

WASHINGTON STATE PARKS AND RECREATION COMMISSION SUSTAINABILITY PLAN GOALS

1. Energy Conservation (reduce energy demand)

There are three major ways to affect the agency's demand for energy. First, using equipment and fixtures with the latest efficiency technology can create significant energy and cost savings. Second, adopting new modern standards for structures we build will assure that they are as energy efficient as possible. Third, modifying the behavior of those that have control over energy consumption can create significant savings by creating an attitude that supports energy conservation as an operational practice.

Goal: By 2020, the agency will reduce its net consumption of electric energy and non-renewable heating fuels (e.g., oil, natural gas, and propane) to 1990 levels (goal adapted from ESSSB 5560; Chapter 519, Laws of 2009).

2. Switch to Renewable Energy Sources

One way to make agency operation more sustainable is to purchase or produce energy generated from renewable sources. By increasing the proportion of energy coming from renewable sources, we reduce our dependence on finite resources and build energy-generating capability that taps resources that will last forever. Examples of renewable energy sources include biofuels, wind energy, tidal energy, and solar energy. Many utilities now offer mechanisms through which customers can buy "green electricity" generated from renewable sources.

Developing renewable energy generating facilities in state parks is another way to achieve this goal. To limit disruption of the park experience, these facilities should principally seek to produce the amount of energy needed to operate the park in which the facility is located. Facilities should only be located where consistent with Commission-adopted land classifications and other applicable resource management policies.

Goal: By 2020, the agency will purchase and/or produce 30% of its electrical energy needs from renewable sources (goal is twice the rate required of electric utilities by Initiative 937 in 2006).

3. Transportation Efficiency

A major portion of the agency's energy consumption is the fleet of vehicles used to conduct daily business. Park operation requires a wide array of vehicle types – everything from semi tractor-trailer trucks to electric carts. Making wise selections in the types of vehicles deployed can greatly reduce fuel consumption. Strategically staging vehicles to allow sharing among parks can also reduce the number of large vehicles needed. Supporting mass transit and energy efficient alternatives to the personal automobile for getting employees to and from work is another way the agency can significantly lessen its energy consumption.

Goal: By 2020, the agency will

- a) Achieve a corporate average vehicle fuel economy of ~~35~~ 36 miles per gallon (goal adapted from ESSSB 5560; Chapter 519, Laws of 2009)
- b) Reduce commute trip mileage by 50% from a 2009 baseline
- c) Increase the fleet share of hybrids and plug-in electric vehicles to 25%

4. Reduce Water Use

Potable water is becoming an increasingly scarce resource. In some parts of the country, withdrawal of water exceeds recharge and water tables are dropping. In Washington, it was long thought that water was a limitless resource. We now know this is far from the case. To meet future demand for potable water we need to use water wisely, reuse it wherever possible, and return it to the environment in as clean a state as possible.

Goal: By 2020, the agency will apply water collection, conservation, and recycling technology at 50 parks and therefore reduce potable water use by 50% in those parks.

5. Waste Management

Reduce, reuse, recycle is the core of sustainability. State Parks and the people who visit our parks can work together to reduce the amount of material that is sent to landfills every year. Efficient recycling and composting programs can reduce the waste stream significantly. We are geographically challenged by access to local and regional programs that support recycling and composting but innovation can overcome many of these challenges.

Goal: By 2020, the agency will divert 80% of current waste from landfills by achieving 100% recycling of metals, plastics, paper products, and glass and by composting at least 50% of organic wastes.

6. Sustainable Environments

In general, the most sustainable landscapes in any of our parks are natural environments. By modeling built landscapes on native landscapes, we can achieve increased sustainability and reduce maintenance and energy costs. The desire for designed recreational landscapes (e.g., picnic areas with lawns) will likely persist – particularly in arid regions. However, we can adapt new technologies and design principles to reduce the developed footprint and dependence on irrigation, fertilization, chemical weed control, and energy consumptive maintenance activities (e.g., mowing, trimming, blowing).

Goal: By 2020, the agency will

- a) reduce water consumption by incorporating xeriscaping design principles and use of native plants in the development and redevelopment of recreational landscapes in parks
- b) maintain park lawns with highly restricted application of herbicides, pesticides and fertilizers
- c) use an IPM (integrated pest management) approach to managing noxious/invasive weeds in all parks and ensure replacement of invasive species with suitable native plants

7. Measuring and Monitoring

Within state government, there is an increasing demand for accurate accounting for the resources we expend. Measuring improvements is always based on a comparison against some baseline measure. In order to accurately measure and report our progress and to inform ourselves about where we can improve, we need to collect and track the necessary data.

Goal: By 2020, the agency will

- a) consistently track recycling; waste disposal; and consumption of electricity, water, and vehicle fuel in all parks and administrative facilities
- b) incentivize and recognize sustainability-related performance of parks and staff through a “green parks” accreditation program and a “green staff” certification program

8. Communication, Education, Interpretation

Without a way to communicate the purpose and aims of sustainability, we stand little chance of success. Achieving the agency’s sustainability goals will require that we effectively communicate with agency staff, policy makers, and the public. Interpreting sustainability to the public will become an increasingly central function in state parks. The agency should work to develop interpretive methodology, programs, funding strategies, and partnerships to instill a sustainability ethic in park visitors and Washington residents.

