

1. World Heritage Property Data

1.1 - Name of World Heritage Property

Great Smoky Mountains National Park

1.2 - World Heritage Property Details

State(s) Party(ies)

- United States of America

Type of Property

natural

Identification Number

259

Year of inscription on the World Heritage List

1983

Comment

Type of Property: should be spelled "natural"

1.3 - Geographic Information Table

Name	Coordinates (longitude / latitude)	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Great Smoky Mountains National Park	35.593 / -83.436	209000	0	209000	1983
Total (ha)		209000	0	209000	

1.4 - Map(s)

Title	Date	Link to source
Great Smoky Mountains National Park	01/03/2006	

Comment

Our understanding is the map of 01/02/2006 shows area outside the approved WHA boundaries. A replacement map has been prepared and will be sent to Jon Putnam for uploading.--03/06/2013

1.5 - Governmental Institution Responsible for the Property

- Jonathan Putnam
US National Park Service Office of International Affairs
World Heritage Program Officer

1.6 - Property Manager / Coordinator, Local Institution / Agency

- Dale Ditmanson
Great Smoky Mountains National Park
Superintendent

Comment

address should include the state: 107 Park Headquarters Road 37738 Gatlinburg TN

1.7 - Web Address of the Property (if existing)

1. [View photos from OUR PLACE the World Heritage collection](#)
2. [Great Smoky Mountains National Park \(U.S. World Heritage\)](#)
3. [Great Smoky Mountains National Park \(U.S. National Park Service\)](#)
4. [Natural site datasheet from WCMC](#)
5. [World Heritage in the United States](#)

Comment

1. remove the link for OUR PLACE as there are no photos of the Smokies
2. NPS World Heritage link is broken; replace with www.nps.gov/oia/topics/worldheritage/WH_US_Sites.htm
3. WCMC link is broken; replace with www.unep-wcmc.org/world-heritage-information-sheets_271.html

1.8 - Other designations / Conventions under which the property is protected (if applicable)

Comment

Great Smoky Mountains National Park is a part of the Southern Appalachian Biosphere Reserve under the UNESCO MAB Biosphere Reserve Program.

2. Statement of Outstanding Universal Value

2.1 - Statement of Outstanding Universal Value / Statement of Significance

Statement of Significance

The Great Smoky Mountains National Park is a major North American refuge of temperate zone flora and fauna that survived the Pleistocene glaciations. The park includes the largest remnant of the diverse Arcto-Tertiary geoflora era left in the world, and provides an indication of the appearance of late Pleistocene flora. It is large enough to allow the continuing biological evolution of this natural system, and its biological diversity exceeds that of other temperate-zone protected areas of comparable size. The park is of exceptional natural beauty with undisturbed, virgin forest including the largest block of virgin red spruce remaining on earth.

Criteria

- (vii) The site is of exceptional natural beauty with scenic vistas of characteristic mist-shrouded ("smoky") mountains, vast stretches of virgin timber, and clear running streams.
- (viii) Great Smoky Mountains National Park is of world importance as the outstanding example of the diverse Arcto-Tertiary geoflora era, providing an indication of what the late Pleistocene flora looked like before recent human impacts.
- (ix) The Great Smoky Mountains National Park is one of the largest remaining remnants of the diverse Arcto-Tertiary geoflora era in the world. It is large enough to be a significant example of continuing biological evolution of this natural system.
- (x) The Great Smoky Mountains is one of the one of the most ecologically rich and diverse temperate zone protected areas in the world. There are over 1300 native vascular plant species, including 105 native tree species, plus nearly 500 species of non-vascular plants - a level of floristic diversity that rivals or exceeds other temperate zone protected areas of similar size. The park is also home to the world's greatest diversity of salamander species (31) - an important indicator of overall ecosystem health - and is the center of diversity for lungless salamanders, with 24 species.

