town and 28 mpg on highways. However, because State Parks cannot currently report actual mileages of particular vehicles, the actual fuel usage cannot be measured. Table 4 summarizes total vehicles, by type, and average fuel efficiency by types of vehicles. Fuel efficiency averages used came from EPA.

<http://www.epa.gov/greenvehicles/>

Table 4. Published fuel efficiency averages for vehicles in the headquarters' motor pool.

TYPE OF VEHICLE	#	CITY mpg	HIGHWAY mpg
Sedan	8	19	26
Van/Bus	6	15	20
SUV/Truck	5	16	22
Hybrid	3	60	61

Mileage on vehicles is not tracked in the field or at headquarters. Paper mileage logs are used at headquarters to charge cost centers for staffs vehicle use, but no staff time is available for further tracking. State Parks does not have the staff and resources for this type of tracking due to budget cuts over the past ten years. The Sustainability Team plans to address this problem in 2005 and provide suggestions for options to make tracking easier during the upcoming year.

EPA does not provide efficiency averages for Universal All Terrain Vehicles (UATV) such as Polaris, Club Cars, and John Deere Gators. Since GA has no averages for UATV equipment, we contacted the John Deere dealer in Mount Vernon who provided the following information. Dealer did not have information on electric Gators efficiency:

4x2 Gators gas 5.3 gallon tanks burns 0.4 gallons per hours (gph)
6x4 Gators gas burns 0.6 gph
6x4 Gators diesel burns 0.25 gph

Section V: New or Updated Goals and Objectives

In June of 2003, State Parks' Sustainability Plan was written by 17 people serving on a quality process improvement team called the Sustainable Practices Plan. A year later, agency created a new Sustainability Team which reviewed the agency's Sustainability Plan and created a list of recommended changes to be made in 2005, as part of the Governor's required Sustainability Plan update.

Major changes under consideration include: removing duplicative and repetitive information; consolidate goals 1 and 2; eliminate or move objectives that appear in more than one goal; and, edit the overall writing style for a clearer communication approach.

A few key topic areas the Sustainability Team plans to update and broaden in the plan include:

Develop policies related to water.

Address landscaping, water use, irrigation, and storm water issues.

Explore the cost issues related to shifting to non-toxic, recycled materials.

Collect quantitative data from parks on fuel used for small vehicles like Club Cars & Gators.

Rewrite goal # 8 to include education in schools to draw upon best skills for the job.

In goal # 5, establish environmental objectives and targets.

Appendix A provides the results of a sustainability practices survey conducted in August 2004. Appendix B provides the baseline data used in September 2003 to prepare State Parks' Sustainability Plan.

Appendix A

Representative Sustainable Practices in Use at Selected State Parks

Penrose

- ▶ Plastic barrels located by each garbage dumpster for recycling glass, plastic jugs, and aluminum cans
- ▶ Clean cardboard boxes are pulled out of the dumpsters to recycle
- ▶ Park staff handles all the recycling
- ▶ Purchased some "environmentally preferred" cleaning supplies from Central Stores
- ▶ Interior lights are energy efficient fluorescent lamps
- ▶ Given some energy efficient light bulbs from utility company
- ▶ Park has requested an energy audit by utility and is waiting for reply to set-up a date
- ▶ Saving used florescent tubes to recycle per the Executive Order
- ▶ Plan to request funding for on-demand water heaters when existing equipment needs replacement
- ▶ Staff purchases wood from a vendor and sells it to park visitors for fire wood sales program

- ▶ Although park has requested funding for a number of years, to date Penrose does not have club cars, Gators, ATVs, or any other small energy efficient transportation
- ▶ Park composts or spread leaves in the woods; mulch grass clipping; food waste is composted at the park residence; and chipper used when available and the quantity is large enough to justify time to borrow from region
- ▶ Water lawn areas at our main day-use area and administrative area only, and only as needed
- ▶ Insulating buildings and lowering thermostats to reduce electrical usage
- ▶ Barrier: Lots more could be done, but it just takes more time and more money – neither of which we have any surplus of

