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**UNITED NATIONS EDUCATIONAL, SCIENTIFIC
AND CULTURAL ORGANIZATION**

**CONVENTION CONCERNING THE PROTECTION OF
THE WORLD CULTURAL AND NATURAL HERITAGE**

WORLD HERITAGE COMMITTEE

Forty-second session

**Manama, Bahrain
24 June - 4 July 2018**

**Item 8 of the Provisional Agenda: Establishment of the World Heritage List
and of the List of World Heritage in Danger**

8E: Adoption of retrospective Statements of Outstanding Universal Value

SUMMARY

This document presents a Draft Decision concerning the adoption of 20 retrospective Statements of Outstanding Universal Value submitted by 6 States Parties for properties which had no Statement of Outstanding Universal Value adopted at the time of their inscription on the World Heritage List.

The Annex contains the full text of the retrospective Statements of Outstanding Universal Value in the original language, as submitted to the Secretariat.

Draft Decision: 42 COM 8E, see Point II

I. BACKGROUND

1. The Statement of Outstanding Universal Value was introduced in the *Operational Guidelines for the Implementation of the World Heritage Convention* in 2005 as an essential requirement for the inscription of a property on the World Heritage List. All properties inscribed since 2007 present such a Statement.
2. In 2007, the World Heritage Committee, in its Decision **31 COM 11D.1**, requested that Statements of Outstanding Universal Value be drafted and adopted retrospectively for all World Heritage properties inscribed between 1978 and 2006.
3. As a consequence, States Parties draft retrospective Statements of Outstanding Universal Value for World Heritage properties located within their territories. These are then reviewed by the Secretariat and the relevant Advisory Body(ies).
4. This document presents 20 draft retrospective Statements of Outstanding Universal Value for which the review process has been finalized since the 41st session of the World Heritage Committee (Krakow, 2017), for adoption by the World Heritage Committee. The Draft Decision presents a list of the properties, one of which in Asia and the Pacific and 19 in Europe and North America regions, in alphabetical order by region and by State Party.
5. The 20 draft retrospective Statements are included in the Annex of this document and are presented in the language in which they were submitted to the Secretariat. Once adopted, they will be translated into the other official language of the *Convention* and uploaded progressively on the World Heritage Centre's website, subject to availability of funds.
6. Since 2009, the World Heritage Committee adopted 694 retrospective Statements. 96 Statements are still to be finalized and presented to the Committee: 2 in Africa, 14 in Arab States, 21 in Asia and the Pacific, 57 in Europe and North America and 2 in Latin America and Caribbean region.
7. In compliance with paragraph 155 of the *Operational Guidelines*, the protection and management part of the Statement of Outstanding Universal Value may be updated by the World Heritage Committee, in consultation with the concerned State Party and further to a review by the Advisory Bodies.
8. Furthermore, in compliance with paragraph 155 of the *Operational Guidelines*, the World Heritage Centre automatically updates the Statements further to subsequent decisions taken by the Committee concerning a change of name of the property and change of surface further to minor boundary modifications. The Centre also corrects any factual errors as agreed with the relevant Advisory Bodies.

II. DRAFT DECISION

Draft Decision: 42 COM 8E

The World Heritage Committee,

1. Having examined Document WHC/18/42.COM/8E,

2. Commends the States Parties for the work accomplished in the elaboration of retrospective Statements of Outstanding Universal Value for World Heritage properties located within their territories;

3. Adopts the retrospective Statements of Outstanding Universal Value, as presented in the Annex of Document WHC/18/42.COM/8E, for the following World Heritage properties:

ASIA AND THE PACIFIC

- *Sri Lanka, Golden Temple of Dambulla*

EUROPE AND NORTH AMERICA

- *Canada, Head-Smashed-In Buffalo Jump*
- *France, Abbey Church of Saint-Savin sur Gartempe*
- *France, Amiens Cathedral*
- *France, Le Havre, the City Rebuilt by Auguste Perret*
- *France, Mont-Saint-Michel and its Bay*
- *France, Palace and Park of Versailles*
- *France, Prehistoric Sites and Decorated Caves of the Vézère Valley*
- *France, The Loire Valley between Sully-sur-Loire and Chalonnes*
- *Italy, Piazza del Duomo, Pisa*
- *Italy, Residences of the Royal House of Savoy*
- *Italy, Villa Adriana (Tivoli)*
- *Italy, Villa d'Este, Tivoli*
- *Portugal, Alto Douro Wine Region*
- *United States of America, Great Smoky Mountains National Park*
- *United States of America, Hawaii Volcanoes National Park*
- *United States of America, Mammoth Cave National Park*
- *United States of America, Olympic National Park*
- *United States of America, Yellowstone National Park*
- *United States of America, Yosemite National Park;*

4. Decides that retrospective Statements of Outstanding Universal Value for World Heritage properties inscribed on the List of World Heritage in Danger will be reviewed in priority by the Advisory Bodies;

5. Requests the States Parties to provide support to the World Heritage Centre for translation of the adopted Statements of Outstanding Universal Value into English or French respectively, and further requests the World Heritage Centre to upload the two language versions on its website.

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ASIA AND THE PACIFIC

Sri Lanka

Golden Temple of Dambulla

Brief synthesis

Located in central Sri Lanka, the Golden Temple of Dambulla is a living Buddhist site that is focused on a series of five cave shrines. Inhabited by forest-dwelling Buddhist monks since the 3rd century BCE, these natural caves have been transformed continuously throughout the historical period into one of the largest and most outstanding Buddhist complexes in the Southern and South Eastern Asian region, showcasing innovative approaches to interior layout and decoration. In keeping with a longstanding tradition associated with living Buddhist ritual practices and continuous royal patronage, the cave shrines underwent several renovation and refurbishing programmes before assuming their present interior forms in the 18th century. The vast internal spaces of the cave shrines are not compartmentalized, but are spatially differentiated by a deliberate and subtle arrangement of polychrome sculpture of exceptional craftsmanship and decorated with brilliant compositions of mural paintings. This spatial hierarchy and purposive interior layout devoid of physical divisions lead the devotees systematically through the spaces from one ritual function to the next. The site is remarkable in the Buddhist world for its association with the continuous tradition of living Buddhist ritual practices and pilgrimage for more than two millennia.

Criterion (i): The monastic ensemble of Dambulla is an outstanding example of the religious art and expression of Sri Lanka and South and Southeast Asia. The cave shrine, their painted surfaces, and statuary are unique in scale and degree of preservation. The monastery includes significant masterpieces of 18th-century art in the Sri Lankan school of Kandy.

Criterion (vi): Dambulla is an important shrine in the Buddhist religion in Sri Lanka, remarkable for its association with the long-standing and wide-spread tradition of living Buddhist ritual practices and pilgrimage for more than two millennia.

Integrity

The property includes all the elements and components related to different facets of creativity that are necessary to express the Outstanding Universal Value of the property, such as the polychrome statuary either moulded with stucco or clay or carved out of the living rock within the cave shrines, mural paintings, and interior layout. The physical fabric of these elements is in good condition and has been preserved to express this value. The property currently does not suffer from any adverse effects of development or other pressures.

Authenticity

The overall form and design as well as the materials and substance of the mural paintings that cover the interior surfaces of the cave shrines and the rock-cut and moulded statuary within the caves have been retained. No interventions have been carried out to change the overall form and design of the interior spaces of the caves, or the location and positioning of sculptures and paintings in relation to their interior layouts. The interior spaces are still being used by pilgrims for ritual Buddhist practices, thus maintaining the original use and function as well as the spirit and feeling of their interior spaces.

Protection and management requirements

The property, which is under the ownership of the Asgiriya Chapter of Buddhist monks, has been declared a Protected Monument under the legal protection of the Department of Archaeology of the Government of Sri Lanka, which administers the Antiquities Ordinance of 1940 (rev. 1998) at the national level. No interventions to the property are allowed without the permission of the Department of Archaeology. Conservation and monitoring of the paintings and polychrome objects are the responsibility of the Department of Archaeology. The monks conduct the daily rituals and are responsible for the general maintenance, protection, and upkeep of the property. Part of the gate collection from foreign tourists visiting the property is used by the monks for these purposes. The area extending up to the edge of entire rock outcrop has been designated a buffer zone under the purview of the Department of Archaeology. The religious character of the property is further safeguarded by the declaration of the whole area around the rock outcrop as a sacred area by the National Physical Planning Department.

The main challenges ahead are conserving the paintings, dealing with the carrying capacity in view of increased pilgrimage mainly during religious festivities, and achieving better results in conservation and regular maintenance. Sustaining the Outstanding Universal Value of the property over time will require taking measures to enhance the management, conservation, and presentation of the property. These include preparing a heritage management framework, a master development plan, and a visitor management plan, and establishing a regular monitoring regime.

EUROPE AND NORTH AMERICA

Canada

Head-Smashed-In Buffalo Jump

Brief synthesis

The significance of the landscape of Head-Smashed-In Buffalo Jump lies in its historical, archaeological and scientific interest. The deep, undisturbed layers of animal bones (largely American Bison) represent nearly 6,000 years of continuous occupation with one lengthy period of unexplained interrupted hunting. This landscape is an outstanding example of subsistence hunting that continued into the late 19th century and which still forms part of the 'traditional knowledge base' of the Plains nations. It throws valuable light on the way of life and practices of traditional hunting cultures elsewhere in the world.

Head-Smashed-In Buffalo Jump is located in southern Alberta, Canada, where the foothills of the Rocky Mountains meet the Great Plains. It is the best preserved example of the communal hunting techniques and of the way of life of the Plains people based on the vast herds of bison that existed in North America for more than five millennia. A remarkable testimony of pre-European contact life in North America, this bison jump bears witness to a sophisticated custom practiced by Indigenous people of the North American plains. These people, drawing on their excellent understanding of bison behaviour and topography, used natural barriers such as coulees, depressions and hills to funnel these animals into drive lanes that ended at a precipice, over which the bison were stampeded. The animals' carcasses were then butchered in a camp set up below the cliff to provide food and the materials for clothing, tools and dwellings. The development of complex social and technological systems to systematically and repeatedly harvest the herds in a communal hunt also nourished spiritual interests. Head-Smashed-In Buffalo Jump is the most outstanding of the surviving bison jumps in the Americas in use from approximately 5,800 years BP until AD 1850. On this grassy, windswept 4,000-ha landscape can be seen the drive lanes that led the bison toward the jump (including the remains of stone markers used to direct the bison toward the cliff), the 10-m-high cliff face that served as the actual jump, the foot of the cliff where numerous undisturbed stratified layers of bone and cultural deposits are found, and the area encompassing the many butchering camps established through the millennia.

Criterion (vi): Head-Smashed-In Buffalo Jump is one of the oldest, most extensive and best preserved sites that illustrate communal hunting techniques and of the way of life of Plains people who, for more than five millennia, subsisted on the vast herds of bison that existed in North America.