2.2 - The criteria (2005 revised version) under which the property was inscribed

(vii)(viii)(ix)(x)

2.3 - Attributes expressing the Outstanding Universal Value per criterion

see answers to question 2.1

2.4 - If needed, please provide details of why the Statement of Outstanding Universal Value should be revised

2.5 - Comments, conclusions and / or recommendations related to Statement of Outstanding Universal Value

3. Factors Affecting the Property

3.14. Other factor(s)

3.14.1 - Other factor(s)

Preserving the Wilderness Character Maintenance backlog of visitor infrastructure within the park

3.15. Factors Summary Table

3.15.1 - Factors summary table

	Name	Impact						Origin
3.1	Buildings and Development							
3.1.1	Housing							
3.1.2	Commercial development							
3.1.4	Major visitor accommodation and associated infrastructure							
3.1.5	Interpretative and visitation facilities							
3.2	Transportation Infrastructure							
3.2.1	Ground transport infrastructure							
3.2.4	Effects arising from use of transportation infrastructure							
3.3	Services Infrastructures							
3.3.1	Water infrastructure							
3.3.2	Renewable energy facilities							
3.3.4	Localised utilities							
3.3.5	Major linear utilities							
3.4	Pollution							
3.4.2	Ground water pollution							
3.4.3	Surface water pollution							
3.4.4	Air pollution							
3.4.5	Solid waste							
3.4.6	Input of excess energy							
3.5	Biological resource use/modification							
3.5.1	Fishing/collecting aquatic resources							
3.5.4	Livestock farming / grazing of domesticated animals							
3.5.5	Crop production							
3.6	Physical resource extraction							
3.6.2	Quarrying							
3.8	Social/cultural uses of heritage							
3.8.2	Society's valuing of heritage							
3.8.6	Impacts of tourism / visitor / recreation							
3.9	Other human activities							
3.9.1	Illegal activities							
3.10	Climate change and severe weather events							
3.10.1	Storms							
3.10.2	Flooding							
3.10.3	Drought							
3.10.6	Temperature change							
3.11	Sudden ecological or geological events							
3.11.4	Avalanche/ landslide							
3.11.6	Fire (wildfires)							
3.12	Invasive/alien species or hyper-abundant species							
3.12.1	Translocated species							
3.12.2	Invasive/alien terrestrial species							
3.12.3	Invasive / alien freshwater species							
3.12.5	Hyper-abundant species							
3.13	Management and institutional factors							

	Name	Impact					Origin	
3.13.1	Low impact research / monitoring activities							
3.13.2	High impact research / monitoring activities							
3.13.3	Management activities							
Legend	Current	Potential	Negative	Positive	Inside	Outside		

3.16. Assessment of current negative factors

3.16.1 - Assessment of current negative factors

	Spatial scale	Temporal scale	Impact	Management response	Trend	
3.1 Buildings and Development						
3.1.1	Housing	localised	on-going	minor	low capacity	increasing
3.1.2	Commercial development	restricted	on-going	minor	low capacity	increasing
3.1.4	Major visitor accommodation and associated infrastructure	restricted	frequent	insignificant	low capacity	static
3.2 Transportation Infrastructure						
3.2.1	Ground transport infrastructure	restricted	on-going	minor	medium capacity	static
3.2.4	Effects arising from use of transportation infrastructure	restricted	frequent	insignificant	medium capacity	static
3.3 Services Infrastructures						
3.3.1	Water infrastructure	restricted	one off or rare	minor	high capacity	static
3.3.5	Major linear utilities	restricted	on-going	insignificant	medium capacity	static
3.4 Pollution						
3.4.3	Surface water pollution	localised	on-going	significant	low capacity	increasing
3.4.4	Air pollution	extensive	on-going	significant	low capacity	decreasing
3.4.5	Solid waste	restricted	frequent	insignificant	medium capacity	static
3.4.6	Input of excess energy	extensive	frequent	insignificant	low capacity	increasing
3.5 Biological resource use/modification						
3.5.4	Livestock farming / grazing of domesticated animals	restricted	intermittent or sporadic	insignificant	high capacity	decreasing
3.8 Social/cultural uses of heritage						
3.8.6	Impacts of tourism / visitor / recreation	localised	frequent	minor	high capacity	decreasing
3.9 Other human activities						
3.9.1	Illegal activities	restricted	intermittent or sporadic	minor	high capacity	static
3.10 Climate change and severe weather events						
3.10.1	Storms	localised	intermittent or sporadic	significant	low capacity	increasing
3.10.2	Flooding	restricted	one off or rare	insignificant	low capacity	static
3.10.3	Drought	extensive	intermittent or sporadic	minor	no capacity and / or resources	increasing
3.10.6	Temperature change	extensive	on-going	significant	no capacity and / or resources	increasing
3.11 Sudden ecological or geological events						
3.11.4	Avalanche/ landslide	restricted	intermittent or sporadic	insignificant	low capacity	static
3.12 Invasive/alien species or hyper-abundant species						
3.12.1	Translocated species	extensive	on-going	significant	medium capacity	increasing
3.12.2	Invasive/alien terrestrial species	extensive	on-going	significant	medium capacity	increasing
3.12.5	Hyper-abundant species	localised	one off or rare	insignificant	medium capacity	static

