



## 2. STATE PARKS MANAGEMENT

*THE NEED of the Tennessee State Parks for a comprehensive systems approach to strategic management.*

During the ten years covered by this plan, TDEC will transition through two changes of leadership. Fortunately, the Division of State Parks is now led by the most professional management team in its history, with a record of excellence that was nationally recognized by the National Parks and Recreation Association's 2007 Gold Medal Award as America's best state park system.

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The goal for the next ten years is to retain this high level of professionalism in Tennessee's park system managers and equip them with a new, comprehensive, strategic management system, enabling them to continue to improve the quality of the State Parks and the park visitor experience.

A major transition toward such a system is already underway. In the last four years, TDEC has undertaken a surprising number of initiatives, which together are moving the department toward a more strategic, mod-

ernized approach to parks management.

- Formation of a new **Resource Management Division** to manage the department's natural and cultural resource protection strategies, outdoor recreation and conservation education components (which also includes interpretive programming) and rivers and trails programs. A major priority of this new division is to implement and enforce a new **Natural and Cultural Resource Protection Policy**. This policy mandates that no change of landscape or

land use can take place on state park lands without rigorous internal review. This policy also includes the protection of historic structures and areas and prehistoric sites.

- **Tennessee State Parks Strategic Direction** provides an overall vision statement which expresses a set of core principles for managing the parks and reinforces the primacy of their conservation mission. Strategic initiatives established for State Parks include: professional management practices; protecting valuable resources; developing natural and cultural resources; acquisition of special places, including conservation priorities and acreage to provide buffers for and corridors between existing public lands; encouraging volunteers; marketing park authenticity; hospitality services; greening the parks; making the most of State Parks as classrooms; improving and maintaining exhibits and signage; expanding use of GIS and GPS technology; park management plans; and greater public involvement.
- Initiation of a **comprehensive GIS inventory** database of all State Park resources and facilities, which makes use of newly available GPS technology to facilitate the data collection process.
- The **Program Services Unit**, within the Resource Management Division, manages some 16,000 interpretive programs presented annually within the park system. This unit has initiated a mandate of 32 hours per year of training for uniformed staff in the areas of interpretive skills and resource management.
- An **Interpretive Action Plan template** designed to help the parks increase their focus on visitor experience and to align interpretive programming with each park's unique characteristics. Each park is currently developing an individual Interpretive Action Plan, which includes an inventory of interpretive facilities, programs and special events, interpretive staff, outside personnel, resource materials, equipment and live animal facilities available at each

park as well as goals to be accomplished over the next four years.

- A **Department of Education partnership** with Tennessee State Parks, under which 20 parks have established year-round environmental education classrooms. Fall Creek Falls State Park now conducts a residential environmental education program that serves students statewide.
- A new **Management Direction Statement** template to help park managers identify management issues and develop consistent strategies for addressing them. Each park has developed its own management direction based on this template.
- A **Greener State Parks Commitment** that has produced reductions in waste and energy savings. Any new construction must now include consideration of energy efficient alternatives as part of the design. All parks are sharing in this initiative.
- A **Land Use Planning process** that is eliminating over-mowing in most of the State Parks, resulting in reduced use of fossil fuels and lower emissions. By utilizing native grasses and plants, mowing will eventually be reduced by as much as 40% statewide. Under this initiative the parks are also working to remove invasive exotic plants and fighting the Hemlock woolly adelgid in the eastern part of the state.
- The **All Taxa Biodiversity Inventory (ATBI)** program, the parks' first comprehensive biological inventory. This program utilizes park staff, local universities and schools, scientists, community volunteers and others with interests in biology to create standard protocols and an inventory database. This inventory will be used to protect the plant and animal species found in the parks. Presently, 33 State Parks are now participating in the ATBI with 14 universities and numerous volunteer groups. Several new state records have been discovered, and it is suspected that there may be thousands of plants and animal species yet to be identified.

The sheer volume and scope of these initiatives sug-

gests a need for a systems approach to ensure coordination, collaboration, and consistency and to streamline the decision-making processes involved in managing a park's day-to-day operations.

On a related front, the park manager's job is becoming more complex than ever as technology begins to play a far more central role, demanding new skills but offering significant opportunities for taking management processes to a new level of effectiveness. **Geographic Information System (GIS)** technology can provide a far more accurate representation of the resources being managed, one that can be continually refined as conditions change. **Geographical Positioning System (GPS)** devices can quickly capture the geospatial data needed to build a working GIS database. The state's transition to the **Edison system** will allow greater control over many park operations.

New technology can be a blessing or a nightmare, depending on how it is organized and implemented, and whether it arrives with the necessary level of training and support. In recent years, a new generation of park managers has moved into place, all with degrees in park management and a more professional perspective. They can make more effective use of new tools if these are organized as components of an integrated management system.

## Management Issues

State Park managers today are also confronted with a number of challenging new issues that call for innovative approaches and new strategies in State Park operations. Many of these issues involve factors from outside the park boundaries that are demanding increasing attention.

