Natural Tunnel State Park
1420 Natural Tunnel Parkway
Duffield, Virginia 24244-9361

Natural Tunnel State Park
MASTER PLAN
Executive Summary
2014 Update

Department of Conservation and Recreation
Division of Planning and Recreation Resources
600 East Main Street, 24th Floor
Richmond, Virginia 23219
Presented for review at a public meeting on November 13, 2014; recommended for adoption by the Board of Conservation and Recreation on December 16, 2014; and reviewed for 30 days by the Virginia General Assembly.

Adopted:

/S/
Clyde E. Cristman, Director
Department of Conservation and Recreation
February 25, 2015
This Natural Tunnel State Park Master Plan Executive Summary is an update to the official unabridged master plan document adopted on May 16, 2000, by Department of Conservation and Recreation (DCR) Director David G. Brickley. The master plan was amended on June 10, 2009, by DCR Director Joseph H. Maroon. The original master plan for Natural Tunnel State Park was written in 1971 by Hayes, Seay, Mattern and Mattern Architects and Engineers, Roanoke, Virginia. This master plan update is intended to set forth a clear vision for the future (based on the phased development). This 2014 executive summary represents the most recent five-year review described in §10.1-200.1 of the Code of Virginia. It outlines the desired future condition for Natural Tunnel State Park when it is fully developed.

Natural Tunnel State Park is located in Scott County on State Route 871, Natural Tunnel Parkway, approximately one-mile northeast of Route 23. The Park is 13 miles north of Gate City and twenty miles north of Kingsport, Tennessee, five miles from Duffield and twenty miles south of Big Stone Gap, Virginia. The Park is located in the Clinchport and Duffield USGS quadrangles of Scott County, Virginia.

Natural Tunnel and approximately 567 acres were purchased in 1967 by the Virginia Division of State Parks from a private company known as Tunnel Chasm and Caverns Corporation. The Park was officially opened in the spring of 1971, with picnic area, visitor center (formally an old motel building) and parking. In 1993, an adjacent parcel of land, the Taylor Property, was acquired containing mostly agricultural land, a residence, and two barns. The current property is 946 acres.

This 2014 update places value on connecting Natural Tunnel State Park to other resources in the community. The Park is in close proximity to the Clinch River, which is qualified to be a state scenic river. The U.S. Forest Service Clinch Ranger District is nearby. The Crooked Road Heritage Music Trail, the Virginia Coal Heritage Trail and the proposed Beaches to Bluegrass Trail are in close proximity to the park, as are scenic byways on Routes 23 and 58. Part of the original Wilderness Road passes through nearby Kane Gap, also known as the Daniel Boone Wilderness Trail in Scott and Lee counties. Natural Tunnel is listed as a site on the Department of Game and Inland Fisheries’ Birding and Wildlife Trail. The Natural Tunnel State Park Regional Connectivity Map is an attachment to the full Master Plan document.

**PARK PURPOSE STATEMENT:** “The purpose of Natural Tunnel State Park is to: tell the history of the Wilderness Road and the settlement of the surrounding region; interpret the unique karst topography; tunnel, caves, flora and fauna; provide environmental education opportunities focusing on the ecology of the region; And provide a range of traditional state park day-use and overnight recreational opportunities.”

**ATTENDANCE:** The following table depicts park attendance during the period **2005 to 2013:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Attendance</th>
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<tbody>
<tr>
<td>2005</td>
<td>272,731</td>
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<tr>
<td>2006</td>
<td>195,577</td>
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<tr>
<td>2011</td>
<td>257,193</td>
</tr>
<tr>
<td>2012</td>
<td>249,529</td>
</tr>
<tr>
<td>2013</td>
<td>246,398</td>
</tr>
</tbody>
</table>

In 2013 Natural Tunnel State Park had 246,398 visitors; 17,606 were overnight guests, while 228,792 were day-use visitors. With this level of visitation, it is estimated that the park had an economic impact on the local economy of approximately $4,981,122. Master plan recommendations designed to increase visitation and improve the visitor experience, once implemented, should also have a positive impact on the region’s economic vitality.

The Department of Conservation and Recreation Planners and State Park Staff conducted this master plan update in accordance with §10.1-200.1 of the Code of Virginia. This plan outlines the desired future condition of the park over a 20-year planning horizon. As required by the Code of Virginia, it must be revisited every five years to ensure that the development objectives outlined in the plan continue to meet the recreational, environmental and historic protection needs of the citizens of the Commonwealth. As a part of the 2014 master plan process, the 2000 park master plan and the 2009 amendment were reviewed. It was determined that significant changes occurred to the master plan to warrant a full revision. The executive summary and accompanying map have been updated. The phased development plan and costs have been revised to reflect current proposed projects. The park staffing and operations costs data have been also updated to reflect current conditions.
This 2014 master plan update describes both proposed facilities and improvements to existing facilities. New facilities are sited to minimize impact to the park, and in keeping with the prescriptive management areas as defined by the Park Resource Management Plan and the guidelines of the Park Visitor Experience Plan, when available. New facilities at this park should be designed and built with consideration to the original design and layout of facilities. These facilities will be carefully sited to minimize impacts to the views in the park and of the park from adjacent lands and water bodies to the greatest extent possible. Consideration will be given to eliminate excessive, misdirected, or obtrusive artificial light in the park in order to maximize the dark sky effect and encourage astronomy and night-sky viewing. Virginia State Parks strives to meet the requirements of the Americans with Disabilities Act (ADA) Standards. Building and site design will implement green energy standards using energy-efficient and sustainable materials and process to the greatest extent possible. Green design initiatives will be considered during the design process for park renovations and new construction. Development activities will comply with requirements set forth by the Department of Environmental Quality’s best management practices for erosion, sediment control and stormwater management in order to protect water quality. A setback guideline of 100 feet from the reservoir shoreline has been established by DCR, and trails and water dependent facilities such as fishing stations, piers, and other water access facilities will be the only developments permitted within the 100-foot setback.

