

Washington State Parks and Recreation Commission

2005 Annual Sustainability Progress Report

Executive Summary - Annual Sustainability Progress Report 2005

This report provides an annual update on Washington State Parks (Parks) progress towards key provision of executive orders and agency objectives. A survey conducted in August 2005, helped Parks learn how sustainable practices are taking root in parks statewide and helped evaluate the agency's progress on objectives from 2004 Sustainability Report. The Survey showed a major increase in parks working on water conservation; the majority of all parks use energy saving practices; waste reduction projects, including recycling and litter clean-up, are active in most parks; alternative fuel vehicles and bikes are used in over three-fourth of parks; and sustainability education activities were reported in over half of the parks. A sustainability policy was developed over the past six months by the agency's Sustainability Team, and is currently under review by Senior Management. This report points out a number of barriers and challenges Parks faces; from OFM accounting practices to budget shortages in most parks, the agency has many opportunities to make more progress in 2006 towards sustainability goals.

SECTION I: AGENCY INFORMATION, POLICY AND GOALS

A. Agency Contact Information

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B. Sustainability Policy Statement

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. State Parks is committed to carry out the Agency's Sustainability Plan (Plan), as is reflected in agency strategic planning documents.

The Washington State Parks and Recreation Commission is 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.

C. 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

Objectives listed below come from the key provisions of Washington State's Sustainability Executive Orders. Following each key provision is a summary of the various elements needed to adequately report performance on the provision, as requested by the Office of Financial Management. Data used in this report come from a simple survey of park managers conducted in August 2005 by State Parks Sustainability Team. The survey was used to understand how the agency is applying sustainable practices. The agency's long range sustainability goals are listed on the bottom of page one and are referenced below each key provision to detail how they relate to agency objectives.

A. Green Buildings - Incorporate Into All New Projects

1. All new construction projects and remodels over 5,000 square feet are built to and certified to LEED Silver standards (or equivalent).
 - a. *Long Range Goals:* 1, 2, 4, 5, 6, and 8.
 - b. *Progress:* State Parks has built no facilities greater than 5,000 square feet.
 - c. *Barriers & Challenges:* State Parks would like to extend LEED standards to park facilities under 5,000 square feet, however, limited funds in budget create very real barriers and challenges in applying LEED standards to these maintenance and/or remodeling projects.
 - d. *Success Factors:* In the 05-07 biennium State Parks will develop building standards for buildings that are not required to meet the LEED silver standard (under 5000 square feet). These standards will incorporate sustainable building practices as defined by the U.S. Green Building Council. State Parks continues to support sustainable practices training for its staff, and will develop a general sustainable practices training plan for staff charged with maintenance and new construction.
 - e. *Savings and Environmental Benefits:* No documentation available at this time.
2. GA and other agencies will develop processes to ensure green building practices are integrated into design and construction process.

Parks Development staff is developing a process with GA for State Parks to support green building goals for the state.