Goal: By 2020, the agency will

- a) provide sustainability-related interpretation to the public at all staffed parks
- b) provide the public current sustainability information on the agency’s website and through other public information campaigns
- c) include sustainability training at ranger in-service trainings and the Stewardship Certification Program

9. Environmentally Preferred Products

From recycled paper to cleaning products that are non-toxic and biodegradable, Environmentally Preferred Products (EPPs) advance sustainability in several ways. These products are easier to recycle, reduce energy consumption, and lessen release of toxins into the environment. Purchase and use of EPPs helps support green industry, reduces pollution, and lessens threats to human health.

Goal: The agency will immediately purchase only one hundred percent recycled copy and printing paper (reflects SHB 2287; Chapter 356, Laws of 2009)

Goal: By 2020, the agency will

- a) apply only paints with low amounts of volatile organic compounds
- b) adopt an EPP policy for cleaning, painting, and other maintenance-related chemical products

10. Reduce Toxics Entering the Environment

Through a sustainability-driven approach to operational and purchasing decisions, we can significantly reduce the amount of toxics released into the environment. While perhaps overlapping considerably with other goals, reducing release of toxics nevertheless merits distinct consideration.

Goal: By 2020, the agency will

- a) adopt a policy on use of toxic substances in parks and agency facilities
- b) provide appropriate training to all staff who handle toxic substances
- c) use an IPM (integrated pest management) approach to managing noxious/invasive weeds in all parks

11. Sustainable Building Practices and Materials

State law already requires that buildings over 5,000 square feet meet green building standards (RCW 39.35D.030). Although the new State Parks headquarters in Tumwater is one of the state's first LEED-gold office buildings, structures in state parks rarely reach this threshold. State Parks should devise a system similar to Leadership in Energy and Environmental Design (LEED) to apply to our smaller buildings to ensure they are as sustainable and efficient as possible. Low Impact Design (LID) guidelines seek to minimize a site's develop footprint and encourage re-use, and where appropriate, removal of existing structures and other impervious surfaces. The agency should also adapt these LID principles to guide development of recreational landscapes in parks.

Goal: By 2020, the agency will

- a) adopt low impact design guidelines for development of new recreational landscapes
- b) adopt sustainable design standards for buildings of less than 5,000 square feet
- c) adopt guidelines for use of recycled materials in park construction projects

12. Reducing Our Carbon Footprint

Like the goal for reducing toxics entering the environment, much of what we achieve in the previous goals helps reduce our carbon footprint. With worldwide concern over global climate change, we need to make decisions that consider and, to the greatest extent possible, reduce release of carbon dioxide and other greenhouse gasses into the air.

State Parks' large collection of historical structures provides a relatively rare opportunity to demonstrate a fundamental approach to reduction of carbon footprint. The notion of "embodied energy" refers to the energy and resources already expended to construct a building, including material extraction, manufacturing, and transportation. While approximately 43% of America's carbon emissions come from the operation of buildings, this figure does not include embodied energy (the energy consumed in the construction of buildings ranges from 15 to 30 times the annual energy use of the building). Historic buildings, in particular, represent a high amount of

embodied energy and are by their nature more sustainable than many recent buildings given their higher quality and longer life span of materials used and designs that accurately respond to the local climate. The concept of embodied energy leads to the conclusion that the greenest building is one that is already built.

Goal: By 2020, the agency will

- a) reduce its carbon foot print 15% from a 2005 baseline (goal reflects ESSSB 5560; Chapter 519, Laws of 2009)
- b) work with its partner organizations to provide a mechanism for visitors to off-set the carbon footprint of their visit
- c) explore and if feasible, participate in carbon credit programs and third party forest practices certification efforts such as the Forest Stewardship Council standards

13. Partnerships

Sustainability and resource conservation does not end at park boundaries. The agency must recognize that parks lie within a larger environmental context where park and global sustainability are inexorably linked. Staff currently shares stewardship and sustainability-related expertise and cooperates with other institutions and colleagues on numerous inter-agency and non-profit committees, councils, boards, and other policy setting, information sharing, and advisory bodies. The Commission also enters into interagency and cooperative agreements with numerous government entities and non-profits to advance sustainability and conservation initiatives. While mindful of potential mission creep, the agency should encourage, expand, and formalize relationships with its neighbors and partners to build its sustainability capabilities and extend their effectiveness.

Goal: By 2020, the agency will

- a) attain a leadership role on the Governor's Statewide Interagency Sustainability Committee
- b) demonstrate a leadership role in conserving and protecting the natural and cultural heritage of Washington State
- c) expand and formalize partnerships with public institutions, conservation-oriented non-profit organizations, and the private sector to advance the agency's sustainability goals