### Facilities Costs

Economic conditions and state budget cuts in 2009 are spurring an objective assessment of the net costs of operating State Park facilities. Few facilities have been built in recent years, as the parks system has returned to its core mission of resource preservation. Yet there

exists a legacy from a previous era that placed a greater emphasis on revenue-producing facilities. During this period legislators sometimes pressed for new park facilities in their districts, often without regard to whether these would be economically sustainable. Thanks to good management, revenues currently generate most of the total costs of operating all State Park facilities, but the department's goal is to eliminate operating deficits altogether. Some types of facilities clearly contribute significantly to this deficit and need to be considered for closure. In addition, the age of many park facilities and structures has made them very expensive to maintain, resulting in a maintenance and renovation backlog estimated at \$100 million. With heightened attention now being paid to wasteful spending in state government, this is the optimum time for TDEC to make hard choices about which park facilities represent a drain on the system and need to be closed.

### Sustainability

The State Parks are called upon to fill a unique role in the greening of Tennessee. As places where millions of people go to be closer to nature, they serve as natural role models for demonstrating how human beings can live in balance with nature in ways that are practical and appealing. Indeed, the legislation creating the State Parks system calls for this kind of balance: "Every park under the provisions of this Act shall be preserved in a natural condition so far as may be consistent with its human use and safety and all improvements shall be of such character as not to lessen its inherent recreational value."

While the sustainability concept is simple, implementing it can be extremely complex. New green technologies for buildings are emerging constantly, some far more cost-effective or practical in the long run than others. The same applies to sustainability solutions for park operations. To be able to incorporate the Greener State Parks directives into their decision-making processes, park managers need an easily accessible set of

reference guidelines, one that can be quickly updated as new sustainable technologies and practices emerge.

### **Invasive Plants and Pests**

Most nursery plants imported from other continents have no natural predators in North America to hold them in check. Some of these are now identified as “invasives” because of their ability to spread rapidly over the landscape, displacing native species. Tennessee’s State Parks are not immune to the insidious threat of invasives. A well-known example, kudzu, has engulfed parts of the forest in several State Parks. Protecting the biodiversity of the parks calls for well-defined measures to control and, where possible, eliminate alien invasives.

Insect pests have emerged as a major new threat to the parks. Perhaps the most worrisome is the Hemlock

wooly adelgid, which can rapidly kill whole stands of hemlock trees. In many of Tennessee’s most scenic State Parks, especially those on the Cumberland Plateau and in East Tennessee, old stands of hemlocks are among the park’s most beautiful features. Left unchecked, the wooly adelgid will significantly impair many of the most scenic gems of the State Park system in the next few years. Preventive treatments do exist but can be expensive and limited in scope. In the coming years, the parks system will need to monitor emerging new strategies for combating insect pests and be able to deploy them quickly when they become available.

### **Water Quality**

Some State Parks have water in their streams or lakes that is unfit for bodily contact or fishing because of upstream pollution. Some 20 years ago, the lake at



Cumberland Mountain State Park, created by a beautiful stone dam constructed by the Civilian Conservation Corps (CCC), was an ideal swimming place that was the jewel of the park. Pollution from upstream in the watershed contaminated the lake, forcing the park to build a swimming pool.

As development increases in park watersheds, park managers need resources for staying aware of new contamination sources that affect their resources and for addressing these sources early. Since much of today's water pollution results from land uses rather than industrial sources, park managers also need tools to help them work in partnership with local governments, which have jurisdiction over land use.

### Boundary Encroachments

New developments adjacent to a park's boundaries can impair the scenic values of the park, its water quality, and the viability of its biodiversity. Some park managers are addressing this issue on an informal basis by working in partnership with local governments and

other entities. This is a strategy that can protect many of Tennessee's State Parks from encroachments, but many park managers will need tools for implementing it.

### Historic Resources

While the State Parks mission includes preserving historic resources, it has not always been recognized that some of the park structures are themselves historic. Many are now over 50 years old and are classified under U.S. Department of the Interior guidelines as historic structures worthy of special protection. Prime examples are the cabins built by the CCC, whose proportions, craftsmanship, and materials use make them rare and significant remnants of an important era in Tennessee history. In two State Parks, CCC cabins have been either renovated inappropriately, eliminating their historic integrity, or allowed to collapse for lack of maintenance.

The department's Natural and Cultural Resource Protection Policy will help prevent inappropriate alterations and neglect of historic State Park structures

### Harpeth River: Managing Outside the Park

The Harpeth State Scenic River has demonstrated the value of "managing outside the borders." The park has developed partnerships with government and non-governmental agencies including the Tennessee Department of Transportation (TDOT), city and county agencies, businesses, property owners, and local media venues. Through TDOT, park roads, signage and roadsides have been improved and maintained. City firefighters have assisted with river rescues and the installation of mile markers along the river. County officials have assisted in efforts to create a vegetated buffer zone along sections of the river. Commercial outfitters work alongside park staff to provide quality experiences for river enthusiasts. Adjacent park property owners have been willing to provide easements, and even to deed or sell land to the state for park expansion. The local media promotes

park activities through publications and television. Other resources have come from volunteers. One man donated his time and talent to create a bluebird trail at Hidden Lake. Now he monitors and maintains the nesting boxes. Another family visiting from Virginia cleared exotic and invasive plants from Hidden Lake. Two Boy Scouts of America Scout Masters have helped 12 young people achieve the rank of Eagle Scout through projects to enhance hiking trails and reduce vandalism inside the park. Several scout troops, university organizations, and leadership development programs, along with interested local volunteers have participated in river clean-up events, planted trees along trails, cleared dead tree branches from the river, and assisted park staff with general park maintenance projects. Numerous other volunteers have helped with interpretive programs.

