



## Maryland Department of Natural Resources

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State Government

Member since May 2010

### MANAGEMENT AND LEADERSHIP



#### **Environmental Policy Statement**

*DNR's Mission Statement fully embraces environmental restoration and protection:*

*The Department of Natural Resources leads Maryland in securing a sustainable future for our environment, society, and economy by preserving, protecting, restoring, and enhancing the State's natural resources.*

*DNR underwent a lengthy strategic planning process, including stakeholder participation, to develop a "One DNR" plan, which serves as the new strategic plan to move DNR toward a sustainable future. The plan integrates a set of six cross-cutting themes – based on tenets of sustainability – that DNR is implementing.*



#### **Environmental Team**

*DNR's Executive Team of top management and Leadership Team of all unit directors focus on internal and external environmental issues of importance to the agency at regular biweekly meetings.*

*In late summer 2007, DNR convened a Green Team to identify topics and opportunities; set specific goals, action items, and timelines; and implement appropriate measures.*

*DNR created an Office for a Sustainable Future that is leading environmental and sustainability initiatives to transform the ways the Department and State Government pursue their missions.*

☒ **Annual Environmental Goals**

*The “One DNR” Strategic Plan specifically sets out goals and targets, including paper reduction, energy efficiency, resource conservation, outdoor learning opportunities for youths, and site design on State lands.*

☒ **Environmentally Preferable Purchasing**

*DNR instituted environmentally preferred purchasing efforts at Rocky Gap State Park and other locations. All State Parks now use green cleaning supplies. DNR adopted a formal department Green Purchasing policy in December, 2009. From those lessons learned, DNR, along with DGS and DBM, is leading the effort to expand environmentally preferable purchasing throughout all of Maryland State Government.*

☒ **Environmentally Preferable Products and Services**

*DNR manages 467,430 acres of State-owned land, including 81 State Park units, 45 wildlife management areas, and 206,695 acres of State Forests. DNR strives to lead by using the most sustainable practices in managing those lands and the hundreds of buildings that are on them.*

*DNR also created, manages and promotes the Clean Marinas program. All DNR-operated marinas are certified Clean Marinas, and all boat ramps/rental areas in State Parks are certified Clean Marina Partners.*

☒ **Environmental Restoration or Community Environmental Projects**

*DNR is unique in that most of our programs support environmental and natural resource restoration in one way or another. With respect to areas owned or managed by the agency, we currently have goals for planting trees on public lands and establishing natural filters on public lands.*

*In 2009, DNR restored 884 acres of wetlands, stream buffers and trees on State lands and we are currently working with the Departments of Transportation and Public Safety and Corrections Services to plant one million new trees, mostly on State lands. DNR is also partnering with the Maryland Port Administration to help replenish oyster reefs on state property.*

*DNR promotes sustainable forestry management practices and has obtained certification of the 66,717-acre Chesapeake Forest Lands by both the Sustainable Forestry Initiative and the Forest Stewardship Council. The Department is also conducting a pilot forest carbon sequestration program on 171.4 acres of the Little Blackwater property south of Cambridge, Maryland.*

*We are also upgrading septic systems on state properties in the Chesapeake Bay Critical Area to use nitrogen-removing technology. Sixteen upgrades have been completed and three are under construction.*

*DNR also conducts extensive educational and outreach programs, including preparation of curriculums available for adoption by elementary and secondary schools.*

## **WASTE**



### **Solid Waste Reduction and Reuse**

*Maryland State Parks are trash-free, meaning that any materials brought into the park by visitors must also leave with them. As a courtesy, the Maryland Park Service provides biodegradable bags for visitors to easily store their trash until they reach a recycling or trash receptacle outside of the park.*

*Contractors are encouraged to recycle construction waste and debris whenever possible. Where possible, use of recycled products is incorporated into new projects to reduce consumption of natural materials.*

*To reduce paint use and overall cleaning costs, previously painted walls and ceilings are now surfaced with fiberglass reinforced plastic (FRP) paneling and vinyl ceilings and concrete floors are being surfaced with porcelain tile or epoxy coatings.*



### **Recycling**

*DNR participates in State government recycling activities and has recently been renewing its recycling efforts, including the recycling of paper, aluminum, glass bottles, and printer cartridges at DNR field offices. At DNR headquarters, a location staffed by volunteers allows employees to bring in used batteries, cell phones, ink and toner cartridges for recycling.*



### **Hazardous Waste/Toxic Use Reduction**

*Integrated Pest Management (IPM) has widely replaced use of toxic pesticides and herbicides at DNR land units.*