3.17. Comments, conclusions and / or recommendations related to factors affecting the property

3.17.1 - Comments

The park works cooperatively with local, state, federal and tribal authorities to address factors affecting the lands outside the park and indirectly affecting the property. There has been no development within the property since date of nomination. The effect of public use pressures are concentrated in areas of high visitor use; 95% of the park is not heavily used so the park can absorb current levels of visitor use. Society's valuing of heritage is currently strong but could swing negatively.

4. Protection, Management and Monitoring of the Property

4.1. Boundaries and Buffer Zones

4.1.1 - Buffer zone status

There is no buffer zone, and it is not needed

4.1.2 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The boundaries of the World Heritage property are **adequate** to maintain the property's Outstanding Universal Value

4.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The property had no buffer zone at the time of its inscription on the World Heritage List

4.1.4 - Are the boundaries of the World Heritage property known?

The boundaries of the World Heritage property are known by both the management authority and local residents / communities / landowners.

4.1.5 - Are the buffer zones of the World Heritage property known?

The property had **no buffer zone** at the time of its inscription on the World Heritage List

4.1.6 - Comments, conclusions and / or recommendations related to boundaries and buffer zones of the World Heritage property

There are no permanent inholdings within the boundary of the park. There is no official buffer zone surrounding the park. Private and commercial properties border a significant portion of the park, however they have limited impact on the park's resources to date. Development of these adjacent properties has increased since nomination. National forest borders the park's boundaries in some areas.

4.2. Protective Measures

4.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and / or traditional)

Great Smoky Mountains National Park is owned by the United States Government on behalf of the American public. It is managed by the National Park Service, a federal agency. As a National Park, it receives the highest level of conservation protection afforded by federal law in the United States. The Act of May 22, 1926 (44 stat. 616) provided for establishment of Great Smoky Mountains National Park "for the benefit and enjoyment of the people." In that Act, the park's purpose is further indicated by reference to the Act of August 25, 1916 (39 Stat. 535). Which established the National Park Service and which states that the fundamental purpose of national parks is "... to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

In addition, elements of the following apply:

National Park Service Organic Act, 1916
 Fish and Wildlife Coordination Act as amended (16 U.S.C. 1531 et seq)
 Wilderness Act (16 U.S.C. 1131 et seq)
 Water Resources Planning Act of 1965 (42 U.S.C. 1962 et seq)
 Concessions Policy Act of 1965 (16 U.S.C. 20 et seq)
 Solid Waste Disposal Act (P.L. 89-272, October 20, 1965)
 National Historic Preservation Act of 1966 (16 U.S.C. 470 as amended by P.L.96-575)
 National Trail System Act (16 U.S.C. 1241 to 1249)
 National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq)
 Noise Control Act of 1972 as amended (42 U.S.C. 4901 et seq)
 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4651 et seq)
 Federal Water Pollution Control Act (33 U.S.C. 208, 303, 401, 402, 404, 405, 407, 511, 1288, 1314, 1341, 1342, 1344)
 Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq)
 Safe Drinking Water Act (42 U.S.C. 300 f-j)
 Clean Air Act, as amended (42 U.S.C. 7401 et seq)
 Energy Supply and Environmental Coordination Act of 1974 (42 U.S.C. 1857b-1 et seq)
 American Indian Religious Freedom Act (42 U.S.C. 1966)
 Resource Conservation Act of 1976 (codified in scattered sections of 42 U.S.C.)
 National Park Service Management Policies, 2001
 Natural Resource Protection Act, 1990
 Government Performance and Results Act, 1993
 National Parks Omnibus Management Act, 1998
 Federal Cave Resources Protection Act, 1988
 Endangered Species Act 1973, amended 1982
 Migratory Bird Treaty Act, 1974
 National Historic Preservation Act, 1966