B. Vehicles - Reduce Petroleum Use

1. Reduce petroleum use 20% by 2009.
 - a. *Long Range Goal:* 1, 2, 4, 5, 6, and 8.
 - b. *Progress:* Our inventory system reports (effective summer 2004) and FY 05 Fastrack reports are listed in section III under Performance Measures and provide all available data related to petroleum fuel use. The data in section III and provided below is the only information available related to vehicles at State Parks.
 - (1) Vehicles Maintenance and Operation costs increased by 33% in FY 05, (Total includes fuel costs). Costs for Voyager gas card use went up 36% and the cost for Private Vehicles use went up 45%.
 - (2) In the middle of FY 05 the agency started recording all fuel usage for vehicles to one sub object code ES001. This fiscal change will allow our 2006 report to be more accurate. See section III for more details. See section III for details.
 - c. *Barriers & Challenges:*
 - (1) Because State Parks does not track fuel consumption and must therefore estimate fuel because the agency does not track mileage it is difficult to provide real fuel use data.
 - (2) 2005 numbers are not available from the inventory system at this time.
 - (3) Alternative fuels, such as Ethanol, are not readily available and are cost prohibitive.
 - (4) Fleet management report to be submitted later, will address agency's plan to comply with required action to reduce petroleum use.
 - d. *Success Factors:*
 - (1) To reduce use of petroleum fuels, both bikes and electric vehicles are used in parks.
 - (2) In 2005 the agency started exploring solutions for better tracking and collection of data and the associated staff time and funds incurred.
 - (3) Alternative fuel vehicles or small in-park vehicles (including over 65 law enforcement bikes) are in use at 69% of parks surveyed; this reflects a 19% increase from numbers provided in 2004 report.
 - (4) The tables provided in section III summarizes total vehicles and average fuel efficiency by vehicle type.
 - e. *Savings and Environmental Benefits:* No documentation available at this time.
2. Freeze purchase of 4-wheel drive SUVs. Those needed for law enforcement or emergency response exempt. Agency directors may approve exemptions. In FY 05 State Parks Director approved the purchase of one 4-wheel drive SUV for law enforcement use.
3. By 9/1/09, replace standard diesel with B20. Begin using B5 as soon as practicable. Dosewallips and Sucia Island State Parks have both been using bio-diesel in some tractors and mowers and the SW Region is planning a pilot test using bio-diesel. However, the higher cost and low availability of bio-diesel is a barrier for using this alternative fuel in more locations.
4. Purchase of hybrid gas/electric and other fuel efficient/low emission vehicles. One hybrid Ford Escape and six hybrid Toyota Prius sedans are in headquarters fleet. Two hybrid Toyota Prius and two hybrid Ford Escape trucks are in regional offices. Six new hybrid vehicles have been purchased since 2004 report. Also, in 2005 two new GEM all electric small vehicles were purchased for Lake Wenatchee State Park.
5. Replace pre-1996 light duty vehicles w/in 3 years. Fleet management report to be submitted later will address this topic.

6. Fleet management plans and annual progress reports due 9/1/05. Consider transfers of vehicles or contract with GA for fleets with fewer than 100 light duty vehicles. State Parks Fleet Manager is responsible for submitting the required Fleet Management Plan and did not have that report finished in time to be submitted with this 2005 Sustainability Plan Report.
7. Request fuel efficient, low emission vehicles for employees from commercial vendors. Fleet management report to be submitted later will address this topic.

C. Paper - Reduce Life Cycle Impacts of Paper Products

1. Office paper minimum 30% post consumer recycled content; Reduce use of office paper by 30% based on 2003 Plans; Increase Percentage of EP to 50%; Recycle 100% of used office paper and increase use of recycled and chlorine free janitorial paper products.
 - a. *Long Range Goals:* 1, 2, 5, 6, 7, and 8.
 - b. *Progress:* In September of 2004 the agency's Deputy Director issued a Paper Directive requiring recycled paper to be used in all office copy machines and printers, copy machines to be set on duplex as a default, and for staff to recycle all paper. Staff are required to use (at a minimum) 30% post-consumer recycled paper for all copier and printer needs. Headquarters, region, and park offices may also elect to use the higher cost 100% recycled chlorine-free paper.
 - c. *Barriers & Challenges:* 8% of the paper product purchased in 03-05 did not achieve the goal of the Paper Directive. We believe this 8% happened before the directive was issued. State Parks' purchasing officer is working with the parks to develop required justifications for any variances from the Paper Directive and the goals of State Parks Sustainability Plan.
 - d. *Success Factors:* In Biennium 03-05 State Parks spent \$16,765 for paper products at Central Stores; 92% of these purchases were for products that had post-consumer recycled paper fiber content. Section III provides more data on paper use based on records provided by Central Stores. See section II E d. (7) for information about State Parks use of State Printers services and products.
 - e. *Savings and Environmental Benefits:* Available data provided in section III.
 - (1) Environmentally preferable products are used in 89% of parks. 93% of parks reported waste reduction efforts; this reflects an increase of over 40% from numbers provided in 2004 report.