in the future, but the process could also benefit from a formal, independent review mechanism. In most states, approval from the State Historic Preservation Officer is mandated for alterations to state-owned historic structures.

Some natural features also have historic significance that makes them worthy of special protection. For example, Great French Lick, a mineral spring located within Bicentennial Mall State Park, was the original reason for Nashville becoming a center for Native American hunters and later a trading post for early settlers. This historic feature, covered over during the redevelopment of the area, could tell an important story of the founding of Nashville if it were restored.

Several State Parks contain recognized Native American archaeological sites, some of national importance. Given the widespread distribution of Native Americans in Tennessee before European settlement, others probably exist that are yet to be discovered. Accordingly, the Tennessee Commission of Indian Affairs passed a resolution in 2005 calling for “development of Management Direction Statements and full Management Plans, with full and direct Native American participation, for all state-owned sites of Native American significance.”

## Conclusions

Tennessee’s State Parks system appears to be evolving on many fronts toward a new level of management expertise. In the past, park management guidelines and directives have resided in printed reference documents, which were difficult to revise. Digital technology now allows a far more dynamic, fluid, systems-oriented approach. An online GIS database can give a park manager a continually updated picture of all resources and facilities under management, including directives relating to each feature. If a park manager is faced with a decision regarding a particular historic structure, a click of the mouse can call up all department directives and procedures that relate to that feature. If a more effective treatment for a pest species emerges, an online GIS can be globally updated to add that information for all areas in the park system affected by that pest. Management decisions can be based not on a bookshelf of quickly out-of-date reference documents but on a dynamically evolving toolkit.

The toolkit model is also appropriate for many of the issues facing park managers today. An online tool can help a park manager compute a cost-benefit analysis of a park facility based on continually updated expense,



revenue, and visitation data. The anticipated online GIS for the department's new Watershed Management Approach will give the park manager access to all local sources of pollution of the park's streams, giving the manager the ability to work with local officials to mitigate those sources, for the good of the park as well as the local economy.

Bringing all the department's strategic management initiatives under a single, GIS-based, online system will keep the Tennessee State Parks in the forefront nationally in terms of continual quality improvement.

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## 2015 Action Plan

To continue the high level of excellence in the State Parks system, TDEC must maintain the current level of professionalism in its management team, especially at the Assistant Commissioner and Park Director positions.

TDEC's Resource Management Division should develop a Tennessee State Parks Stewardship System designed to ensure system-wide consistency and provide a streamlined approach for all park strategic management decisions.

This initiative should begin with the development of a Design Document that will define content, functionality, and information architecture for the system.

Content may include system-wide core principles as well as directives, policies, and procedures that apply to all types of park resources, facilities, structures, landscapes, and programming (see "Checklist-State Parks-Stewardship-Design-Document.doc" on the Reference Disc.)

Functionality may include a GIS inventory of facilities and natural, historic, and cultural resources; an online calculator for cost/benefit evaluation of facilities; a calculator for energy use analysis; identification of visitor use zones using the USFS Recreation Opportunity Spectrum; and a toolkit for "managing outside the park" issues such as boundary encroachments and water quality impairments.

This document should also describe a training/

technical assistance program for helping park personnel make optimal use of the system.

It will be critical to incorporate robust input from state park personnel in this design phase, to ensure that the resulting system will be convenient and practical in the context of their day-to-day operations. For this system to be effective, the park managers and staff must regard it not as a top-down burden but as a user-friendly set of tools that help them do their jobs more effectively.

The department should then implement this Design Document across the whole park system. This process should proceed over a period of 3-5 years, to be determined by the department, based on available funding and staffing and competing demands on parks personnel. Implementing this system for an individual park will require collecting the park's complete GIS inventory and training staff in the use of the technology and system functions. GIS inventory can be performed with park-based GPS units.

This Stewardship System should be allocated sufficient resources to allow continuous updating and improvement. If effectively implemented, this system will more than pay for itself in cost savings.

## 2020 Vision

Tennessee's State Parks will continue to be a national model for a modernized strategic park management process characterized by a dynamic, systems-oriented approach that ensures high standards of professionalism and consistency, eliminates wasteful spending, provides superior protection for park resources, and delivers a quality visitor experience.

## Coordination Links

**Tennessee Recreation One-Stop:** Includes a mechanism for park user comments, which can provide feedback for park managers. Possible assistance from user-generated GPS data uploaded to the site.