Integrity

The 4,000-ha property encompasses all the elements necessary to understand the communal hunting technique that is the basis for its Outstanding Universal Value, including numerous undisturbed stratified layers of bone and cultural deposits, drive lanes, the cliff face and the butchering camps. Its boundaries thus adequately ensure the complete representation of the features and processes that convey the property's significance. The property is not at risk of degradation and does not suffer from adverse effects of development and/or neglect. There is no buffer zone.

Authenticity

Head-Smashed-In Buffalo Jump is an exceptionally well-preserved landscape that illustrates the Indigenous tradition relating to bison hunting. In terms of setting and materials, the extensive landscape features include the gathering basin and archaeological features such as the rock cairns that define the borders of the extensive drive lanes. Since 1960, the property has been the object of systematic archaeological excavations that have enriched knowledge about the pre-European-contact era. This information transformed previously held theories on the use of game for food, clothing and shelter by the Plains people.

A potential threat to the authenticity of the property is the increase in the erosion of the cliff and pathways with use over time and with the extreme weather patterns seen in recent years. An increasing number of visitors at Head-Smashed-In Buffalo Jump has the potential to create pressures on the property. Since inscription, a visitor interpretation centre has been built into the cliff side and access to the property has been restricted in order to control visitor impacts and to interpret the property's associated values more effectively. Where required, archaeologists have also surveyed and sampled pathways, roadways and parking structures to ensure they are clear of any significant cultural materials.

Protection and management requirements

Head-Smashed-In Buffalo Jump is safeguarded by several levels of protection from the federal, provincial and local governments. It is commemorated by the Government of Canada as a National Historic Site (1968). The Province of Alberta has also designated it a Provincial Historic Resource (1979), thereby protecting the property under the Alberta Historical Resources Act. This Act includes severe penalties for any action that has an adverse physical or visual effect on the resources associated with the reasons for the property's designation, and provides for the administration of archaeological resources through its Archaeological Research Permit Regulation. Head-Smashed-In Buffalo Jump is also included in Alberta's Special Places 2000 program in order to afford it another

safeguard through monitored use. Alberta's Municipal Government Act provides additional protection for the property by establishing Direct Control Zoning that can consider heritage conservation in land use planning at the municipal level in the province. As a result, activities such as the development of industry in the surrounding titled lands, including windmills, electrical lines, and mines, are restricted. The use of land for ranching has had minimal impact on the archaeological resource.

The central 640 acres (S6-9-27-W4) of the property is owned and managed by the Government of the Province of Alberta as a provincial historic site. The remainder of the 4,000 hectares is a mix of provincial Crown land leased to local ranchers and private deeded land owned by those same local ranchers, along with a strip of land along the southern border of the inscribed area that crosses over the northern border of the Piikani Nation Reserve.

Leasehold Crown Lands adjacent to the provincial historic site do have additional restrictions in place under provincial law to provide for strict controls on physical and visual impacts. For example, a fence must be placed in such a way as to be unobtrusive to the viewscape, by following land contours in coulee bottoms. The private deeded land within the inscribed area and the agreements with those landowners are not formalized in all cases.

These stakeholders were directly consulted in the site development process at the invitation of the Province of Alberta. Ongoing community consultations may at times include a Minister's Advisory Committee comprised of the primary regional stakeholders.

The site is developed and managed by the Province of Alberta in consultation with the local Blackfoot-speaking First Nations. Blackfoot-speaking interpretive and education guides are engaged exclusively to interpret the property and their culture. While there is no Management Plan in place for the property, there is a Development Plan and Interpretation Plan, in addition to which the site is managed as an Alberta Culture, Historic Sites and Museums Branch Interpretive Centre.

Sustaining the Outstanding Universal Value of the property over time will require monitoring the erosion of the cliff and pathways, with the intent of preventing further erosion of land under stress, either by wind or water; and ensuring the number of visitors does not have a negative impact on the property's value, authenticity or integrity.

France

Abbey Church of Saint-Savin sur Gartempe

Brève synthèse

L'église de Saint-Savin-sur-Gartempe, située en région Nouvelle-Aquitaine, est celle d'une ancienne abbaye fondée ou refondée à l'époque carolingienne par Saint Benoît d'Aniane, père du monachisme d'Occident, sous la protection de Charlemagne et de ses successeurs. Reconstituée au XI^e siècle, elle témoigne de l'architecture romane occidentale avec ses volumes équilibrés. Son décor de peintures murales, réalisé à la fin du XI^e siècle ou au début du XII^e siècle, est un ensemble exceptionnel d'imagerie médiévale. Elle est surmontée d'une flèche gothique du XIV^e siècle reconstruite au XIX^e siècle, qui culmine à près de 80 mètres.

Le programme pictural de l'abbatiale de Saint-Savin consiste en un immense récit biblique, présent dans tous les espaces de l'église et s'organisant de façon thématique. Un premier cycle pictural couvrant la voûte du clocher-porche et le tympan de la porte ouvrant vers l'église décrit l'Apocalypse en des scènes grandioses. Une seconde série de sujets bibliques se déploie sur tout le berceau de la nef centrale. La Passion du Christ est peinte dans la tribune supérieure du porche, avec des scènes de martyres, de grandes figures de Saints subsistent dans le chœur et sur les piliers du transept. Enfin, l'histoire de Saint-Savin et de Saint Cyprien occupe les parois de la crypte qui porte leurs noms. Ce décor fait de l'édifice un témoin capital de la tradition médiévale, suivant laquelle les églises étaient peintes.

Critère (i) : L'abbatiale de Saint-Savin sur Gartempe est un chef-d'œuvre de la peinture murale des XI^e et XII^e siècles. Son caractère exceptionnel tient à son extraordinaire décor, témoignant de l'art de représenter et de peindre dans la civilisation de l'Occident médiéval chrétien. L'art de couvrir les murs de scènes narratives, utilisant une palette complète de couleurs et des compositions empreintes d'élégance et de mouvement atteint ici un sommet. Le style monumental et l'ampleur du programme iconographique justifient le surnom de « Sixtine romane » donné à Saint-Savin-sur-Gartempe.

Critère (iii) : L'abbatiale de Saint-Savin sur Gartempe témoigne de l'importance de l'image dans un édifice monastique, considéré à l'époque comme un lieu majeur de l'enseignement, reflet des modes de pensée du Moyen Âge. L'image, répandue à profusion sur ses murs, est un témoignage exceptionnel de la civilisation médiévale et de ses modes de représentation et de diffusion des idées. Certains des thèmes bibliques représentés en images sont des topiques de la civilisation chrétienne occidentale.

Intégrité

S'imposant par ses volumes exceptionnels, l'édifice possède la plus grande superficie de peintures murales romanes (420 m²) conçue à l'issue d'une seule et même campagne, réalisation artistique unique dans cet état de conservation. En dépit d'éléments de décor repris à partir du XIV^e siècle, et de l'absence de décors anciens dans

le chœur, la proportion de cycles peints datant de l'époque romane est prépondérante, étant donné la présence de peintures murales situées dans chaque espace de l'édifice. L'église a fait l'objet de chantiers réguliers de restauration. Les bâtiments conventuels, détruits par les guerres de religion, ont été reconstruits au XVIII^e siècle. La flèche gothique surmontant l'abbatiale marque le paysage environnant par sa silhouette élancée. L'état de conservation de l'édifice et de ses dépendances est aujourd'hui jugé satisfaisant.

Authenticité

Chef-d'œuvre authentique de la peinture murale romane des XI^e et XII^e siècles, l'abbatiale a conservé la majeure partie de son décor peint de cette époque malgré des reprises datant pour certaines du XIX^e siècle (peintures des colonnes, décor du cul de four...), des couleurs aujourd'hui disparues ou transformées (exemple : le minium) et de la disparition de fonds colorés de certaines scènes. Les bâtiments abbatiaux contigus du XVII^e siècle, certains classés, d'autres inscrits au titre des Monuments historiques, ont conservé aussi leur authenticité, malgré la disparition d'autres espaces monastiques caractéristiques, comme le cloître.

Éléments requis en matière de protection et de gestion

L'édifice étant classé Monument historique depuis 1840, toute intervention est soumise à autorisation et fait l'objet d'un contrôle scientifique et technique de l'Etat. Le bien est protégé par une zone tampon de près de 148 ha équivalent aux périmètres des protections juridiques existantes (Site patrimonial remarquable de la commune de Saint-Savin et abords de l'abbatiale et de monuments situés sur la commune voisine de Saint-Germain). Une réflexion est en cours pour définir une nouvelle zone tampon qui soit à même de mieux protéger les perspectives visuelles de l'abbaye.

La commune est propriétaire de l'ensemble immobilier, notamment de l'église devenue paroissiale au début du XIX^e siècle. Un établissement public de coopération culturelle (EPCC) associant la commune de Saint-Savin, la communauté de communes du Montmorillonais, le département de la Vienne, la région Nouvelle-Aquitaine et l'Etat, est chargé de la valorisation culturelle et économique du site de Saint-Savin depuis le 1^{er} juillet 2006. Cet établissement coordonne le plan de gestion du bien qui est actuellement en cours de rédaction.

Amiens Cathedral

Brève synthèse

Située en région Hauts-de-France, dans le département de la Somme, la cathédrale Notre-Dame d'Amiens est l'une des plus grandes églises de France, et l'une des œuvres les plus achevées du style gothique du XIII^e siècle. Son plan d'une logique rigoureuse où nef et chœur s'équilibrent parfaitement de part et d'autre du transept, la beauté de son élévation intérieure à trois niveaux, l'audacieuse légèreté de sa structure qui marque une nouvelle étape vers la conquête de la lumière, la richesse de sa décoration sculptée et de ses vitraux en font un des exemples les plus remarquables de l'architecture médiévale.

La cathédrale d'Amiens a été élevée en moins d'un siècle avec une grande continuité, par des maîtres d'œuvre unis par des liens puissants (Robert de Luzarches (1220-1223) puis son assistant Thomas de Cormont (1223-1228), puis le fils de celui-ci, Renaud (1228 à 1288). L'unité de sa conception et de sa réalisation témoigne de façon significative des valeurs qui s'attachent à cet exemple remarquablement conservé de cathédrale gothique.

Critère (i) : La cathédrale Notre-Dame d'Amiens, élevée principalement de 1220 à 1288, est un chef-d'œuvre de l'architecture gothique pour la beauté de son élévation intérieure, son prodigieux décor sculpté et ses vitraux.

Critère (ii) : La cathédrale Notre-Dame d'Amiens a exercé une influence importante sur le développement ultérieur de l'architecture gothique. Plusieurs des solutions retenues à Amiens annoncent l'avènement du style flamboyant dans l'architecture et la sculpture monumentale.