Birch Bay

- ▶ Park recycles aluminum cans, cardboard, glass, florescent lamps, engine oil and paint thinner
- ▶ Using some environmentally preferred products from central stores
- ▶ Removed all creosote logs from the park
- ▶ Replaced the treated barrier logs along our beach parking lots with rock barriers
- ▶ Lighting upgraded in shop and office using energy efficient lamps and ballasts
- ▶ Efficient vehicles used in park include two Gators, one club car, and one bike
- ▶ All wood trimmings used to help re-vegetate heavily used areas in the campground, it keeps traffic from these areas and breaks down to form a better soil for the new native plantings
- ▶ As part of our Interpretive programs we design posters that are placed around the park regarding recycling, reducing and wise use of our resources

Riverside

- ▶ Recycling aluminum, glass, paper and plastic--volunteer Boy Scouts and park sort and remove
- ▶ Using some environmentally preferred products
- ▶ Switched over to energy efficient lights after having an energy audit
- ▶ Recycle florescent lamps
- ▶ On-demand water heaters used in some areas
- ▶ Fire wood sales program in park includes donated wood
- ▶ Use club cars, Gators, and other ATV or small energy efficient vehicles and bikes
- ▶ Some composting of leaves, grass, pruning and food waste all done
- ▶ Chipper used instead of burn piles
- ▶ In some areas Pack-it-in, Pack-it-out programs are in place
- ▶ Some use of alternative fuels and/or energy has started
- ▶ Program in place to reduce water and energy use
- ▶ Staff wants to improve with developing educational programs on sustainability for your park visitors and for staff

Fort Flagler

- ▶ Park has been recycling for years; in 2004, containers were upgraded and park now has 100% recycling available in rental property and at Environmental Learning Centers (ELC)
- ▶ Next year Park plans to add recycling at camping area

Fort Worden

- ▶ Recycling for years, close to 100% recycling available in rental property
- ▶ Composting program being developed this summer for all food waste at conference center café

Rockport

- ▶ Recycle aluminum only, done by park staff
- ▶ Purchase Environmentally Preferred Products when available
- ▶ Park has completed energy audit by Puget Sound Energy and is working to change lighting to more efficient system this year
- ▶ Park has firewood sales program
- ▶ Small Energy Efficient Transportation used - club car and Gator
- ▶ Chipping is done when equipment is available
- ▶ Replacing old and inefficient water devices as money is available

Deception Pass

Park has recycled for over 15 years – with the support of local volunteers and the US Navy. Park has current plan to increase recycling to all camping areas, and to purchase new containers for collection and transfer to Navy recycling center, were park pays nothing for service:

- ▶ One year case study will be started 1-1-05 to support needs for planned improvements
- ▶ Park starting Pack-it-in, Pack-it-out program in 2005 with a case study at West Beach
- ▶ Composting study in progress – hope to have going in FY06
- ▶ Park is talking with Navy about allowing 2 or 3 other Parks on the island to also bring recycled materials to the base
- ▶ Waste Wise staff (Janet Hall) will fund and help create series of educational flyers to support recycling in State Parks

Sucia

- ▶ Sucia Island is a role model of innovative technologies in the San Juan's and has been using photovoltaic (PV) solar power year-round since 1988. For over two years PV's have been used to power 6 well pumps and the electricity needs at parks shop and staff housing. Funding saved has allowed staff to complete other projects, such as the new garage addition to the park's shop.
- ▶ In the 3 years since the large PV array was installed, park staff have saved two staff days a week, that was used to drive boat to Moran and pick up gas; also saved cost of 40 gallons of gasoline per week, which keep 6 well generator pumps running
- ▶ Nine of the San Juan Island Parks have composting toilets, which eliminates the need for septic tanks and pumping fees; these toilets protect the water system from pollution
- ▶ Fans powered by PV energy keep guests happy by removing odors from the toilets
- ▶ Sucia's next project is developing a reverse osmosis system later this year, that will filter salt water for use at the park