D. Energy and Water - Achieve Gains in Energy and Water Conversation

1. Reduce energy purchases by 10% from FY 2003, use energy efficiency programs and on site renewable resources.
 - a. *Long Range Goal:* 1, 2, 3, 4, 6, 7, and 8.
 - b. *Progress:* Many of our parks have completed energy audits. Some parks are implementing upgrades, others have not reported upgrades. Southwest Regional offices installed two geothermal heat pumps in the past two years, and upgraded lighting based on recommendations from a Puget Sound Energy (PSE) audit. By tracking PSE billings, region staff has estimated a savings of about 10% from prior years.
 - c. *Barriers & Challenges:* Agency's budget has no funds dedicated to sustainable practices such as a major lighting retrofit. Even with good payback times for upgrades, up front funding is not available.

- d. *Success Factors:*
 - (1) 92% of parks surveyed reported working on saving energy; we have also tracked a 5% increase in the number of parks that have had energy audits completed since last year's report.
 - (2) State Parks has tested the potential of generating renewable energy at a number of sites in eastern region using wind and solar energy production technologies. Eastern region has purchased testing equipment and plans to loan to other regions for testing in 2006.
 - (3) Currently ten parks use Photovoltaic solar collectors. Sucia Island is the only park using only solar power; the other 9 parks use solar panels for a swimming pool and on remote sites where lighting is needed.
 - (4) Two improvements that demonstrate new energy savings and new resources conservation practices will be made in 2006 at each of the five model Stewardship Parks.
- e. *Savings and Environmental Benefits:* No documentation available at this time.

2. Report total energy use annually to General Administration (GA). State Parks spent \$3,130,000 on utilities in FY 05. This amount reflects a 20% increase from FY 04. We do not know if the increase is due to rate increases or increased energy use in parks. This baseline of cost for utilities is submitted to GA annually. Staff to track energy in more detail is not funded at this time.

3. Achieve State Parks water conservation goals.

- a. *Long Range Goal:* 1, 2, 3, 7, and 8.
- b. *Progress:* Sustainability Team developed a draft policy that supports the development of water conservation goals and procedures.
- c. *Barriers and Challenges:* Agency's budget has no funds dedicated specifically to sustainability practices. Accounting system is limited and is not able to provide baseline data at this time.
- d. *Success Factors:*
 - (1) 90% of parks surveyed reported using water conservation methods including waterless urinals, low-flow toilets, and less irrigation; survey reflects a 40% increase from numbers provided in 2004 report.
 - (2) Two improvements that demonstrate new resources conservation practices will be made in 2006 at each of the five model Stewardship Parks.
- e. *Savings and Environmental Benefits:* Water conservation is a core value at State Parks. As a natural resource land management agency, State Parks is a role model to guests and other park systems. No tracking baseline data is available at this time.

E. Solid Waste and Toxic Chemicals - Reduce Use of Products With Persistent, Toxic Chemicals

- 1. Adopt measures to reduce use of equipment, supplies and other products that contain persistent, toxic chemicals.
 - a. *Long Range Goals:* 1, 2, 5, 6, 7, and 8.
 - b. *Progress:* Environmentally preferable products are used in 89% of parks.
 - c. *Barriers & Challenges:* Agency's budget has no funds specifically dedicated to sustainability practices. Each manager must accommodate purchases in a tight budget with many demands.
 - d. *Success Factors:* Several parks take the time to research and purchase green items not offered by GA and Central Stores. The GA contracting staff works with the parks purchasing officer and sustainability coordinator to help parks.