Additional land acquisition is recommended to enhance park offerings, buffer the park from inappropriate development or protect valued viewsheds. Future land acquisitions will only be negotiated with willing property owners. The placement of conservation easements on adjacent property to preserve the natural resources, cultural landscapes, and scenic resources in close proximity to the park will be encouraged. In working cooperatively with neighboring landowners, the park will be enhanced and protected over time.
Phased Development Plan

Completion of all of the projects in this list will represent total build-out (completion of the master plan), and covers a 20-year timeframe. The phasing costs are based on 2014 estimates.

Other Projects not included in the master plan phasing, include:
To acquire and manage the Daniel Boone Interpretive Center in Duffield, when it is constructed; And to acquire and develop a satellite canoe put-in/take-out site on the Clinch River.

PHASE I
Cabins (4-2 bedroom, funded and not included in this cost estimate)
Enlarge existing park office, construct a contact station, add parking , and modify roads
Demolish house on the former Jessee property
Add 25 parking spaces at park visitor center
YCC bunkhouse
Accessible pathway and fishing nodes at Stock Creek
Comfort station with storage/upgrade road/parking/picnic shelter at observation deck/gazebo.
Expand internal park trails to connect park features
Relocate utility lines underground
Expand seating and provide shading for spectators at Amphitheaer
The total estimated cost for Phase I development is $3,934,600

PHASE II
Camping cabins (3)
Relocate maintenance complex
Environmental Center office/meeting space and small shelter at Stock Creek
Expand internal park trails to connect park features
Relocate utility lines underground
The total estimated cost for Phase II development is $2,701,321

PHASE III
Expand trails, including connecting the Cove Ridge Trail to the National Forest
Expand internal park trails to connect park features
Staff residence.
Relocate utility lines underground.
The total estimated cost for Phase III development is $1,156,065
The total cost to bring Natural Tunnel State Park to its desired future condition is $7,791,986
Staffing and Operations

Staffing and operational costs at Natural Tunnel State Park are presently budgeted at $1,309,000 annually, including salaries for 9 staff positions. One additional staff position is identified in Phase 1 which is a vacant position and would bring the current park staffing to standard base level. At complete build out of the proposed 3 phases of development, 5 additional staff will be needed and an additional $358,000 in operating funds. In order for the park to operate effectively and efficiently at full build out, the park must be provided the projected staffing and operating costs for the 3 development phases. The total budget for Natural Tunnel at full build out is projected to be $1,667,000 with 14 staff positions.
## NATURAL TUNNEL STAFFING AND OPERATING COSTS

<table>
<thead>
<tr>
<th>EXISTING (FY 15)</th>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>FULL BUILD OUT</th>
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<tr>
<td><strong>STAFFING</strong></td>
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<tr>
<td>Park Manager</td>
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<tr>
<td>Asst. Park Mgr</td>
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<tr>
<td>Chief Ranger</td>
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<td>Educ. Specialist</td>
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<tr>
<td>Park Ranger (4)</td>
<td>Cove Ridge Dir*</td>
<td>Park Ranger</td>
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<td>Park Ranger (5)</td>
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<tr>
<td>Cove Ridge Dir*</td>
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<td>Cove Ridge Dir</td>
</tr>
<tr>
<td>Housekeeper</td>
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<tr>
<td>Office Manager</td>
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<tr>
<td>Admin Assistant</td>
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<tr>
<td><strong>SALARY TOTAL</strong></td>
<td>$542,000</td>
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<td><strong>WAGE TOTAL</strong></td>
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<td><strong>OTPS TOTAL</strong></td>
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<td><strong>TOTAL BUDGET</strong> (FY15 dollars)</td>
<td>$1,309,000</td>
<td>$220,000</td>
<td>$133,000</td>
<td>$5,000</td>
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NOTE – All costs (salary, wage, OTPS (Other than Personnel Services)) are based on FY15 budget projections.
* Additional positions which are vacant and/or will bring park to standard base level staffing.
GENERAL NOTES:

- ENHANCE ADA ACCESS THROUGHOUT THE PARK.
- EXPAND PARK TRAILS & EXPLORER TRAIL NETWORK WITHIN AND OUTSIDE PARK.
- ACQUIRE AND MANAGE THE DANIEL BOONE INTERPRETIVE CENTER IN DUFFIELD, VIRGINIA.
- ACQUIRE AND DEVELOP A SATELLITE CANOE PUT-IN / TAKE-OUT SITE ON THE CLINCH RIVER.

LEGEND

- PROPOSED FACILITIES
- EXISTING FACILITIES
- PARK PROPERTY
- PARK BOUNDARY
- BIKING TRAIL
- HIKING TRAIL
- RPA SETBACK LINE
- CREEKS