Larrabee

- ▶ Recycling aluminum cans sorted by volunteers then collected and removed by staff
- ▶ Mixed paper and cardboard recycled and removed with staff housing recycling by local company
- ▶ Using environmentally preferred, 30% post-consumer recycled, paper products
- ▶ Florescent lamps are recycled at county toxics disposal site
- ▶ On demand water heaters in 2 of 3 park restrooms
- ▶ Fire wood sales program run by camp hosts

- ▶ Quad provides energy efficient access to backcountry
- ▶ Composting of leaves, pruning, etc., chipping of branches.
- ▶ Water reduction program: have spent considerable time tracking water leaks and repairing; replaced leaky hose bibs with better sealing faucets
- ▶ Staff education related to sustainability: Start of each season staff meeting held to outline what we recycle on the park level

Sacajawea

- ▶ Recycling program includes cardboard, glass bottles and aluminum cans
- ▶ Installed energy efficient lights in 1 restroom & reservation picnic shelter
- ▶ Cut down noxious weeds mechanically instead of spraying with pesticides, saves \$600 pesticide costs, and not putting additional chemicals into the environment = Sustainability

Illahee

- ▶ Participated in the PSE energy audit
- ▶ Modernized restroom fixtures with electric eye facets, to reduce water consumption and associated waste production
- ▶ Installed an automated irrigation system for more efficient use of water and for healthier turf areas, helping reduce the need for fertilizer, water and pesticides

Fort Casey

Input below provided by Janet Hall (WSU), Manager of the Environmental Learning Center at park's lighthouse; Janet is a citizen member of the Parks Sustainability Think Tank

- ▶ Created Compost Demonstration Site with 11 different compost bin types; composting food waste from lighthouse & from volunteers for use in worm bin
- ▶ Recycling all paper, cardboard, cans, and glass from lighthouse
- ▶ Recycled content paper used and strive for 30-100% post consumer content
- ▶ Printers default to clean side of used paper for most of printing at lighthouse
- ▶ Strive to duplex copies when possible
- ▶ In-line hot water heater installed in lighthouse bathroom

Lake Sammamish

- ▶ Conducted energy use audit with PSE
- ▶ Retrofitting lighting to new energy efficient ballasts and bulbs
- ▶ Disposing of old florescent bulbs and ballasts as hazardous waste
- ▶ Recycling oil, paper, cardboard, aluminum, scrap metal and plastic from office, shop and residences
- ▶ Utilize dumpsters in park instead of garbage cans, eliminates the need for can liners
- ▶ Try to purchase products with recycled content
- ▶ Removed all paper towel dispensers from restrooms (use hand driers instead)
- ▶ Identifying and repairing underground water leaks
- ▶ Use water saving flushometer parts in toilets
- ▶ Installing garbage and recycling stations throughout park
- ▶ Use alternative means of transportation in park: 1 cushman, 2 gators, 1 bicycle
- ▶ Encourage backcountry visitors to "Pack it In, Pack it Out."
- ▶ Restrooms use on demand water heaters

Jarrell Cove

- ▶ Recycling mixed paper, cardboard, cans, bottles, and glass
- ▶ Volunteers pick up cans & park pays to have others materials picked up by county
- ▶ Hope Island, McMicken Island, Squaxin Island, Stretch Point., Harstine Island, and Eagle Island all have Pack it in, Pack it out programs
- ▶ In vault toilets (concrete container in ground) at 2 parks staff pull 4 bags of garbage out of annually
- ▶ Squaxin Island has composting toilets
- ▶ Environmentally safe cleaning products are used whenever possible
- ▶ Hope Island has a Photovoltaic solar power system which powers a cabin
- ▶ Eventually PV's will run a pump to provide potable rain water to the park staff and visitors
- ▶ Planning to get Rainwater Catchment system at Hope Island; staff have used collected rain water for years to water the orchard trees and the historic grape vines
- ▶ Current goal for next summer is to use new rain water collection system for flushing toilets, showers, dishwashing and drinking at Hope Island
- ▶ Boat Pump out free service provided to boaters to help reduce sewage waste being let go directly into the water