Intégrité

La cathédrale d'Amiens a préservé à travers les siècles son expression architecturale et ses fonctions culturelles. Les attributs qui expriment sa valeur universelle exceptionnelle présentent une remarquable intégrité. Tous les éléments architecturaux clés sont inclus dans les limites du bien et sont dans un bon état.

Authenticité

La cathédrale d'Amiens possède une grande authenticité et illustre de manière significative le style gothique rayonnant qui marqua le XIII^e siècle. De nombreux épisodes évolutifs au cours des siècles qui suivirent ont marqué l'édifice sans pour autant le dénaturer. De 1292 à 1375, la cathédrale s'est enrichie d'une série de chapelles bâties entre les contreforts des bas-côtés. Avec la flèche érigée à la croisée du transept, la clôture de chœur et les splendides stalles canoniales en bois sculpté, elle a pris à la fin du Moyen-Âge la physionomie que nous lui connaissons. Des interventions mineures à la Renaissance et au XVIII^e siècle, en particulier à l'intérieur de la cathédrale, ont enrichi le décor et consolidé l'édifice. Dans l'ensemble, la cathédrale a été épargnée par les deux principaux épisodes de vandalisme, les guerres de religion et la Révolution française, qui ne l'ont pratiquement pas endommagée. Elle a été restaurée au XIX^e siècle par Eugène Viollet-le-Duc, qui s'est attaché à dégager le chœur et dont l'intervention la plus importante n'a concerné que la galerie des Sonneurs, en haut de la façade, dont il a changé le style et l'aspect.

L'édifice a en grande partie été épargné par les deux guerres mondiales.

Eléments requis en matière de protection et de gestion

La cathédrale d'Amiens est classée en totalité au titre des monuments historiques depuis 1862. Le contrôle des travaux sur le bâtiment est assuré par l'État (ministère de la Culture), qui finance et met en œuvre les travaux de conservation nécessaires.

Propriété de l'État, la cathédrale d'Amiens est gérée en partie par le Centre des monuments nationaux (établissement public sous tutelle du ministère de la Culture), par la collectivité territoriale et par le clergé. Elle est légalement affectée au culte catholique.

Un plan de gestion du bien est en cours d'élaboration. Il précisera le rôle de chacun des partenaires concernés par le bien, sa protection et sa valorisation (État, ville d'Amiens, communauté d'agglomération, clergé)

En 2007, à l'occasion de l'élaboration du plan local d'urbanisme, un périmètre de protection modifié a été institué en application du code du patrimoine. Ce périmètre de protection constitue la zone tampon du bien.

Le Havre, the City Rebuilt by Auguste Perret

Brève synthèse

Située au bord de la Manche en Normandie, la ville du Havre a été lourdement bombardée pendant la Seconde Guerre mondiale. La zone détruite a été reconstruite entre 1945 et 1964 d'après le plan d'une équipe d'architectes et d'urbanistes dirigée par Auguste Perret. Elle forme le centre administratif, commercial et culturel du Havre. Parmi les nombreuses villes reconstruites, Le Havre est exceptionnel pour son unité et son intégrité, associant un reflet du schéma antérieur de la ville et de ses structures historiques encore existantes aux idées nouvelles en matière d'urbanisme et de technologie de construction. Il s'agit d'un exemple remarquable de l'architecture et de l'urbanisme d'après-guerre, fondé sur l'unité de méthodologie et le recours à la préfabrication, l'utilisation systématique d'une trame modulaire et l'exploitation novatrice du potentiel du béton.

Le bien inscrit, une zone urbaine de 133 ha, représente un ensemble architectural et urbain homogène. Il comprend les espaces majeurs (grands axes, places, édifices et groupes d'édifices significatifs de l'École du Classicisme Structurel), mais aussi le tissu résidentiel ordinaire (rues, passages, intérieurs d'îlots) réalisé de 1945 à 1964 dans le cadre de la reconstruction. Il intègre l'île Saint-François (reconstruite à la même période par des architectes régionaux extérieurs à l'atelier Perret), des fragments du tissu urbain ancien et des édifices isolés ayant échappé aux bombardements (autour desquels s'est reconstituée la trame de la ville) et des bâtiments postérieurs à 1964 dont la présence apparaît indissociable du tissu reconstruit (notamment la Maison de la Culture, la résidence de France, l'extension de l'Hôtel de Ville.).

Le nouveau plan urbain suit deux axes : l'axe public principal est constitué par la large avenue Foch, qui traverse d'ouest en est la partie nord de la ville, sur l'alignement de l'ancien boulevard de Strasbourg. Il commence à la Porte Océane sur le front de mer et se poursuit jusqu'au square Saint-Roch et à la place de l'Hôtel de Ville, donnant l'orientation générale de la trame du plan. À la Porte Océane, le boulevard François 1er, qui forme le second axe, vient croiser l'avenue à 45 degrés. Du côté bord de mer du boulevard se trouve le quartier du Perrey. La Porte Océane est l'entrée monumentale de l'avenue Foch et la voie d'accès à la ville depuis la mer, reprenant l'idée de l'ancienne porte détruite pendant la guerre. Cet édifice est aussi devenu un « laboratoire » expérimental pour le développement du système et des méthodes structurelles de construction du projet. Le square Saint-Roch s'élève en lieu et place d'un ancien parc public et d'un cimetière, dont il a hérité certaines des orientations. L'Hôtel de Ville est la structure la plus monumentale de l'ensemble : long de 143 m, il comporte en son milieu une tour de 18 étages haute de 70 m.

Le projet de Perret reflète son idéal : réaliser un ensemble homogène au sein duquel tous les détails soient dessinés sur le même modèle, afin de créer une sorte de *Gesamtkunstwerk* à l'échelle urbaine. L'architecte se réserva le dessin des principaux édifices publics.

Critère (ii) : Le plan de reconstruction d'après-guerre du Havre est un exemple exceptionnel et une étape importante de l'intégration des traditions urbanistiques à une mise en œuvre pionnière des développements modernes qui se sont produits dans l'architecture, la technologie et l'urbanisme.

Critère (iv) : Le Havre est un exemple d'après-guerre exceptionnel de l'urbanisme et de l'architecture, basé sur l'unité de la méthodologie et sur le système de la préfabrication, l'utilisation systématique d'une trame à module et l'exploitation novatrice des potentiels du béton.

Intégrité

L'essence du projet de Perret réside dans son dessin structurel qui se fondait sur un usage d'avant-garde d'éléments en béton armé, avec le système connu sous le nom de « poteau dalle ». Son idée était de créer une structure modulaire et complètement transparente, de sorte qu'aucun élément structurel ne soit dissimulé, ce qui donne son caractère dominant et une cohérence certaine à toute l'architecture de la ville. Toutefois, ces éléments ont été utilisés avec habileté, de manière à éviter la monotonie. Le dessin des édifices et des espaces ouverts, fondé sur un module carré de 6,24 m de côté, facilitait la construction, mais introduisait aussi une « harmonie

musicale » dans la ville. Par rapport à l'avant-guerre, la densité moyenne de la population fut réduite de 2 000 à 800 habitants par hectare. L'esprit de la ville était conçu comme « néoclassique », avec des blocs de construction fermés et des rues pleinement fonctionnelles. Ces principes d'intégration des traditions urbanistiques à une mise en œuvre pionnière des développements modernes qui se sont produits dans l'architecture, la technologie et l'urbanisme, ont été entièrement respectés et sont toujours parfaitement lisibles.

Authenticité

Le Havre, la ville reconstruite par Auguste Perret, est une œuvre récente à l'échelle de l'Histoire. Ni le plan ni la destination des constructions n'ont changé depuis leur édification. Si des modernisations et des entretiens courants ont pu remplacer ici ou là certains composants, l'authenticité de l'ensemble est réelle.

Éléments requis en matière de protection et de gestion

La ville moderne construite par Perret est protégée par un site patrimonial remarquable (SPR), approuvé en juillet 2016, qui définit les modes d'intervention sur les immeubles bâtis ou non bâtis. Le SPR a pour objectif la mise en valeur des caractéristiques architecturales de la reconstruction : ordonnancement des façades, lisibilité de la structure porteuse, diversité de traitement des bétons. Son périmètre correspond au bien inscrit.

Au sein de ce SPR se trouvent de nombreux immeubles protégés au titre du code du Patrimoine (inscrits ou classés au titre des Monuments historiques).

Le SPR porte une attention particulière au développement durable. Les qualités des immeubles de la Reconstruction en matière énergétique sont notamment mises en avant dans le diagnostic de cette servitude d'utilité publique. La Communauté de l'Agglomération Havraise (CODAH) accompagne les particuliers dans leurs projets d'amélioration des performances énergétiques de leurs logements, afin qu'ils ne nuisent pas aux qualités patrimoniales des façades.

La plan local d'urbanisme (PLU) adopté le 19 septembre 2011 a été mis en compatibilité avec le règlement et les objectifs du SPR par modification du 11 juillet 2016, ce qui s'est traduit par un degré d'exigences architecturales et paysagères accru.

Une commission locale regroupant des élus de la Ville, des représentants de l'État et des personnalités qualifiées, assure le suivi et la mise en œuvre du plan de valorisation de l'architecture et du patrimoine.

En ce qui concerne le matériau dominant, le béton, des campagnes de restaurations sont l'occasion de recherches spécifiques et novatrices.

Mont-Saint-Michel and its Bay

Brève synthèse

Sur un îlot rocheux au milieu de grèves immenses soumises au va-et-vient de puissantes marées, à la limite entre la Normandie et la Bretagne, s'élève la « merveille de l'Occident », abbaye bénédictine de style gothique dédiée à l'archange Saint Michel, et le village né à l'abri de ses murailles. La construction de l'abbaye, qui s'est poursuivie du XI^e au XV^e siècle, en s'adaptant à un site naturel très difficile, a été un tour de force technique et artistique. Ainsi, les solutions pratiques et esthétiques inscrites dans les pierres de l'édifice sont désormais inséparables de son environnement naturel.

Cette abbaye bénédictine, fondée en 966, fut érigée sur un sanctuaire dédié à l'archange Michel depuis 708 et conserve quelques vestiges de l'Époque romane. La plus ancienne partie actuelle, la petite église pré-romane à deux nefs de Notre-Dame-sous-terre, en maçonnerie de granit et de briques plates, remonte sans doute au Xe siècle. L'apport de l'époque romane est encore visible dans la nef de l'abbatiale, dont la croisée s'appuie sur le sommet du rocher, et dans un groupe de bâtiments conventuels étagés (aumônerie ou galerie de l'Aquilon, promenoir des moines dont la voûte, construite après 1103, serait un des plus anciens exemples de croisée d'ogives).