Comment

Add: Clean Air Interstate Rule, 2005 (EPA); Cross-State Air Pollution Rule, 2011 (EPA); and Omnibus Public Land Management Act, 2009

4.2.2 - Is the legal framework (i.e. legislation and / or regulation) adequate for maintaining the Outstanding

Universal Value including conditions of Integrity and / or Authenticity of the property?

The legal framework for the maintenance of the Outstanding Universal Value including conditions of Authenticity and / or Integrity of the World Heritage property provides **an adequate or better basis** for effective management and protection

4.2.3 - Is the legal framework (i.e. legislation and / or regulation) adequate in the buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and / or Authenticity of the property?

The property had **no buffer zone at the time of inscription** on the World Heritage List

4.2.4 - Is the legal framework (i.e. legislation and / or regulation) adequate in the area surrounding the World Heritage property and buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and / or Authenticity of the property?

The legal framework for the area surrounding the World Heritage property and the buffer zone provides **an adequate or better basis** for effective management and protection of the property, contributing to the maintenance of its Outstanding Universal Value including conditions of Authenticity and / or Integrity

4.2.5 - Can the legislative framework (i.e. legislation and / or regulation) be enforced?

There is **excellent** capacity / resources to enforce legislation and / or regulation in the World Heritage property

4.2.6 - Comments, conclusions and / or recommendations related to protective measures

Great Smoky Mountains National Park is owned by the United States Government on behalf of the American public. It is managed by the National Park Service, a federal agency. As a National Park, it receives the highest level of conservation protection afforded by federal law in the United States.

4.3. Management System / Management Plan

4.3.1 - Management System


The National Park Service has sole management responsibility for Great Smoky Mountains National Park. The Superintendent reports to a Regional Director, who reports to the NPS Director.

There is a General Management Plan for Great Smoky Mountains National Park, written in 1983. It is not available on the internet, but a copy can be obtained by writing to the Park Superintendent. Management plans are required by law. The plan contains sections on purpose, management objectives, the environment, management zoning, resources management, visitor use and services, and general development. There are no current plans, as of 2004, for development of a new General Management Plan. However, amendments are in progress for specific portions of the park.

Comment

Change last two sentences to read: There are no current plans, as of 2012, for development of a new General Management Plan. However, in 2013 the park will create a new Foundation Statement for the existing plan that updates and reaffirms the basic facts, major resources, and interpretive themes of the park and it is on this that the park management is based.

4.3.2 - Management Documents

Title	Status	Available	Date	Link to source
Great Smoky Mountains National Park - North Carolina - Tennessee (vol. I: Final Environmental Impact Statement General Management Plan, vol. II: General Management Plan), 01/1982	N/A	Available	01/01/1982	

Comment

current link is dead; contact the park for a new PDF to upload, but this document has become mostly out of date. A 5-year strategic plan is available at <http://www.nps.gov/grsm/parkmgmt/upload/2008strategicplanmds.pdf>

4.3.3 - How well do the various levels of administration (i.e. national / federal; regional / provincial / state; local / municipal etc.) coordinate in the management of the World Heritage Property ?

There is **excellent coordination** between all bodies / levels involved in the management of the property

4.3.4 - Is the management system / plan adequate to maintain the property's Outstanding Universal Value ?

The management system / plan is **fully adequate** to maintain the property's Outstanding Universal Value

4.3.5 - Is the management system being implemented?

The management system is being **fully** implemented and monitored

4.3.6 - Is there an annual work / action plan and is it being implemented?