## **ENERGY**



### **Energy Efficiency**

*Building renovation and retrofit projects incorporate products and designs that reduce energy use for lighting, hand drying, and heating. Incandescent light bulbs have been widely replaced by energy-efficient compact fluorescent bulbs (CFLs) in State Parks and other facilities. Light designs incorporate task lighting to reduce costs associated with general lighting. Motion sensor switches have been installed to control general lighting. Facility lighting now incorporates T-8 electronic ballast light fixtures, CFL light fixtures, and high pressure sodium or metal halide security lights – all of which increase light output and decrease power consumption.*

*Solar light tubes are also being incorporated into designs to bring in natural light and louver vents are now being replaced with windows to facilitate natural light and ventilation. Existing windows, doors and garage doors are being replaced with Energy Star-rated products to reduce heating and cooling costs.*

*Electric hand dryers previously rated at 2200 watts have been replaced with ones rated at 900 watts. Existing heating systems previously rated at 82% have been replaced with new ones rated at 92% or better. Heat pumps previously rated at SEER 9 or 10 are being replaced with ones exceeding SEER 17. HVAC systems are tied to programmable thermostats and have been better zoned to adapt to specific needs.*

*As buildings are renovated or fixtures replaced, large hot water heaters are normally being replaced by on-demand hot water systems. The insulation package for existing structures has been upgraded to meet or exceed current code requirements (R-13 walls, R-19 Floors, R-38 ceilings). Where applicable, Energy Star-rated products are specified.*

*As budgetary conditions allow, stand alone, single purpose computer network servers are being replaced with those that can handle multiple enterprise systems, applications and data, or being integrated into a virtual server farm allowing one server to do the work of nine individual servers. These steps will decrease the energy used by the DNR server farm, and the energy used for temperature and humidity control of the room. Office computers are being upgraded every three to four years for more energy efficient models, and energy-saving flat panel monitors have replaced older CRT monitors. DNR is also encouraging employees to have only one computer – a laptop – for both energy savings and continuity of operations purposes.*

*Energy efficiency improvements at Deep Creek Lake State Park's Administration Building in late 2007 reduced the annual electricity consumption of the building by 17%, saving over 4500 kWh per year. The improvements included eliminating air leaks, CFLs, motion sensors, and increased thermal insulation.*



#### **Renewable Energy**

*DNR is retrofitting the bath house/ranger station/concession stand at Rock Gap State Park for a geothermal heat pump.*

### **TRANSPORTATION**



#### **Employee Commute**

*DNR actively promotes telecommuting, compressed work weeks, and other reduction efforts in employee commuting.*



#### **Efficient Business Travel**

*DNR is committed to reducing travel through several efforts. The Department purchased web conferencing software, and is actively training employees to promote web conferencing and teleconferencing, reducing the need for participants to travel to meetings. DNR also provides opportunities for coordination and encourages carpooling to events, field work, and meetings.*

*DNR's highway vehicles were driven 2.1% fewer miles in fiscal year 2009 than in fiscal year 2008, a reduction of 271,466 miles. The vehicles were driven 3.8% fewer miles in the first 9 months of fiscal year 2010 compared to the same period in the previous fiscal year, an additional savings of 362,196 miles.*



#### **Fleet Vehicles**

*As budgets allow, older vehicles are replaced by hybrid or alternative fuel vehicles to the maximum extent possible.*

*DNR's fleet of 943 highway vehicles contains:*

- *7 hybrid (gasoline/electric) vehicles*
- *292 alternative fuel vehicles (ethanol E85/gasoline).*

### **WATER**



#### **Water Conservation**

*DNR changed its land management practices away from intensive watering/mowing via its "Grow, Don't Mow Program," resulting in significant*

*reduction of water usage. Plumbing fixtures are rated for low water consumption and fitted with low flow valves and faucets. Flush valves for toilets and urinals are automatic, reducing water consumption. In some cases tankless water heaters have been placed at the point of use to provide instant hot water. At several locations, circulator pumps and insulated piping have been installed to provide on demand hot water at multiple points of use.*



#### **Stormwater Management and Site Design**

*Stormwater management at DNR facilities now uses environmental site design (low impact) technologies, and unnecessary impervious surfaces are removed and replaced with pervious materials or plantings that allow water to soak into the ground.*

*Resurfacing projects incorporate natural filtration of runoff water whenever possible. Areas where erosion has taken place are repaired and corrective measures installed to prevent future problems. Existing storm water retention ponds are cleaned and upgraded where necessary. New paved surfaces incorporate pervious materials where possible.*

*DNR employees installed a rain garden for stormwater drainage from the parking lot at the agency's headquarters in Annapolis.*

### **GREEN BUILDING**



#### **LEED Silver**

*DNR was an early adopter and leader in promoting green building technology in Maryland. The Hammerman Complex building at Gunpowder State Park is certified LEED Silver - New Construction. The future Harriet Tubman Center is also being designed and constructed to meet/exceed LEED Silver, and will have a green roof. The new Madonna Forestry building also has a green roof.*