Mais ce sont les maîtres d'œuvre de la période gothique qui, tout en tirant le meilleur parti de l'espace restreint, inventèrent les hautes murailles, les masses élancées, les volumes ajourés, les pinacles aériens où s'exalte la silhouette aiguë du rocher. Pour l'élégance de sa conception, le nouveau corps de bâtiments conventuels, édifié à partir de 1204, mérite le surnom de « Merveille ». Il comprend, au-dessus de l'aumônerie du XIII^e siècle, les célèbres salles dites des Hôtes et des Chevaliers et, au dernier étage, outre l'immense vaisseau du réfectoire, le cloître aux colonnettes en quinconce qui ouvre d'un côté sur la mer. Parmi les nombreuses adjonctions plus tardives, il faut enfin signaler le chœur flamboyant de l'abbatiale commencé en 1448 à l'emplacement du chœur roman qui s'était effondré.

Sanctuaire situé en un lieu peu accessible, selon la tradition des lieux de culte dédiés à Saint-Michel, lieu de pèlerinage fréquenté durant tout le Moyen Âge et au-delà, siège d'une abbaye bénédictine au puissant rayonnement intellectuel, le Mont-Saint-Michel est un des hauts lieux de la civilisation chrétienne du Moyen Âge dans ses aspects les plus caractéristiques.

Critère (i) : Par l'alliance inédite du site naturel et de l'architecture, le Mont-Saint-Michel constitue une réussite esthétique unique.

Critère (iii) : Le Mont-Saint-Michel est un ensemble sans équivalent tant par la coexistence de l'abbaye et de son village fortifié sur l'espace resserré d'un îlot, que par l'agencement original des bâtiments qui lui confère une silhouette inoubliable.

Critère (vi) : Le Mont Saint-Michel est un des hauts lieux de la civilisation chrétienne médiévale.

Intégrité

Malgré l'histoire mouvementée du Mont et la destruction de la partie antérieure de l'église, l'intégrité de l'ensemble du site et de l'abbaye est effective. Les restaurations du XIXe siècle ont rendu leur dignité aux bâtiments et leur aspect emblématique, notamment par la construction de la flèche en 1897. Le village a conservé son bâti ancien.

Les valeurs du site ont été maintenues en dépit de l'ensablement de la baie en raison de phénomènes naturels et de la construction, notamment, d'une digue-route d'accès en 1879, qui avait fait perdre au Mont son caractère insulaire. Au terme de travaux de grande envergure menés par l'État français, le caractère maritime du Mont Saint-Michel a été rétabli en 2015.

Authenticité

L'alliance du Mont et du grand paysage de la baie qu'il focalise est intacte depuis des siècles. Les bâtiments de l'abbaye et du village qui l'entoure, entretenus, restaurés ou renouvelés selon le cas depuis les XVIIe, XIXe et XXe siècles sont d'une authenticité remarquable dans leur substance, leur développement ou leur agencement.

Supprimée en 1789 et transformée en prison jusqu'en 1863, l'abbaye est aujourd'hui un monument qui témoigne du passé chrétien, où la présence monastique est assurée par une petite communauté. Son histoire, partagée par trois millions de visiteurs annuels, rappelle le rôle exceptionnel qu'elle a joué.

Les caractéristiques visuelles du Mont, liées à sa topographie et à son statut de repère largement visible, sont très vulnérables aux insertions dans le paysage susceptibles d'altérer les vues depuis et vers le bien. Par ailleurs, la haute fréquentation touristique risque de porter atteinte à l'esprit du lieu.

Éléments requis en matière de protection et de gestion

L'ensemble du bien, bâti et naturel, bénéficie d'une protection de niveau national soit au titre du code du Patrimoine soit au titre du code de l'Environnement. L'abbaye, ses remparts et dépendances appartiennent à l'Etat et sont classés au titre des Monuments historiques depuis 1862. Le rivage inclus dans le bien est protégé au titre de la « loi littoral » et la baie est couverte depuis 1994 par la convention de Ramsar.

L'État a confié la gestion de l'abbaye au Centre des monuments nationaux, établissement sous tutelle du ministère de la Culture. L'abbaye bénéficie d'importantes et régulières opérations de restauration. Compte-tenu de la nature géologique du site, des travaux de consolidation des rochers sont périodiquement menés.

La gouvernance partagée entre l'État et le syndicat mixte de la Baie du Mont-Saint-Michel, instaurée en 2006, se poursuit au sein de la Conférence de la Baie, présidée par le Préfet de région Normandie et les deux présidents de région Normandie et Bretagne.

Depuis le rétablissement du caractère maritime du Mont-Saint-Michel, la digue-route a été remplacée par un pont-passerelle et des navettes assurent le transport des visiteurs depuis le lieu-dit La Caserne jusqu'au pied du Mont. La mise en place de ce dispositif a permis une régulation des flux touristiques. De plus, la construction d'ouvrages hydrauliques, comme le barrage du Couesnon dont les lâchers d'eau chassent les sédiments au large, permet de lutter contre l'ensablement du Mont.

La zone tampon proposée en 2018 inclut près de 130 communes. Sa limite a été définie sur la base d'une étude paysagère au regard de l'espace à partir duquel le Mont-Saint-Michel est visible, des principaux points de vue et des Montjoies. Par ailleurs, une aire d'influence paysagère du Mont-Saint-Michel, excluant les grands équipements, complète le dispositif. Elle (est incorporée dans les outils de planification tels que les schémas de cohérence territoriale.

Palace and Park of Versailles

Brève synthèse

Situé au sud-ouest de Paris en région Île-de-France, lieu de résidence privilégié et lieu d'exercice du pouvoir de la monarchie française de Louis XIV à Louis XVI, le palais et le parc de Versailles, édifiés et embellis par plusieurs générations d'architectes, de sculpteurs, de peintres, d'ornemanistes et de paysagistes, ont été pour l'Europe pendant plus d'un siècle le modèle de ce que devait être une résidence royale. L'ordonnance architecturale et la composition majestueuse du paysage forment une symbiose étroite servant d'écrin à la magnificence des décors intérieurs des appartements.

Le bien inscrit comprend la zone renfermant le prestigieux ensemble du palais, les châteaux de Trianon et ses jardins, ainsi qu'une étroite bande de terrain marquant la perspective depuis l'extrémité du Grand Canal. Il est le résultat d'un siècle et demi de travaux commandés par les rois de France et confiés à leurs plus grands artistes.

L'empreinte la plus forte y a été laissée par Louis XIV, qui décida l'agrandissement du petit château de briques et pierres édifié en 1624 par son père Louis XIII. Un premier accroissement eut lieu après 1661 sous la direction de Le Vau, dans un style encore fortement italianisant. Après 1678, Versailles fut considérablement agrandi et radicalement modifié par Jules Hardouin-Mansart, qui fit triompher une architecture sobre, colossale, homogène, majestueuse, désormais inséparable du souvenir du Roi-Soleil. La fameuse galerie des Glaces, entre le Salon de la Guerre et celui de la Paix, est le chef-d'œuvre du style classicisant et typiquement français que l'on appelle le style Louis XIV. L'Orangerie et le Grand Trianon sont aussi l'œuvre de Mansart qui, pour la Chapelle royale, fut aidé par Robert de Cotte.

Les créations versaillaises du XVIII^e siècle comptent parmi les plus parfaites et les plus célèbres réalisations des styles Louis XV et Louis XVI : Petit Trianon par Jacques-Ange Gabriel, décoration des appartements de Louis XV par Verbeekt et Rousseau, appartements et Hameau de Marie-Antoinette par Mique.

Les jardins qui complètent le palais se développèrent dans la foulée de la construction de l'ensemble et furent conçus par Le Nôtre, créateur de la typologie du jardin à la française, un système ouvert de sentiers axiaux s'étendant aussi loin que l'œil peut voir et ponctué de fleurs et de haies basses, de parterres, de petits ruisseaux, de grands étangs et de fontaines.

Critère (i) : L'ensemble du palais et du parc de Versailles constitue une réalisation artistique unique, tant par son ampleur que par sa qualité et son originalité.

Critère (ii) : Versailles a exercé une influence considérable dans toute l'Europe de la fin du XVII^e siècle à la fin du XVIII^e siècle. Wren s'est souvenu de Versailles à Hampton Court, Schlüter à Berlin, en dessinant les façades du Palais Royal. De petits Versailles s'élevèrent un peu partout : à Nymphenbourg, à Schleissheim, à Carlsruhe, à Würzburg, à Postdam, à Stockholm, etc... Les jardins de Le Nôtre, dessinés par l'architecte lui-même ou par ses imitateurs, ne se comptent pas : de Windsor à Cassel, à la Granja, jusqu'en Suède, au Danemark, en Russie.

Critère (vi) : Haut-lieu du pouvoir absolu du monarque et de sa mise en scène, Versailles fut le creuset de la vie de cour pendant un siècle et demi (Louis XIV y perfectionna « l'étiquette ») et de la création artistique dans le domaine de la musique, du théâtre et des arts décoratifs. Y furent présentées de nombreuses découvertes scientifiques encouragées par les rois, fondateurs des académies royales. C'est à Versailles enfin, le 6 octobre 1789, que le peuple vint enlever Louis XVI et Marie-Antoinette, déplaçant de nouveau le centre du pouvoir vers Paris.

Intégrité

Le palais et le parc de Versailles ont perdu leur fonction avec la Révolution, mais l'ensemble a été conservé par l'État et transformé en musée au début du XIX^e siècle. Si le mobilier et les décors ont été dispersés ou en partie détruits, l'emprise du domaine modifiée par des affectations à différentes administrations, l'intégrité de Versailles doit cependant être considérée comme bonne. Le domaine a été remis en dotation à un établissement public dédié en 1996. Depuis, le transfert de bâtiments et de terrains a permis de restituer partiellement sa cohérence : pour ne citer que les principaux, le Grand Commun, la Grande Écurie et les Mortemets, l'aile du Midi et la place d'armes y ont été rattachés.

Authenticité

La Révolution et ses conséquences ont provoqué à Versailles destructions et dispersions, tandis que l'aménagement du palais en musée, au XIX^e siècle, y a apporté de nouveaux décors et de nouveaux espaces. L'authenticité de Versailles est préservée par la politique entreprise, depuis des décennies, de reconstitutions des espaces intérieurs et de l'ameublement.

Éléments requis en matière de protection et gestion

Appartenant à l'État, le palais et le parc de Versailles sont classés au titre des Monuments historiques en totalité. À ce titre, ils bénéficient d'importantes opérations de conservation et de restauration sous le contrôle scientifique et technique de l'État qui assure leur financement. Depuis la création de l'établissement public, les travaux sont programmés dans le cadre d'un schéma directeur. Ils portent sur la restauration des édifices et des dispositions originelles connues. Ils concernent également la mise à niveau des installations techniques, en particulier sur le plan de la sécurité incendie et de l'accessibilité.

Le régime de protection des abords d'un monument historique a été spécialement élargi et adapté au cas de Versailles. Il fait office de zone tampon du bien patrimoine mondial.