- e. *Savings and Environmental Benefits:* As stated above, parks were cleaned, recycling opportunities were made available, pet waste was removed from areas where it might infiltrate and contaminate the groundwater, and food scraps were composted.
2. Report annually on progress in sustainability plans.
- a. *Progress & Barriers:* Collecting data from field is a challenge that the agency's sustainability team hopes to address next year by working closely with regional offices. Even with data collection barriers, overall agency staff is doing a good job of responding to executive orders related to sustainable practices, and the agency will continue to work towards statewide goals.
3. Solid Waste Reduction - Litter and Recycling.
- a. *Long Range Goals:* 1, 2, 5, 7, and 8.
- b. *Progress, Barriers, Challenges and Success Factors:*
- (1) 93% of parks reported waste reduction efforts. 82% offered recycling to guests and staff; this reflects a 40% increase from numbers provided in 2004 report.
 - (2) Department of Ecology provided \$49,000 in 03-05 for Parks Litter and Recycling programs. The past two years funds were used for a number of projects including:
 - (a) Litter and dump site clean-up expenses 52%
 - (b) Recycling containers and labeling expenses 28%
 - (c) Pet Waste Program expenses 8%
 - (d) Volunteer Program expenses 10%
 - (e) Composting materials - Fort Worden 2%
 - (3) Parks Litter program cleaned up 28 dump sites, removing 226,016 pounds of debris.
 - (4) Over 103,000 litter bags were provided to volunteers and park guests.
 - (5) Pet Waste disposal project expanded to serve 34 State Parks and provided 60,000 biodegradable pet waste disposal bags.
 - (6) Recycling program provided standardized labels statewide for park guests and staffs education about recycling.
 - (7) Large composting system built at Fort Worden in December of 2004 has removed over 5,000 pounds of food waste from the landfill in less than 11 months. Approximately 40 volunteer hours have been spent maintaining the composting system.
 - (a) Composting has increased in several parks, but no tracking data is available.
 - (8) Volunteer Program has data for ten years collected during the annual Shore Patrol, which is part of a national event for Coastal Cleanups. (See table below).

<u>YEAR</u>	<u>PEOPLE</u>	<u>HOURS</u>	<u>POUNDS</u>
1995	970	6,990	22,600
1996	1,044	9,824	28,460
1997	964	9,656	38,900
1998	856	11,474	26,430
1999	1,017	9,056	19,320
2000	940	5,514	25,520
2001	1,049	6,709	25,640
2002	1,057	7,568	19,580
2003	960	6,539	27,200
2004	763	5,256	33,620

F. Communications and Education

1. Steps taken to educate employees or clients; and education on Plan as well as general sustainability educational efforts.
 - a. *Long Range Goal:* 1, 2, 3, 4, 5, 6, 7, and 8.
 - b. *Progress:* The Sustainability Team developed a number of communication tools this past year.
 - (1) 46% of parks surveyed have sustainability education activities; this reflects a 15% increase from numbers provided in 2004 report.
 - (2) To communicate educational information about sustainable practices and emerging technologies to staff, the Sustainability Team created a series of fact sheets. Topics of the fact sheets developed in 2005 include: Web-sites on Sustainability Thoughts and 100% Recycled Toilet Paper Processed Chlorine Free.
 - c. *Barriers & Challenges:* Money and time is a major barrier for educational goals.
 - d. *Success Factors:* The agency's Sustainability Team created a draft Sustainability Policy for the agency. Key changes the proposed policy would strengthen communications and education include:
 - (1) Create a process to implement the agency's Sustainability Plan
 - (2) Create a standing Sustainability Team to drive agency change.
 - (3) Create a procedure for parks to request support for sustainability project ideas and revised long range goals. (See section IV for proposed new goals).
 - e. *Savings and Environmental Benefits:* No baseline documentation available at this time.

SECTION III: STATEWIDE PERFORMANCE MEASURES

FY 2003 data were provided in State Parks Sustainability Plan 2003. FY 2004 data on progress were provided in agency's October 2004 annual report. All data provided in this report is for FY 2005 Progress.

A. Annual petroleum use, vehicle miles traveled and number and type of state vehicles owned

1. The table below summarizes the total number of vehicles at headquarters with the average fuel efficiency by type. Three new Hybrid vehicles were added to headquarters motor pool since 2004 report. State Parks estimated average fuel efficiency is 29 mpg in city and 30 mpg on highways, with an average fuel efficiency of 30 mpg. Fuel efficiency numbers used are from EPA. <http://www.epa.gov/greenvehicles/>

Type of Vehicle	#	CITY mpg	HIGHWAY mpg
Prius hybrid sedans	5	60	51
Other sedans	3	19	26
Escape hybrid truck	1	33	29
Other Trucks & SUV	5	16	22
Van/Bus	5	15	20

2. In 2005 the agency started exploring solutions to some of our tracking problems. Fiscal staff started coding all vehicle fuel expenses to one object code effective January 1, 2005 in the

middle of FY 05; see section III 4. a. (1) for more details. The agency hopes to address other fiscal tracking problems and be able to provide more details in the future.