Columbia Hills

- ▶ Installed paper & cardboard recycling container for park office use
- ▶ Five aluminum can recycling containers installed next to each campground trash bin; picked up monthly by a local nonprofit
- ▶ Using compact fluorescent bulbs in office
- ▶ Using storage container for hazardous waste products (paint thinner, cleaning solutions, etc) and taking container to local transfer station
- ▶ Mulching leaves according to new Leaf Mulching Plan
- ▶ Purchased a rechargeable electric Cushman cart
- ▶ Researching Integrated Pest Control and creative solutions for invasive lake weeds and algae as opposed to herbicides

Lincoln Rock

- ▶ Limiting irrigation time/days to those necessary for efficiency
- ▶ Replacing & adjusting inefficient sprinklers, valves, and other parts
- ▶ Replacing manual light switches with photocells and timed switched
- ▶ Started a recycling program for the campground and shop

Steamboat Rock

- ▶ Replaced restroom lighting in 3 buildings with upgraded fluorescent lighting
- ▶ Continuing to replace concrete bumper blocks with recycled plastic
- ▶ Developing plans for better re-cycling program; the major barrier is no local removal service

Mayhill

- ▶ Compacting Friday/Saturday garbage dumpsters to last a full week; saving money by avoiding paying for a second dump run
- ▶ Purchasing only recycled paper products from central stores

Goldendale

- ▶ Container used to save paper taken to local transfer station's recycling center
- ▶ Saving electricity by not turning on all the lights in a room at once, and by task lighting
- ▶ Have changed some lighting to compact fluorescent lights
- ▶ Controlling outdoor lighting demonstrate savings in energy and money, while gaining night sky
- ▶ Ranger would like to help agency conduct survey of outdoor lighting in parks, with the goal of changing fixtures to bring back the night sky

Lake Wenatchee

- ▶ Switched to compact fluorescent lighting in all possible locations
- ▶ Using EPP cleaning supplies and recycled/ chlorine free toilet paper
- ▶ Conducting wind studies to determine feasibility of wind power at the park
- ▶ Continuing to switch over to low flow shower heads and toilets
- ▶ Have plastic, glass, aluminum, mixed paper and tin recycling for staff
- ▶ Aluminum recycling for public
- ▶ Revised restroom cleaning methods to reduce water usage
- ▶ No longer using herbicides to control noxious weeds
- ▶ Researching recycled plastic to use as wood alternatives in bumper block replacement and tent pad definition
- ▶ Lake Wenatchee's three goals for the following year:
- ▶ Continue switching to EPP products and paper, etc.
- ▶ Continue working to create a more thorough recycling program for the public
- ▶ Work toward more alternative power generation in the park

Grayland and Westport Light

Two Southwest Region Parks are planning to use renewable energy by installing wind turbines:

- ▶ Grayland Beach Park is purchasing a 10,000-watt Wind-turbine which will provide enough power to exceed the needs of the restrooms; the excess power will go back to the power grid as negawatts
- ▶ Westport Lighthouse Park will install a smaller 400-watt Wind-turbine to power public restrooms at the beach

Marine Crew

- ▶ Staff started a float improvement program in 2004 which includes removing treated wood from the water and replacing with USMB plastic (bottom box) to support floats
- ▶ Tops of floats (above water) are being repaired and/or replaced using recycled decking from other parks
- ▶ Recycled plastic hand-rails are starting to be use to replace old wooden hand-rails on floats

Volunteers Statewide

Volunteers provide the most important statewide resource State Parks has for getting the job done. Without volunteers, parks staff would not have the time or funds to pursue sustainable practices. Volunteers often work on sustainability projects such as litter clean-up, hand cutting weeds, native plant projects, and national beach clean-up programs.