La Plaine de Versailles, sur laquelle se trouvent les vestiges de l'Allée de Villepreux qui, à partir de l'étoile royale, prolongeait la grande perspective du palais sur cinq kilomètres à travers le grand parc des chasses du roi, est un site classé au titre du code de l'environnement.

Un plan de gestion tenant compte des différents régimes de protection qui s'appliquent sur l'édifice, les collections qu'il contient, ses abords et le site classé qui le borde, sera rédigé, à terme, par l'établissement public, en liaison avec l'ensemble des acteurs concernés.

Prehistoric Sites and Decorated Caves of the Vézère Valley

Brève synthèse

Située dans en région Nouvelle-Aquitaine dans le département de la Dordogne, la vallée de la Vézère est un territoire préhistorique privilégié qui comporte plus de 150 gisements remontant jusqu'au Paléolithique et une trentaine de grottes ornées. Ce vaste territoire de 30 km sur 40 environ présente un intérêt exceptionnel d'un point de vue ethnologique, anthropologique et esthétique avec ses œuvres pariétales, en particulier celles de la grotte de Lascaux, découverte en 1940. Il a également permis d'établir le cadre chronologique des civilisations préhistoriques du Quaternaire en Europe.

Ce bien est composé de 15 sites préhistoriques qui témoignent d'une occupation paléolithique d'une forte densité : grottes ornées, lieux funéraires, ateliers, aires d'exploitation de la matière première, habitats, haltes de chasse. En outre, son potentiel de réserve archéologique est considérable, comme le montrent les découvertes effectuées à l'occasion de fouilles préventives depuis l'inscription Sur la Liste du patrimoine mondial.

Critère (i) : Certains des ensembles figurés des grottes de la vallée de la Vézère sont mondialement connus en tant que chefs d'œuvre de l'art préhistorique : La Vénus de Laussel (Marquay), la frise des chevaux en haut relief de Cap-Blanc, et surtout les peintures pariétales de la grotte de Lascaux (Montignac), dont la découverte, en 1940, a marqué une date importante dans l'histoire de l'art préhistorique : des scènes de chasse habilement composées mettent en œuvre environ une centaine de figures animales, étonnantes par la précision de l'observation, la richesse des coloris et la vivacité du rendu.

Critère (iii) : Les objets et les œuvres d'art repérés dans la vallée de la Vézère sont les témoins extrêmement rares de civilisations depuis longtemps disparues, très difficiles à appréhender. Ce matériel, infiniment précieux pour la connaissance des périodes les plus reculées de l'histoire de l'humanité, remonte jusqu'à la période paléolithique et présente un intérêt exceptionnel sur le plan historique, ethnologique, anthropologique et esthétique.

Intégrité

L'association et la densité de sites paléolithiques font de la vallée de la Vézère un ensemble qui reflète pleinement les attributs de la Valeur universelle exceptionnelle. Par leur chronologie (de 400 000 à 10 000 ans). Ces sites reflètent la diversité des occupations humaines et des productions artistiques des hommes de la préhistoire. L'essentiel des sites est conservé dans l'état de leur découverte, assurant leur authenticité. L'intégrité de leur environnement est également préservée, majoritairement dans un contexte rural traditionnel.

Les vestiges sont bien préservés et documentés. La longue histoire de la recherche dans cette région pionnière de la préhistoire fournit un niveau exceptionnel de compréhension et de documentation des sites, dont un outil de médiation commun à L'État et aux collectivités territoriales rend compte : le Pôle international de la préhistoire.

Authenticité

Malgré les menaces concernant la conservation des peintures de Lascaux, qui ont conduit, dès 1963, à la fermeture de la grotte au public, à son acquisition par l'État et à l'adoption de mesures strictes de gestion - menaces renouvelées lors d'une prolifération biologique en 2000, l'authenticité des peintures et des gisements est assurée. La surface altérée par des « taches brunes » des peintures de Lascaux est minime.

Éléments requis en matière de protection et gestion

Cette série de 15 sites préhistoriques composant le bien bénéficie d'une protection légale de haut niveau : classement au titre des monuments historiques et pour certains au titre des sites (Code de l'Environnement).

Pour garantir leur conservation, certaines cavités sont fermées au public, en raison de leur vulnérabilité. L'accès est toujours contingenté. Un suivi de leur condition de conservation est assuré par les gestionnaires de ces lieux sous l'égide de l'État et avec le concours de la communauté scientifique (Centre national de la Préhistoire, Laboratoire de recherche des Monuments historiques, conseil scientifique international de la grotte de Lascaux).

Depuis plusieurs années, une protection de l'ensemble du territoire de la vallée est mise en œuvre. Elle s'appuie sur une politique privilégiant la protection de l'environnement immédiat des sites et leur présentation dans des centres d'interprétations, comme le Centre international d'art pariétal de Montignac, comprenant un nouveau fac-similé de la grotte de Lascaux.

Un Comité local, réunissant tous les partenaires et coordonné par l'État, a pour objectif de définir les principaux enjeux et les actions à mener pour préserver la valeur universelle exceptionnelle, l'intégrité et l'authenticité du bien, en s'appuyant notamment sur l'ensemble (des travaux liés à l'opération grand site conduite parallèlement sur le territoire.

The Loire Valley between Sully-sur-Loire and Chalonnes

Brève synthèse

Le bien Val de Loire entre Sully-sur-Loire et Chalonnes est situé dans les régions Centre-Val-de-Loire et Pays-de-la-Loire. Ce paysage culturel couvre une section du cours moyen du fleuve long de 280 km, de Sully-sur-Loire, à l'est d'Orléans jusqu'à Chalonnes, à l'ouest d'Angers, englobant les lits mineur et majeur du fleuve.

Il est façonné par des siècles d'interaction entre le fleuve, les terres qu'il irrigue et les populations qui s'y sont établies tout au long de l'histoire.

La Loire a été un axe majeur de communication et de commerce depuis la période gallo-romaine jusqu'au XIXe siècle, favorisant ainsi le développement économique de la vallée et de ses villes. En témoignent les nombreux ouvrages destinés à la chenalisation du fleuve pour la navigation et à la protection des hommes et des terres contre les inondations, tels les ports ou levées, parfois maçonnées, qui ponctuent le fleuve.

La Loire a façonné tant les paysages ruraux, dans l'organisation du sol et les types de culture (maraîchage, vigne), que les paysages urbains. Les établissements humains, fermes isolées, bourgs et villes, traduisent à la fois les caractéristiques physiques des différentes parties du fleuve et leur évolution historique. L'architecture en tuffeau et en ardoise, l'habitat troglodytique, la trame urbaine, en portent témoignage. Dans le périmètre du bien, les rives de la Loire sont ponctuées par des villages et des villes parmi lesquels Sully, Orléans, Blois, Amboise, Tours et Saumur.

L'histoire politique et sociale de la France et de l'Europe de l'ouest au Moyen Âge ainsi qu'à la Renaissance, à l'époque où le Val de Loire était le lieu du pouvoir royal, est illustrée par les édifices et les châteaux qui en ont fait la célébrité tels que Chambord, Chenonceau, Amboise, Blois et Azay-le-Rideau. Abbayes bénédictines d'abord, forteresses médiévales ensuite, ont été transformées à la Renaissance en demeures d'agrément, dotées de jardins et ouvertes sur le paysage. Il subsiste également en Val de Loire une suite notable de grandes églises romanes, témoins de la manifestation de la foi des souverains et des peuples : Saint-Benoît-sur-Loire, Fontevraud, Cunault, les églises ogivales de Blois et de Candés.

Aux XVe et XVIe siècles, le Val de Loire a constitué une aire culturelle majeure de rencontres et d'influences entre la Méditerranée italienne, la France et les Flandres, et a participé au développement de l'art des jardins et à l'émergence de l'intérêt pour le paysage.

Critère (i) : Le Val de Loire est remarquable pour la qualité de son patrimoine architectural, avec ses villes historiques telles que Blois, Chinon, Orléans, Saumur et Tours, mais plus particulièrement pour ses châteaux de renommée mondiale, comme celui de Chambord.

Critère (ii) : Le Val de Loire est un paysage culturel exceptionnel le long d'un grand fleuve. Il porte témoignage sur un échange d'influences, de valeurs humaines et sur le développement harmonieux d'interactions entre les hommes et leur environnement sur plus de deux mille ans d'histoire.

Critère (iv) : Le paysage du Val de Loire, et plus particulièrement ses nombreux monuments culturels, illustre à un degré exceptionnel l'influence des idéaux de la Renaissance et du siècle des Lumières sur la pensée et la création de l'Europe occidentale.

Intégrité

La trajectoire historique du Val de Loire est clairement lisible dans le paysage actuel. Sur 280 kilomètres, la variété des typologies architecturales, urbaines et paysagères du bien est entièrement et largement représentée.

Authenticité

Le Val de Loire conserve un haut degré d'authenticité de l'ensemble, et notamment des principaux centres urbains et monuments à travers leurs usages et matériaux, grâce à de nombreux travaux de conservation. Cependant, plusieurs facteurs risquent d'affecter le bien: les mutations agricoles, l'étalement urbain, l'installation de zones d'activités en bordure des villes et des axes de circulation, la construction de grands équipements (ponts, autoroutes).

Éléments requis en matière de protection et de gestion

Le régime de propriété de ce bien étendu est très divers, incluant de nombreux propriétaires publics et privés. Le fleuve et ses rives appartiennent au domaine public fluvial géré directement par l'État. La protection du bien s'appuie sur la complémentarité de plusieurs réglementations relevant notamment des codes du patrimoine, de l'environnement et de l'urbanisme : monuments historiques et leurs abords, sites patrimoniaux remarquables, sites classés ou inscrits, réserves naturelles.

Plusieurs centaines d'édifices, publics et privés, grands châteaux ou monuments plus modestes, sont protégés au titre du code du Patrimoine (monuments historiques), un certain nombre depuis le XIXe siècle, et font l'objet de restaurations et d'entretien régulier. Plusieurs dizaines de centres urbains sont protégés au titre des sites patrimoniaux remarquables, ce qui a permis le lancement de programmes de réhabilitation importants. Plusieurs dizaines de sites, enfin, sont classés en application du code de l'Environnement, permettant une préservation de grandes portions de paysage. Les ouvrages liés au fleuve sont régulièrement entretenus ou restaurés. Des protections au titre de la biodiversité préservent le lit du fleuve.

Sur ce territoire très vaste et objet d'un dynamisme démographique et économique important, la coordination de la gestion du bien est assurée par L'État, qui a nommé un préfet coordonnateur, et les deux régions concernées au moyen d'un dispositif spécifique (structure dédiée et comité d'orientation à l'échelle du Bien).