An annual work / action plan exists and **most or all activities** are being implemented and monitored

4.3.7 - Please rate the cooperation / relationship with World Heritage property managers / coordinators / staff of the following

Local communities / residents	Good
Local / Municipal authorities	Good
Indigenous peoples	Good
Landowners	Not applicable
Visitors	Good
Researchers	Good
Tourism industry	Good
Industry	Not applicable

4.3.8 - If present, do local communities resident in or near the World Heritage property and / or buffer zone have input in management decisions that maintain the Outstanding Universal Value?

Local communities **directly contribute** to some decisions relating to management

4.3.9 - If present, do indigenous peoples resident in or regularly using the World Heritage property and / or buffer zone have input in management decisions that maintain the Outstanding Universal Value?

Indigenous peoples directly contribute to **some decisions** relating to management but their involvement could be improved

4.3.10 - Is there cooperation with industry (i.e. forestry, mining, agriculture, etc.) regarding the management of the World Heritage property, buffer zone and / or area surrounding the World Heritage property and buffer zone?

There is contact but only **some cooperation** with industry regarding the management of the World Heritage property, buffer zone and / or area surrounding the World Heritage property and buffer zone

4.3.11 - Comments, conclusions and / or recommendations related to human resources, expertise and training

The number of scientific studies has increased, as has the emphasis on science-based management and education about the park's resources.

4.3.12 - Please report any significant changes in the legal status and / or contractual / traditional protective measures and management arrangements for the World Heritage property since inscription or the last Periodic report

Management of the park remains consistent from the date of nomination. As a national park, the Smokies is given the highest protection for natural and cultural resources.

4.4. Financial and Human Resources

4.4.1 - Costs related to conservation, based on the average of last five years (relative percentage of the funding sources)

Multilateral funding (GEF, World Bank, etc)	0%
International donations (NGO's, foundations, etc)	0%
Governmental (National / Federal)	88%
Governmental (Regional / Provincial / State)	0%
Governmental (Local / Municipal)	0%
In country donations (NGO's, foundations, etc)	10%
Individual visitor charges (e.g. entry, parking, camping fees, etc.)	0%
Commercial operator payments (e.g. filming permit, concessions, etc.)	2%
Other grants	0%

4.4.2 - International Assistance received from the World Heritage Fund (USD)

Comment

Not Applicable.

4.4.3 - Is the current budget sufficient to manage the World Heritage property effectively?

The available budget is **sufficient** but further funding would enable more effective management to international best practice standard

4.4.4 - Are the existing sources of funding secure and likely to remain so?

The existing sources of funding **are secure** in the medium-term and planning is underway to secure funding in the long-term

4.4.5 - Does the World Heritage property provide economic benefits to local communities (e.g. income, employment)?

There is a **major flow** of economic benefits to local communities from activities in and around the World Heritage property

4.4.6 - Are available resources such as equipment, facilities and infrastructure sufficient to meet management needs?

There are **adequate** equipment and facilities

4.4.7 - Are resources such as equipment, facilities and infrastructure adequately maintained?

Equipment and facilities are **well maintained**

4.4.8 - Comments, conclusion, and / or recommendations related to finance and infrastructure

There is a significant, unfunded maintenance backlog, yet the basic facilities are maintained.

4.4.9 - Distribution of employees involved in managing the World Heritage property (% of total)

Full-time	96%
Part-time	4%

4.4.10 - Distribution of employees involved in managing the World Heritage property (% of total)

Permanent	55%
Seasonal	45%

4.4.11 - Distribution of employees involved in managing the World Heritage property (% of total)

Paid	79%
Volunteer	21%

4.4.12 - Are available human resources adequate to manage the World Heritage property?

Human resources are **adequate** for management needs

4.4.13 - Considering the management needs of the World Heritage property, please rate the availability of professionals in the following disciplines

Research and monitoring	Good
Promotion	Not applicable
Community outreach	Good
Interpretation	Good
Education	Good
Visitor management	Good
Conservation	Good
Administration	Good
Risk preparedness	Good
Tourism	Not applicable
Enforcement (custodians, police)	Good

4.4.14 - Please rate the availability of training opportunities for the management of the World Heritage property in the following disciplines

Research and monitoring	High
Promotion	High
Community outreach	High

Interpretation	High
Education	High
Visitor management	High
Conservation	High
Administration	High
Risk preparedness	High
Tourism	High
Enforcement (custodians, police)	High

4.4.15 - Do the management and conservation programmes at the World Heritage property help develop local expertise?