The Volunteer program, managed from Headquarters, prepares annual reports that include the number of hours worked and the related number of people/groups. The table below lists the numbers for the past five years:

Year	Volunteer Hours	Groups/Hours	Individuals/Hours	comments
2004*	111,250	161/20,000	708/91,000	*effective Aug-04
2003	277,000	300/80,500	1,100/196,500	
2002	231,000	250/45,500	899/185,500	
2001	205,000	258/42,000	938/163,000	
2000	203,500	202/45,500	918/157,800	

As part of the national Shore Patrol clean up of ocean beaches volunteers removed 27,000 pounds of waste in 2003 and 33,620 pounds in 2004.

Regional Sustainable Practices

- ▶ All Eastern region parks are using recycled plastics for stall partition replacement in restrooms, eliminating the use of wood products and laminates; three others regions have started to use these recycled plastics stall partition replacement, when funding is available
- ▶ Eastern Region HQ replaced old lighting with new energy efficient fixtures and bulbs
- ▶ All Regional offices recycle paper and aluminum cans
- ▶ On demand water heaters have been installed in restrooms at seven eastside parks
- ▶ Installed low flow toilets and infrared flushometers at Curlew Lake
- ▶ Replaced toilets with low flow at 25 Mile Creek
- ▶ Eastern Region added water meters in six parks
- ▶ Potholes replaced a truck with an electric club car
- ▶ Fort Simcoe added an electric club car
- ▶ Chippers are used in eight parks to eliminate necessity for burn piles
- ▶ Two regional offices have Prius Hybrid cars for staff use
- ▶ Most Eastern region parks have ATV's or utility vehicles for in-park use
- ▶ Plastic tables have been in use statewide in parks for over seven years
- ▶ A new program for Folk and Traditional Arts in parks will include aspects of sustainable practices, teaching older cultural practices that honor the earth and create lower impacts
- ▶ Eastern region is hosting training this fall that will include two sustainability classes, one related to landscaping; Agency Sustainability Coordinator provided learning tools to field staff for classes
- ▶ All regions have started staff education at regional meetings
- ▶ Southwest, Puget Sound, and Northwest Regional stewards have started Integrated Pest Management (IPM) programs with focus on weed management
- ▶ East Region has seven completed (IPM) plans and about 20 are in progress.
- ▶ Riverside's State Parks has completed a prescriptive management plan and Lake Wenatchee's prescriptive management plan is in progress; these plans are designed to protect and insure the sustainability of natural resources

State Parks Shops

The King County Environ-Star award gave the State Parks Shops a rating of 5 on a scale of 1-5, for their haz-mat recycling program.

Visitors Protection and Law Enforcement

Visitors Protection service center is implementing a bicycle patrol program that will equip, train and encourage park rangers to conduct campground patrols on bicycles. While there are many advantages such as improved ranger physical fitness, ability to respond over rough, non-road terrain, and a more rapid response than possible with foot patrol, the primary purpose is to encourage additional positive contacts between rangers and the public. A significant side benefit is the sustainability practices of reducing vehicle use, reduced emissions, and reduced fuel costs/maintenance costs.

Energy Audits by PSE and Sustainability Programs at Parks

State Parks and Puget Sound Energy (PSE) have created a partnership with a common goal of reducing energy use in State Parks. PSE provided free "energy audits" identifying opportunities for utility cost reduction. After each park completes installation of recommended upgrades, PSE pays back up to 50 percent of total costs in rebates. The parks save money for use elsewhere and the company helps reduce energy consumption.