Le plan de gestion identifie les risques majeurs qui pèsent sur le bien et comprend des propositions pour les réduire. La mise en œuvre de protections réglementaires complémentaires, la sensibilisation et la formation des collectivités locales et des habitants aux enjeux de la protection du bien inscrit, la veille sur les grands projets d'équipement sont menées en continu avec l'ensemble des acteurs publics et privés du Val de Loire.

Le plan de gestion s'appuie par ailleurs sur un programme interrégional de planification et de gestion cohérente du bassin de la Loire, le plan Loire grandeur nature, mis en place par l'État en 1994 et constamment reconduit avec tous les acteurs concernés. Ses objectifs sont la sécurité des populations face au risque d'inondation, l'amélioration de la gestion de la ressource en eau, la restauration de la diversité écologique, la mise en valeur du patrimoine naturel, paysager et culturel des vallées ligériennes.

Italy

Piazza del Duomo, Pisa

Brief synthesis

Piazza del Duomo houses a group of monuments known throughout the world. Standing in a large green expanse, enclosed by the city walls, the former Ospedale della Misericordia and the Palazzo dell'Arcivescovato, the Piazza del Duomo at Pisa comprises one of the most renowned constructed landscapes in the world. The four masterpieces of medieval architecture – the cathedral, the baptistery, the bell tower (the 'Leaning Tower') and the cemetery – were erected between the 11th and 14th centuries within close proximity of each other, forming a unique cluster of monuments. A striking quality pervades the site, emanating from the interplay of marble and mosaics, the usual alliance of bare walls and arched galleries, triangular frontons and heavy cupolas with the whole effect heightened by the breath-taking slant of the bell tower.

The square is remarkable since it contains works of art that bear witness to the creative spirit of the 14th century. Its monuments reflect such a decisive stage in the history of medieval architecture that they have become a reference point for studies related to the Pisan Romanesque style. The Camposanto and its cycle of frescoes, with particular typology and use, constitute an outstanding example for the history of Italian medieval painting of the 14th and 15th centuries.

Criterion (i): Artistically unique because of its spatial design, the Piazza del Duomo contains four absolute architectural masterpieces: the cathedral, the baptistery, the bell tower and the Campo Santo. Within these monuments are such world-renowned art treasures as the bronze doors and mosaics of the cathedral, the pulpits in the baptistery and cathedral, the frescoes of the Campo Santo, and many others.

Criterion (ii): The monuments of the Piazza del Duomo considerably influenced the development of architecture and monumental arts at two different times in history. First, from the 11th century up to 1284, during the epitome of Pisa's prosperity, a new type of church characterized by the refinement of polychrome architecture and the use of loggias was established. The Pisan style that first appeared with the Cathedral can be found elsewhere in Tuscany (notably at Lucca and Pistoia), but also within the Pisan maritime territory, as shown in more humble form by the "pieve" in Sardegna and Corsica. Later, during the 14th century, architecture in Tuscany was dominated by the monumental style of Giovanni Pisano (who sculpted the pulpit of the Cathedral between 1302 and 1311), a new era of pictorial art -the Trecento- was ushered in after the epidemic of the Black Death (Triumph of Death, a fresco by Bonamico Buffalmacco at the Campo Santo, c. 1350).

Criterion (iv): The group of monuments of the Piazza del Duomo, composed of typical religious buildings constructed for distinct and specific functions, constitutes an outstanding example of medieval Christian architecture.

Criterion (vi): It was at the Cathedral of Pisa that Galileo Galilei (1564-1642), observing the oscillations of the bronze chandelier created by Battista Lorenzi, discovered at the age of 19 the theory of isochronism of small oscillations, a prelude to his pioneering work on dynamics. From the top of the campanile, he conducted experiments, which led him to formulate the laws governing falling bodies. Two of the principal buildings of the Piazza dei Miracoli are thus directly and tangibly associated with a decisive stage in the history of physical sciences.

Integrity

The Piazza del Duomo, as seen today, is a monumental complex and a public space that results from a long process that dates back to the Middle Ages. It began in 1064, with the foundation of the new Cathedral, and was concluded in the 14th century with the definition of a veritable "square". The inscribed property encompasses 8.87 ha with a 254 ha buffer zone that includes all the necessary elements to convey the Outstanding Universal Value of the property. The interventions made over the centuries, after the completion of the square, have preserved the integrity of the structures and the spatial relationship between the monuments themselves, and between the

monuments and their historical context, is maintained and are at present visible and comprehensible. The extension of the property has also ensured that the three main visual axes are adequately preserved. The creation of a buffer zone has also provided an additional layer of protection to the visual qualities and attributes of the property, although further protection might be warranted to the north and west of the inscribed property.

Authenticity

The monumental complex of the Piazza del Duomo of Pisa has retained over time the historical and artistic qualities and attributes that convey its Outstanding Universal Value. After the construction of the monumental buildings and of the square, the numerous interventions have strengthened the relationship between the square and the city, while respecting the values and significance of the buildings of the monumental complex. In more recent times, all the restoration works have been carried out by qualified personnel and have met both international and national standards for practice. The authenticity of the property, particularly in terms of location and setting, and form and design has been maintained over time.

Protection and management requirements

There is an adequate legislative and protection framework in place at the national level, which is reflected, in the municipal plans. Under such legislation, any work must first be approved by the Ministry of Cultural Heritage and Activities and Tourism through its local offices. According to the Law the area is also subject to archaeological restrictions.

There is also zoning at the local level for the area of the inscribed property and uses are recognized in the city plan as A, B, C, i.e.: -A: ordinary maintenance -B: extraordinary maintenance -C: restoration and conservative reclamation. As to their intended use, sites of architectural interest are marked as "urban facilities" and in particular the Monumental Cemetery is considered as a Museum. The lawn areas are marked in the same plan as "gardens of historical, architectural or natural value", and the city planning regulations put them in class value A, "Preservation area". According to these planning tools, the design and all historical parts have to be preserved.

A very ancient institution, the Opera Primaziale Pisana, supervises the management system. The Opera was set up in 1063 and is run by a Deputation (similar to a Board of Directors) which is composed of several members coming from the Diocesan Ordinary and Ministry of Internal Affairs. The management structure is legally constituted and pursues exclusively social solidarity purposes, in the following areas:

- a) Care, protection, preservation and maintenance, promotion of the image and development of the site, by taking care in particular, of the administration, maintenance, monitoring of the state of conservation of the property, as well as preservation and restoration actions for inscribed buildings and temporary assets; of purchasing and maintaining the furnishings, furniture and equipment;
- b) Promoting the knowledge of the history and art in all their forms and cultural manifestations, with reference to the monumental complex and to the other assets.

An underlying premise of the management system is that buildings cannot be interpreted individually and have therefore to be considered in relation to the setting as a whole. Management provisions consider this overarching policy in the adopted legislation and in the guidance for technical and scientific criteria for interventions.

Residences of the Royal House of Savoy

Brief synthesis

The Residences of the Royal House of Savoy comprise a large serial inscription of estates including 22 palaces and villas developed for administrative and recreational purposes in and around Turin by the dukes of Savoy from 1562. Eleven of the component of the property are in the centre of Turin and the remaining 11 located around the city according to a radial plan.

The plan was initially conceived by the Duke of Savoy, Emmanuel-Philibert, when he transferred the capital of his Duchy to Turin. His successor, Charles-Emmanuel I, and his wife developed and implemented the plan to completely reorganise the area during the 17th and 18th centuries giving the city and surrounding area a Baroque character. The plan celebrates the absolute power of the Royal House of Savoy. The capital was organized and developed along the axes defined by the 'Command Area' as the central node including the Palazzo Reale, Palazzo Chiabrese and Palazzo della Prefettura and managing political, administrative and cultural aspects of life which was surrounded by a system of *maisons de plaisance*. These villas including Castello di Rivoli, Castello di Moncalieri and Castello di Venaria created a *Corona di Delizie*, or 'Crown of Delights' around the capital and with the outlying residences of Racconigi, Govone, Agliè and Pollenzo gave form to the countryside. The construction plan foresaw a change in function for existing residences, the construction of new buildings, the definition of hunting routes and the creation of a network of roads connecting outlying residences to the state capital.

The ensemble of Residences was unified both by the road network and the uniform style and choice of materials by the court architects and artists who worked throughout the many different residences. Outstanding architects included Ascanio Vitozzi, Benedetto Alfieri, Amedeo di Castellamonte, Guarino Guarini and Filippo Juvarra.

In the 1800s the government of the realm was taken over by the Carignano branch of the House of Savoy and during this period its sovereigns shifted their interest to more outlying buildings used as retreats (Agliè, Racconigi, Govone and Pollenzo) and ultimately the abandonment of the Baroque 'Crown of Delights' plan.

The Residences of the Royal House of Savoy is an outstanding example of European monumental architecture and town-planning in the 17th and 18th centuries that uses style, dimensions and space to illustrate in an exceptional way the prevailing doctrine of absolute monarchy in material terms.

Criterion (i): The Residences of the Royal House of Savoy provides outstanding testimony to the exuberant genius of Baroque and late Baroque art and architecture, constructed over many decades by outstanding architects, including Ascanio Vitozzi, Benedetto Alfieri, Amedeo di Castellamonte, Guarino Guarini and Filippo Juvarra.

Criterion (ii): The monumental architecture and town-planning of the Residences of the Royal House of Savoy reflect the interchange of human values across Europe during the 'Baroque episode' of the 17th and 18th centuries which led to an immense work of creation and homogenization, ornamentation and improvement.

Criterion (iv): The Residences of the Royal House of Savoy is an outstanding example of the strategies and styles of the Baroque, a monumental architectural ensemble illustrating the prevailing doctrine of absolute monarchy in material terms.

Criterion (v): The Residences of the Royal House of Savoy constitute a dynastic heritage that is both complex and unitary being a true symbiosis between culture and nature through its mastery of urban space and its planning of vast tracts of countryside to create a concentric authoritarian organization with Turin at its centre.

Integrity

The Residences of the Royal House of Savoy include the most representative buildings constructed and renovated by the Savoy dynasty from the 17th to the 19th century. The buildings reflect the original radial plan from the central node of the 'Command Centre' in Turin to the surrounding residences or 'Crown of Delights' illustrative of the prevailing doctrine of absolute monarchy. Boundaries and buffer zones have been approved for all components of the property. In 2010 some missing buffer zones were created (Valentino Castle, Villa della Regina, Moncalieri Castle, Govone Castle), and others were expanded (Rivoli Castle, Reggia di Venaria Reale, Agliè Castle and Racconigi Castle). The perimeter areas of their buffer zones include parks, gardens and historic town centres, elements that still add to the original value of these Residences today.

The integrity of the property could be further strengthened by extensions to the buffer zones to recognise the historical connections between the Residences and the 'command centre' in Turin, their axial relationships, views and vistas.