A capacity development plan or programme is **in place and fully implemented**; all technical skills are being transferred to those managing the property locally, who are assuming leadership in management

4.4.16 - Comments, conclusions and / or recommendations related to human resources, expertise and training

The Smokies is a large park with a large staff. Administration, maintenance, and law-enforcement functions cover the range of professions that you might expect in managing a small city. In addition, the park employs professionals in landscape planning, public affairs, archeology, fire management, ecology, GIS, etc. Most professional staff have Bachelor's degrees or better, including many with Master's degrees or Ph.D's.

4.5. Scientific Studies and Research Projects

4.5.1 - Is there adequate knowledge (scientific or traditional) about the values of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained?

Knowledge about the values of the World Heritage property is **sufficient** for most key areas **but there are gaps**

4.5.2 - Is there a planned programme of research at the property which is directed towards management needs and / or improving understanding of Outstanding Universal Value?

There is a **comprehensive, integrated programme of research**, which is relevant to management needs and / or improving understanding of Outstanding Universal Value

4.5.3 - Are results from research programmes disseminated?

Research results are **shared widely** with the local, national and international audiences

4.5.4 - Please provide details (i.e. authors, title, and web link) of papers published about the World Heritage property since the last Periodic Report

Several hundred research papers were published since that last report was submitted in 2004. A selection of 35 key papers is available upon request, as there is not enough space here to provide citations for more than one.

4.5.5 - Comments, conclusions and / or recommendations related to scientific studies and research projects

About 180 research permits have been active annually since 2004, concerning aspects of the natural and cultural resources of the park. Information on research in the parks can be found at <https://science.nature.nps.gov/research/ac/ResearchIndex>. The All Taxa Biodiversity Inventory, the largest study ever conducted in the park, attempts to identify and learn about all park life forms: www.dlia.org

4.6. Education, Information and Awareness Building

4.6.1 - At how many locations is the World Heritage emblem displayed at the property?

In **many locations and easily visible** to visitors

4.6.2 - Please rate the awareness and understanding of the existence and justification for inscription of the World Heritage property amongst the following groups

Local communities / residents	Average
Local / Municipal authorities within or adjacent to the property	Average
Local Indigenous peoples	Average
Local landowners	Average
Visitors	Average
Tourism industry	Excellent
Local businesses and industries	Average

4.6.3 - Is there a planned education and awareness programme linked to the values and management of the World Heritage property?

There is a **planned and effective** education and awareness programme that contributes to the protection of the World Heritage property

4.6.4 - What role, if any, has designation as a World Heritage property played with respect to education, information and awareness building activities?

World Heritage status has influenced education, information and awareness building activities, **but it could be improved**

4.6.5 - How well is the information on Outstanding Universal Value of the property presented and interpreted?

There is **excellent presentation and interpretation** of the Outstanding Universal Value of the property

4.6.6 - Please rate the adequacy for education, information and awareness building of the following visitor facilities and services at the World Heritage property

Visitor centre	Adequate
Site museum	Adequate
Information booths	Not needed
Guided tours	Excellent
Trails / routes	Adequate
Information materials	Adequate
Transportation facilities	Not needed
Other	Excellent

4.6.7 - Comments, conclusions and / or recommendations related to education, information and awareness building

Providing information about the park's designation as a World Heritage Site brings with it the recognition of the importance to protect and preserve this area. It brings the focus of its importance regionally to a national and world level assisting visitors with the importance of the resources found in the park. Waysides about the World Heritage designation are at all main entrances.

4.7. Visitor Management

4.7.1 - Please provide the trend in annual visitation for the last five years

Last year	Minor Increase
Two years ago	Decreasing
Three years ago	Minor Increase
Four years ago	Decreasing
Five years ago	Minor Increase

4.7.2 - What information sources are used to collect trend data on visitor statistics?