Object Code	FY 05	Change from FY 04	% Change
ES Vehicles Fuel	\$ 660,100	\$ 201,000	up 33%
GC Private			
Auto Mileage	\$ 47,050	\$ 15,000	up 45%

3. Our Inventory System provided the following totals for motorized equipment owned by State Parks, as of summer 2004. Newer totals are not available at this time.

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

4. Average fuel efficiency of vehicles in agency fleet: State Parks headquarters motor pool has 19 vehicles. These vehicles have an average fuel efficiency of 30 miles per gallon mpg (see section III A. 1. for more details).
- a. Because State Parks does not track miles driven for particular vehicles, the actual fuel usage cannot be measured for FY05.
- (1) Effective January 1, 2005 State Parks started recording all fuel expenses for vehicles to one sub object area. Based on the fuel costs reported in table above, we estimate State Parks spent about \$707,150 in FY 05 on fuel statewide, using an average cost of \$2 per gallon, and our average fuel efficiency of 30 mpg, we estimate 353,600 gallons were purchased. We estimate about 10,607,300 miles were traveled using State Parks vehicles in FY 05.

5. Mileage is not tracked in the field or at headquarters; see section II B. for more detail.

B. Number of exception purchases of 4-wheel drive SUVs made

1. Only 1 exception made in FY05, reported in section II B.2.
2. Fleet management report to be submitted later will address this topic further.

C. Amount and type of office paper and janitorial paper products purchased; quantity of office paper recycled; and justification for virgin office paper purchased.

1. In 03-05 State Parks spent \$16,765 on paper products at Central Stores:
 - a. 92% of these purchases were products that had post-consumer recycled paper fiber content:
 - b. 46% were processed Chlorine-Free with 100% post-consumer recycled paper content.
 - c. 44% were 40% post-consumer recycled paper content.
 - d. 10% were 30% post-consumer recycled paper content.
2. All paper is recycled at State Parks headquarters, and also at regional and park offices when services are available.
3. Data on janitorial paper products purchased is not tracked currently. The agency plans to start tracking procedures at regional offices in 2006. Central Stores provides only a small portion of these paper products. State Parks purchasing office works with three outside contractors also to purchase janitorial paper products, and was not able to research more at this time.
4. Justifications for not following agency paper directive must be approved by managers and purchasing officer in advance.
5. Data on volume of paper purchased is not tracked at this time, but the Sustainability Team hopes to work with the regional offices and purchasing officer next year to collect the data.

SECTION IV: NEW OR UPDATED GOALS AND OBJECTIVES

A. Revised Long Term Goals in 2005 Draft Sustainability Policy

The five Long Range Goals, listed below, are revised goals developed as part of a Sustainability Policy. This policy was developed over the past six months by the agency's Sustainability Team, and is currently under review by Senior Management. The eight goals are combined into five, while still maintaining the intent of the original eight.

1. Raise employee awareness of sustainable practices in the work place and incorporate these practices into the operation, construction and development of our park system;
2. Optimize energy and water use;
3. Shift to clean energy for facilities and equipment;
4. Shift to non-toxic, recycled, and remanufactured materials in purchasing, construction, renovation, and regular maintenance procedures where possible, and
5. Reduce or eliminate waste through recycling programs and other means.

C. Other Barriers and Challenges

In Section II we have mentioned a number of barriers. OFM accounting practices represents a major tracking problem for State Parks. OFM combines details such as power (gas or electric) and water use into general object codes. The middle of FY 05 Parks fiscal staff started an in-house tracking process for gas used in vehicles only. Also, budget staff is looking into other changes that might be made without impacting fiscal work loads too much.

D. Goals for Revised Sustainability Plan 2006

The agency's Sustainability objectives for the coming year focus on the revised goals and establishing a permanent Sustainability Team, as well as several other long term goals and objectives from both the Sustainability Plan of 2003 and the policy developed in 2005. The State Parks Sustainability Plan, which is due to be updated in the fall of 2006, will include:

- Five new long term goals, to replace existing eight goals.
- Development of policies and procedures to support water conservation goals.
- Development of procedures for collecting quantitative data on sustainable practices.
- Establishment of environmental objectives and targets.
- Removal of duplicate or repetitive information.