Authenticity

The buildings comprising the Residences of the Royal House of Savoy have undergone many restoration procedures. The conservation and restoration work undertaken is based on patient stratigraphic research, archive studies, scientific analysis and the analysis of structures. The work is also designed in some cases to bring to light elements that had been hidden by previous refurbishment and to correct some previous building work. Repair and restoration work on the House of Savoy residences, conducted with the aim of opening them to the public, was begun in the 1970s and is still underway. With the programme to restore Rivoli Castle and its conversion into the Museum of Contemporary Art (inaugurated in 1984) a process of restoration and the return to public utility of these historic, architectural and artistic assets and led to the reopening of many residences.

Protection and management requirements

Each of the components comprising the Residences of the Royal House of Savoy is protected by national, regional and local regulations. According to national regulations of the Codice dei Beni culturali e del Paesaggio (or the cultural and landscape heritage code) these monuments are subject to specific conservation measures that affect single buildings and, in the case of Stupinigi, Rivoli, Govone, Racconigi, Pollenzo, Venaria, La Mandria and Agliè regional and EU landscape regulations protect the wider area where they are located. Under the National regulations all restoration work is subject to prior approval by the competent Office of the Ministry of Cultural heritage and Activities and Tourism. On a local level, the Regional Territorial Plan (2009) covering the protection and enhancement of the Residences of the Royal House of Savoy and other urban planning rules identify further conservation regulations for palaces and villas located within their perimeter. Furthermore, the regional legislation on the conservation of natural areas and biodiversity includes a few of the areas located within the perimeter of the UNESCO property among those subject to special protection due to their natural features.

The property is managed through a Memorandum of Understanding signed by all stakeholders for the drafting of a management plan and the coordination of any work done on the complex itself.

Responsibility for management of each component of the property is mainly entrusted to the owner. The majority of the residences are owned by the State or local government authorities. A territorial Office of the Ministry of Cultural heritage and Activities and Tourism is responsible for managing residences belonging to the State. The owners of the other residences are responsible for managing them through their respective Administrations or organisations including the Consorzio di Valorizzazione Culturale La Venaria Reale, the Associazione culturale

Castello di Rivoli, the Ordine Mauriziano per la Palazzina di Stupinigi, the Agenzia di Pollenzo S.p.A and the private owners of the castle of Pollenzo.

Villa Adriana (Tivoli)

Brief Synthesis

Villa Adriana is an exceptional architectural legacy of the great Roman Emperor Hadrian. Built as a retreat from Rome between 117 and 138 AD, the villa was designed as an ideal city and incorporates the architectural traditions of Ancient Greece, Rome and Egypt. The remains of some 30 buildings extend over 120 hectares of the Tiburtine Hills, in Tivoli in the Lazio Region.

While the structures appear to be arranged with no particular plan, the site comprises a complex and well planned arrangement together with a large number of residential and recreative buildings, extensive gardens and reflective pools, the site creates a serene and contemplative oasis.

There are some thirty extant buildings within the site that can be broadly divided into four groups.

A first group of buildings on the site includes the so called 'Greek Theatre' and 'Temple of Cnidian Aphrodite'.

At the core of the Villa, is a second group of structures including buildings specifically for the emperor and his court, and includes the so called 'Maritime Theatre', the 'Imperial Palace', 'Winter Palace', Latin and Greek 'Libraries' and the 'Golden Square'. This group of structures is organized around four separate peristyles, The 'Golden Square' is one of the most impressive buildings in the complex, comprising a vast peristyle surrounded by a two-aisled *portico* with alternate columns of cipollino marble and Egyptian granite. The 'palace' consists of a complex of rooms around a courtyard. The circular structure of the 'Maritime Theatre' comprises an Ionic marble peristyle that surrounds an artificial circular island with a miniature villa. The 'Libraries' are reached from there by two passages, and a *nymphaeum* stands on the northern side.

A third group of buildings comprises the baths, including Small *Thermae*, Large *Thermae* and the *Thermae* with Heliocaminus.

The final group of structures includes the 'Lily Pond', 'Roccabruna Tower' and 'Academy'. In addition to these structures, there is a complex of underground elements, including *cryptoportici* and underground galleries, used for internal communications and storage. There are also a number of large gardens, including the 'Pecile', and monumental *nymphaea*, as that with the 'Temple of Cnidian Aphrodite' or that in the 'Court of the Libraries' and, of course, dwellings for servants, as the 'Cento Camerelle'.

This extraordinary complex of buildings and structures is symbolic of a power that was gradually becoming absolute. Villa Adriana, reminiscent of famous places and buildings throughout the empire, reproduced elements of the material cultures of Egypt, Greece and Rome in the form of an "ideal city".

After suffering damage and neglect for many centuries after Hadrian's death in 138 AD, the site was eventually rediscovered in 1461. The serenity of the site inspired a renewed interest in classical architecture. Studies of Villa Adriana influenced architects of later centuries, notably the Renaissance but especially baroque architecture. Its remarkable achievement in design continued to exert significant influence on notable architects and designers of the modern era.

Criterion (i): The Villa Adriana is a masterpiece that uniquely brings together the highest expressions of the material cultures of the ancient Mediterranean world.

Criterion (ii): Study of the monuments that make up Villa Adriana played a crucial role in the rediscovery of the elements of classical architecture by the architects of the Renaissance and the Baroque periods. It also profoundly influenced many 19th and 20th century architects and designers.

Criterion (iii): Villa Adriana is an exceptional survival from the Early Roman Empire. The great number of buildings and other structures within it, and the collection of statues and sculptures that decorate the interior and exterior rooms, illustrate the taste and erudition of one of the greatest Roman Emperors. Hadrian was a man of immense culture, who personally oversaw the construction of the villa, inspired by his travels through his extensive Empire, he brought the best of the varied cultures back to this palatial complex.

Integrity

The archaeological area of Villa Adriana protected as a World Heritage property includes all the essential elements that contribute to the recognition of the site as holding Outstanding Universal Value. The key features of the site in the protected area include exemplary and unusual structures situated within an extensive area of green space, comprised of gardens and pools, fountains and architectural settings that create an immersive landscape that has remained unchanged since at least the 18th century. The original layout of the main buildings is perfectly preserved, in its relationship with the surrounding landscape. Despite centuries of plundering and destruction, prior to the 15th century, the integrity of the structures is well preserved, to the extent that it is possible to accurately interpret various component parts of the structures comprising the monumental complex.

Potential impacts to the buffer zone were identified in close proximity to the World Heritage property boundary. The buffer zone is an important and sensitive site that ensures the enhancement, the presentation and protection of the Outstanding Universal Value of the property, and as such requires sensitive management and protection.

Authenticity

As far back as the latter half of the 19th century, restoration work carried out at Villa Adriana was undertaken in keeping with the theories and techniques of archaeological restoration, the criteria of which had recently been applied in the restoration of the Colosseum and later codified in the Restoration Charter. At the same time careful analysis and studies made possible to carry out partial anastylosis of some structures.

All numerous, subsequent interventions by the Archaeological Office of the Ministry for Cultural Heritage and Activities and Tourism were effected in compliance with the principles of the Restoration Charter, thus ensuring their preservation to date.

Protection and management requirements

The entire property is protected under the provisions of the basic Italian Law, which prohibits the carrying out of any works that may affect the monument without authorization. The Villa Adriana covers c. 120 ha comprised of state and private ownership, both protected under the Italian Law.

The archaeological site of Villa Adriana, and the buffer zone around it, is protected by the Ministry for Cultural Heritage and Activities and Tourism - Decreto Legislativo 42/2004 (*Codice dei beni culturali e del Paesaggio*), a safeguarding measure which ensures that any activity on the site must be authorized by the competent offices of the Ministry for Cultural Heritage and Activities and Tourism. The site is further protected by the provisions of the Lazio Region, including the Landscape-Territorial Plan of the Lazio Region, adopted in 2008 and confirming the regulations and directions set out under ministerial restrictions.

Management of the Villa Adriana falls within the responsibility of the Ministry for Cultural Heritage and Activities and Tourism. The competent office of the Ministry for Cultural Heritage and Activities and Tourism is responsible for management at local level.

Since the site is an archaeological park, much of the area is an open, green space that demands careful maintenance. For this reason, a Green-space Management Plan is drawn up every three years, aimed at safeguarding historic tree species, maintaining visitor walkways and weed clearance – all of which are useful in terms of preserving the historic masonry work. Work is underway to reinstate the Villa's ancient gardens to their original state at the time of Hadrian. The buffer zone provides important protection to the site and requires special maintenance for the conservation of the Outstanding Universal Value of the property.

Since 1997 a management plan has been in force relating to infrastructural aspects of the site – drainage, water and electricity supply and distribution, hygienic services, emergency exits, etc. A wireless video surveillance system was installed, covering the most sensitive sections within the Archaeological Area.

The Ministry have allocated special financial resources to the site in order to draw up the Management Plan of the whole site.

The monument is one of the most visited sites in Italy. Since 1996 major sources of funding from the European Union, the National Lottery and elsewhere has permitted the preparation and implementation of a major programme of investigation, restoration and conservation, and, in particular, the upgrading of visitor facilities. Activities to enhance interpretation and access to the site include a number of cultural events and exhibitions aimed at raising awareness of the various aspects of the monumental complex at Villa Adriana, and the creation of a Villa Adriana website. An analysis of the site's accessibility for the physically disabled is currently underway. In addition there will be a program of archaeological research conducted in collaboration with international partners (Italian and foreign universities and institutions). There will be a specific study of the underground passageways. One of the main goals is to integrate, in a more effective manner, the property with the surrounding area, the ancient Tiburtine countryside, which preserves numerous historic-archaeological remains, covering a wide range of periods, Villa Gregoriana Park and the World Heritage property, Villa d'Este which is under the protection of the Italian Ministry of Cultural Heritage and Activities and Tourism, and now also managed by the same competent office as Villa Adriana.

Villa d'Este, Tivoli

Brief synthesis

The palace and the gardens of Villa d'Este in Tivoli, in the centre of Italy, were laid out by Pirro Ligorio (1500-1583) on behalf of Cardinal Ippolito II d'Este of Ferrara (1509-72), who, after being named governor of Tivoli in 1550, desired the realization of a palace adequate to his new status. The ensemble composed of the palace and gardens forms an uneven quadrilateral and covers an area of about 4.5ha.

The Villa d'Este in Tivoli is one of the most remarkable and comprehensive illustrations of Renaissance culture at its most refined. Owing to its innovative design and the creativity and ingenuity of the architectural components in the gardens (fountains, ornamental basins, etc.), it is a true water garden and a unique example of an Italian 16th

century garden. The Villa d'Este, one of the first *giardini delle meraviglie*, served as a model for and had a decisive influence on the development of gardens in Europe.