Parks Headquarters - Facilities Staff

- ▶ Energy Audit by Puget Sound Energy (PSE) completed and landlord sent offer for rebates and grants for upgrade from PSE
- ▶ HQ Recycling includes: cardboard, fluorescent bulbs, aluminum cans, paper (commingling plastic & tin containers)
- ▶ Three Toyota Prius hybrid cars purchased for motor pool
- ▶ HQ is using 100% post-consumer recycled chlorine-free paper
- ▶ Directive from Deputy Director requires at least 30% recycled paper for all staff use
- ▶ Green cleaning supplies for sinks, counters, toilets, and floors

Parks Headquarters Sustainability Program - Partnerships & Educational Projects

Think Tank member Janet Hall asked if we were using sustainable papers and inks on publications. State Parks Sustainability Coordinator formed a partnership with the Department of Printing Sustainability Coordinator (Kelly Kellerman) and State Parks' Public Affairs Office (PAO), to learn more about the State Printers sustainable products in order to adjust our agencies policy to use State Printer's sustainability friendly papers and inks more often. PAO staff agreed to start mentioning the sustainable practice in use on all documents, that use recycled paper and/or vegetable based inks, so readers can see in a glance the type of ink and paper. PAO staff also shared this new information with State Parks' Boating section, who has agreed to consider these sustainability products when planning printed materials.

State Parks' Sustainability Coordinator used networking to promote State Parks staff as member of the Governor's Global Warming Workgroup on Vehicles. As a result, our vehicles manager was appointed. At the Deputy Director's request, we asked to also have Parks staff appointed to three other workgroups. Within a few days the appointments occurred; a sustainability success story that has put the agency in an informed and empowered position as we move towards meeting our sustainability goals.

Other Sustainability Program Activates:

- ▶ 1-on-1 meeting's this past year with field and headquarters staff
- ▶ Created Sustainability Team & Think Tank who share educational roles
- ▶ Sustainability fact sheets and presentations planned for FY05 – 06
- ▶ Sustainability Coordinator will continue visiting parks and meeting with regions to support cultural changes related to the sustainability plan

Information Technology

- ▶ Mary Ellen Bradley of the Department of Ecology worked with Ranger Pete Wood and Joe Rogoski, from Parks headquarters, on a sustainability project that transferred 30 computers with Windows 2000 to Parks from Ecology, which will be distributed to field staff; some of whom are still operating Pentium I computers and Windows 98.

Barriers

We have many barriers to overcome or work around at State Parks:

- ▶ No funds to pay for new printers that could better use recycled paper and produce double sided copies without jamming
- ▶ Field staff slow to except and/or understand contracts available to meet sustainability goals
- ▶ History is often a barrier in that some of these ideas were tried in the past but without success, therefore there is resistance in trying again

**APPENDIX B
Fiscal Year 2003**

Baseline Data Used to Prepare Sustainability Report
Submitted September 2003

This data is provided with State Parks Sustainability Report due October 15, 2004 as a point of reference for data reported in Sustainability Plan a year ago. Some of these numbers have been updated, other were not available in both years.

Motorized Vehicles

Headquarters - 18 vehicles

Miles traveled: 255,500

Eastern Region – office and parks – 166

Fort Worden – 19

Shops/Maintenance/Loaner Pool – 136

Northwest Region – office and parks – 110

Puget Sound Region – office and parks – 85

Southwest Region – office and parks – 111

NOTE: This does not include utility carts or ATVs.

State Parks does not track mileage beyond the HQ motor pool. Also, State Parks has a policy against using POVs unless there are no motor pool cars available. POVs are used very little and the agency does not track mileage. (Note, in 2004 using OFM's Fastrack system privately owned vehicles use costs have been provided (see page 14 object code GC Private Auto Mileage – POV).

Employees

We have a little more than 500 permanent employees year round. During the season, April through September, we double in size.

Building Space

- ◆ Headquarters – 3 modular buildings; leased space in an office building – 37, 839
- ◆ Four regional offices
- ◆ Number of buildings throughout the system (HQ, regions, 120 parks) – 2,679
- ◆ Total square footage of all buildings – 2,330,184

Paper Consumption

- ◆ In-house – 250 reams – 100% virgin
- ◆ Envelopes – 100% recycled paper
- ◆ Outside print jobs – Data is not available