Visitor surveys
Other

4.7.3 - Visitor management documents

Comment

The Comprehensive Resource Education Plan (2001) and other management documents are available at www.nps.gov/grsm/parkmgmt/index.htm

4.7.4 - Is there an appropriate visitor use management plan (e.g. specific plan) for the World Heritage property which ensures that its Outstanding Universal Value is maintained?

Visitor use of the World Heritage property is **effectively managed** and does not impact its Outstanding Universal Value

4.7.5 - Does the tourism industry contribute to improving visitor experiences and maintaining the values of the World Heritage property?

There is **limited co-operation** between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation

4.7.6 - If fees (i.e. entry charges, permits) are collected, do they contribute to the management of the World Heritage property?

No fees are collected

4.7.7 - Comments, conclusions and / or recommendations related to visitor use of the World Heritage property

Visitation numbers are determined by using data from road counters stationed at park entrances. The official monthly count is calculated by multiplying the road count by an average visitation number provided by Washington Public Use Statistics. There is no entrance fee but there are campground use fees.

4.8. Monitoring

4.8.1 - Is there a monitoring programme at the property which is directed towards management needs and / or improving understanding of Outstanding Universal Value?

There is a **comprehensive, integrated programme** of monitoring, which is relevant to management needs and / or improving understanding of Outstanding Universal Value

4.8.2 - Are key indicators for measuring the state of conservation used to monitor how the Outstanding Universal Value of the property is maintained?

Information on the values of the World Heritage property is **sufficient** for defining and monitoring key indicators for measuring its state of conservation

4.8.3 - Please rate the level of involvement in monitoring of the following groups

World Heritage managers / coordinators and staff	Excellent
Local / Municipal authorities	Not applicable
Local communities	Not applicable
Researchers	Excellent
NGOs	Not applicable
Industry	Not applicable
Local indigenous peoples	Not applicable

4.8.4 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee?

No relevant Committee recommendations to implement

4.8.5 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee

There have been no relevant recommendations since the last report.

4.8.6 - Comments, conclusions and / or recommendations related to monitoring

The Smokies was one of the initial prototype parks funded as part of a national monitoring program (circa 1990), and is therefore farther ahead of most national parks. Its long-term monitoring program is being restructured in 2013 to focus on six vital signs: water chemistry, atmospheric deposition, soil quality, vegetation communities, freshwater communities, and climate changes.

4.9. Identification of Priority Management Needs

4.9.1 - Please select the top 6 managements needs for the property (if more than 6 are listed below)

Please refer to question 5.2

5. Summary and Conclusions

5.1. Summary - Factors affecting the Property

5.1.1 - Summary - Factors affecting the Property

		World Heritage criteria and attributes affected	Actions	Monitoring	Timeframe	Lead agency (and others involved)	More info / comment
3.4	Pollution						
3.4.3	Surface water pollution	(x)--biodiversity; surface water is categorized as impaired because of acidification caused by acid deposition, an air quality issue	NPS staff are sponsoring scientific studies to better understand this system and working with public and private partners across the region to develop strategies for reducing acid deposition	NPS staff and University of Tennessee partners have been monitoring water quality for about 20 years and are working on developing a more holistic vital signs monitoring program	long-term	National Park Service, US Environmental Protection Agency, University of Tennessee, and others	The Smokies controls almost all sources of water within the World Heritage Area, except for inputs from the air; eleven miles of high elevation stream have been declared in violation of EPA clean water regulations because of acidification.
3.10	Climate change and severe weather events						
3.10.6	Temperature change	all criteria	Park staff have been monitoring climate changes and impacts; supporting targeted research to study climate, range shifts, and to locate potential microhabitat refugia; and conducting public awareness and education programs about climate change.	The park has been monitoring temperature in over a dozen locations and has accumulated all available temperature and rainfall data back to the late 1800s in a single database. A researcher has developed a ground level temperature model for the park	long-term	National Park Service, with partners	Control of climate change is outside managers' ability, but we seek to understand how temperature, rainfall, and storm severity interplay; continued moisture levels may reduce temperature rise in high elevations and stream side areas.
3.12	Invasive/alien species or hyper-abundant species						
3.12.1	Translocated species	all criteria; translocated forest pathogens of concern include chestnut blight, beech blight, thousand canker disease of walnut, butternut blight and pathogens of other trees. We are also concerned about introduced rainbow and brown trout.	Park staff has conducted surveillance for new and spreading forest pathogens and have supported research to find mitigation measures. Non-native trout have been removed above natural barriers to provide refugia for native trout.	Fish communities and forest pathogens are monitored throughout the park as part of our comprehensive monitoring program.	long-term	National Park Service, with partners	Managers have the fewest tools to combat alien forest pathogens but work with partners at universities and other agencies to develop new tools.
3.12.2	Invasive/alien terrestrial species	all criteria; invasive species of significance include forest pests impacting hemlock, fir, ash, and other trees, wild boar, and several dozen invasive non-native plant species.	Exotic boar and plant species are currently being treated and/or removed in the park. Hemlock trees in developed areas are being treated to control hemlock wooly adelgid and predator beetles have been released that feed on adelgids.	All invasive exotic plant populations, significant exotic forest pests and wild boar are monitored by park staff.	long-term	National Park Service, with partners	Managers have the fewest tools to combat alien forest pests but work with partners at universities and other agencies to develop new tools; new alien species are discovered in the park yearly.

5.2. Summary - Management Needs

5.2.2 - Summary - Management Needs

Answers provided have not outlined any serious management need.

5.3. Conclusions on the State of Conservation of the Property

5.3.1 - Current state of Authenticity

Not applicable (for sites inscribed exclusively under criteria vii to x)

5.3.2 - Current state of Integrity

The integrity of the World Heritage property is **intact**

5.3.3 - Current state of the World Heritage property's Outstanding Universal Value

The World Heritage property's Outstanding Universal Value has been **maintained**.

5.3.4 - Current state of the property's other values

Other important cultural and / or natural values and the state of conservation of the World Heritage property are **predominantly intact**

5.4. Additional comments on the State of Conservation of the Property

5.4.1 - Comments

6. World Heritage Status and Conclusions on Periodic Reporting Exercise

6.1 - Please rate the impacts of World Heritage status of the property in relation to the following areas

Conservation	No impact
Research and monitoring	No impact
Management effectiveness	No impact
Quality of life for local communities and indigenous peoples	No impact
Recognition	Positive
Education	No impact
Infrastructure development	No impact
Funding for the property	No impact
International cooperation	Positive
Political support for conservation	No impact
Legal / Policy framework	No impact
Lobbying	Not applicable
Institutional coordination	No impact
Security	No impact
Other (please specify)	Not applicable

6.2 - Comments, conclusions and / or recommendations related to World Heritage status

6.3 - Entities involved in the preparation of this Section of the Periodic Report

Governmental institution responsible for the property
Site Manager/Coordinator/World Heritage property staff
Staff from other World Heritage properties

6.4 - Was the Periodic Reporting questionnaire easy to use and clearly understandable?

no

6.5 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

There should be more space to upload research citations or to submit comments. The Assessment of Current Negative Factors (3.16) did not print out for review with the rest of the questionnaire.

6.6 - Please rate the level of support for completing the Periodic Report questionnaire from the following entities

UNESCO	Fair
State Party Representative	Good
Advisory Body	Fair

6.7 - How accessible was the information required to complete the Periodic Report?

All required information was accessible

6.8 - The Periodic Reporting process has improved the understanding of the following

The World Heritage Convention

6.9 - Please rate the follow-up to conclusions and recommendations from previous Periodic Reporting exercise by the following entities

UNESCO	Not Applicable
State Party	Not Applicable
Site Managers	Not Applicable
Advisory Bodies	Not Applicable

6.10 - Summary of actions that will require formal consideration by the World Heritage Committee

- **Map(s)**
Reason for update: Our understanding is the map of 01/02/2006 shows area outside the approved WHA boundaries. A replacement map has been prepared and will be sent to Jon Putnam for uploading.-- 03/06/2013

6.11 - Comments, conclusions and / or recommendations related to the Assessment of the Periodic Reporting exercise