The plan of the villa is irregular because the architect was obliged to make use of certain parts of the previous monastic building. On the gardens side the architecture of the palace is very simple: a long main body of three storeys, marked by bands, rows of windows, and side pavilions that barely jut out. This uniform facade is interrupted by an elegant loggia in the middle, with two levels and stair ramps. Starting in 1560 great efforts were made to supply the water needed for the numerous fountains that were intended to embellish the gardens. Once the water supply had been ensured and its flow made possible by the natural gravity created by the different levels of the garden, work started on constructing the fountains, ornamental basins, and grottoes and on laying out the landscape.

The Villa d'Este gardens stretches over two steep slopes, descending from the palace down to a flat terrace in the manner of an amphitheatre. The loggia of the palace marks the longitudinal and central axis of the gardens. Five main transversal axes become the central axis from the fixed point of view created by the villa, as each of these axes terminates in one of the gardens fountains. This arrangement of axes and modules was adopted to disguise the irregular outline of the gardens, to rectify by means of an optical illusion the relationship between the transversal and longitudinal dimensions, and to give the palace a central position, even though it is in fact out of alignment in relation to the whole.

The most striking effect is produced by the big cascade flowing out of a krater perched in the middle of the exedra. Jets of water were activated whenever unsuspecting people walked under the arcades. The Fontana del Bicchierone (Fountain of the Great Glass), built according to a design by Bernini (1660-61) was added to the decoration of the central longitudinal axis in the 17th century. This fountain is in the shape of a serrated chalice, from which a high jet of water falls into a conch shell. The gardens, with the fountains, is a masterpiece of hydraulic engineering, both for the general lay out of the plan and the complex system of distribution of water as well as for the many water plays with the introduction of the first hydraulic automatons ever built.

Criterion (i): The Villa d'Este is one of the most outstanding examples of Renaissance culture at its apogee.

Criterion (ii): The gardens of the Villa d'Este had a profound influence on the development of garden design throughout Europe.

Criterion (iii): The principles of Renaissance design and aesthetics are illustrated in an exceptional manner by the gardens of the Villa d'Este.

Criterion (iv): The gardens of the Villa d'Este are among the earliest and finest of the *giardini delle meraviglie* and symbolize the flowering of Renaissance culture.

Criterion (vi): The Villa d'Este, with its palace and gardens, bears exceptional testimony to the Italian Renaissance and has been a source of artistic inspiration ever since its creation.

Integrity

The property includes all the fundamental elements that contribute to justify its exceptional universal value and is of adequate size to convey its significance. The interventions made over the centuries have preserved the integrity of the structure and the spatial relationship between the villa and the gardens themselves, as well as the ones between the architecture complex and the landscape. The link between the villa and the water – key element of the places using the peculiar shape of the Tiburtine territory – remains integral.

Authenticity

The degree of authenticity of both the palace and of the gardens is very high, and the different periods of the ensemble are clearly visible and recognizable. The remains of the Roman villa and the monastery on which the palace was built are still visible. Moreover, a large part of the spatial and ornamental structure of the gardens has been preserved. The restoration of the murals is methodical and rigorous. Other notable Baroque works, such as those by Bernini, have been well conserved and restored.

In the last years the Villa d'Este has benefited of several restoration campaigns in conformity with the principles laid down in the Venice Charter, also because of micro-climatic conditions that have caused rapid deterioration in the decoration, of the finishing materials and the fountains with their distribution system.

Protection and management requirements

The Villa d'Este is protected as national monument under the Decreto Legislativo 42/2004, *Codice dei beni culturali e del Paesaggio*. It has been the property of the Italian government since 1920 and falls under the responsibility of the Ministry of Cultural Heritage and Activities and Tourism which takes care of the safeguarding, maintenance, restoring and preserving works.

A wide area around the Villa is protected as landscape by the same Decreto n.42/04: a safeguarding measure which is applied in areas declared by a law decree to be of interest for their landscape resources. Authorization for any form of intervention is granted or denied by the relevant authority (the Municipality and the Soprintendenza, a peripheral office of the Ministry for Cultural Heritage and Activities and Tourism). This area includes the UNESCO property's buffer zone. The safeguarding dispositions introduced by the Piano Territoriale

Paesaggistico Regionale adopted by the Regione Lazio according to Regional Law 24/1998 also apply to Villa d'Este.

The management of the Villa d'Este falls under the responsibility of the competent offices of the Ministry of Cultural Heritage and Activities and Tourism which has a head office within Villa d'Este dedicated to the preservation, management and valorization of the monument. To achieve these goals, programmes for the maintenance, preservation and improvement of the services to the customers are drafted on an annual basis.

Portugal

Alto Douro Wine Region

Brief Synthesis

The river Douro and its principal tributaries, the Varosa, Corgo, Távora, Torto, and Pinhão, form the backbone of the mountain landscape, which is protected from the harsh Atlantic winds by the Marão and Montemuro mountains, has been transformed by steeply sloping terraced vineyards that cover some 24,600 ha.

Wine has been produced by traditional landholders in the Alto Douro Region (ADWR) for some 2,000 years. A world commodity, Port wine, a wine of a quality defined and regulated since 1756 is produced here.

Throughout the centuries, row upon row of terraces have been built according to different techniques. The earliest, employed during the pre-phylloxera era (pre-1860), was that of the *socalcos*, narrow and irregular terraces buttressed by walls of schistous stone, which require continuous maintenance on which only one or two rows of vines could be planted. The long lines of continuous, regularly shaped terraces date from the end of the 19th century and the beginning of the 20th century when the Douro vineyards were rebuilt, following the phylloxera attack. The new terraces altered the landscape, not only because of the monumental walls that were built but also owing to the fact that they were wider and slightly sloping to ensure that the vines would be better exposed to the sun.

Along the lower banks of the Douro or on the edges of watercourses on the hillsides are groves of orange trees, sometimes walled. The landscape is covered with brushwood and scrub and, here and there, a coppice of trees alternating with vineyards. Water used to be collected in catchments along stone channels. Characteristically white-walled villages and *casais* are usually located midway up the valley sides. Around an often imposing 18th century parish church, rows of houses opening directly on to the street to form a web of narrow, twisty roads with some notable examples of vernacular architecture. The Douro *quintas* are major landmarks, easily identified by the groups of farm buildings and wineries that around the main house particularly in the Upper Corgo and the Upper Douro. The landscape is dotted with small chapels located high on the hills or next to manor houses.

The long tradition has produced a cultural landscape of outstanding beauty that is at the same time a reflection of its technological, social, and economic evolution. The visually dramatic landscape is still profitably farmed in traditional ways by traditional landholders.

Criterion (iii): The Alto Douro Region has been producing wine for nearly two thousand years and its landscape has been moulded by human activities.

Criterion (iv): The components of the Alto Douro landscape are representative of the full range of activities associated with winemaking – terraces, quintas (wine-producing farm complexes), villages, chapels, and roads.

Criterion (v): The cultural landscape of the Alto Douro is an outstanding example of a traditional European wine-producing region, reflecting the evolution of this human activity over time.

Since the 18th century, its main product, port wine, has been world famous for its quality. This long tradition of viticulture has produced a cultural landscape of outstanding beauty that reflects its technological, social and economic evolution.

Integrity

The boundaries fully encompass all the attributes of Outstanding Universal Value.

The cultural landscape of the ADWR is an outstanding example of humankind's unique relationship with the natural environment. Its nature is determined by wise management of limited land and water resources on extremely steep slopes. It is the outcome of permanent and intense observation, of local testing, and of the profound knowledge of how to adapt the culture of the vine to such extremely unfavourable conditions. The landscape is an expression of people's courage and determination, of their acumen and creative genius in understanding the cycle of the water and the materials, and of their intense, and almost passionate, attachment to the vine. The setting, in the landscape of several forms of training the vines, is an outstanding example of human ability to master physical constraints, here actually creating the soil and building an immense and extensive construct of buttressed *socalcos*. It is this acumen that enabled a multitude of anonymous artists to create a collective work of land art.

This landscape, however, is a whole and it is in constant evolution, now with new terrace-forms reflecting the availability of new technology. It is a diverse mosaic of crops, groves, watercourses, settlements, and agricultural buildings, arranged as *quintas* (large estates) or *casais* (small landholdings).

The general state of preservation of this historic landscape is good. Alterations do exist, but they do not seem of sufficient importance to impair its integrity. Some terraces suffered badly during torrential rain in the latter part of January 2001, and a special effort will be needed to restore parts of vineyards to working order.

Authenticity

Conservation as a "heritage concept" has scarcely been carried out in this area until recently. With everything subordinate to wine-growing, functional need has driven maintenance. As a result, the state of conservation of the ADWR, in particular of the majority of supporting walls, is remarkably good, and clearly superior to that of the buffer zone. There, although a considerable amount of land under vine in *quintas* and *casais* and considerable vernacular heritage exist, the settlements in particular have suffered the loss of much of their original character.

Today they maintain the landscape's active social role in perpetuating a prosperous and sustainable economy. Popular identification with the Region is reinforced by the congruence between its area now and that of the original demarcation.

The ADWR has, and undoubtedly always had, a different meaning according to the perspective of each interest group. It is not looked at in the same manner by the parishioner who lives in the middle of the vineyard that has shaped his horizon since birth and which provides his sole source of income, or by the man from the mountain who remembers the days when the *roga* joyfully descended the hills to the *Terra Quente* to spend a few weeks working for the vintage. The Douro equally belongs to the small shopkeepers and middlemen in the region, to the owners of the *quintas* – both Portuguese and foreign – who stay there at different times in the year, to the shippers in the Douro and in Vila Nova de Gaia who are engaged in the wine trade, and to all those people in Portugal and the world over who have learnt to celebrate each great moment in their lives or in the destiny of nations with a glass of port wine.

Yet the man-made landscape of so many significances is visibly there, a series of impressive views but also a seriously complex machine, still working.

Protection and management requirements

The existing legal provisions to ensure the protection of the nominated property and its buffer zone are adequate.

Protecting and managing the Alto Douro Wine Region (ADWR) is a rather complex task considering the property's size, the diversity of entities involved and the high number of owners and stakeholders.

Protection and management rules applying to the ADWR derive from the Intermunicipal Spatial Plan for the ADWR (IMSP-ADWR). Municipalities, stakeholders and different Government officials have been cooperating in the management and protection of the ADWR. The main concerns with the protection and management of the ADWR have to do with physical indicators such as: conserving and rehabilitating schistous stone walls and *socalcos*; adequating methods for installing vineyards and other cultures; creating arboreal networks for dividing vine fields and creating passageways; minimizing visual intrusions; recording, and protecting vernacular heritage; licensing of new buildings; enhancing settlements; implementing new road networks.

Associations have been set up with the aim of promoting and raising awareness for the protection and management of the property.

Long term vulnerabilities and challenges have to do with the application of strategic and guideline rules from the IMSP-ADWR, implementation of its action plan, dissemination of good intervention practices on vineyards, and liaison with all parties involved for the implementation of the common goal of protecting and managing the landscape.

The Management Plan (the IMSP-ADWR, approved in 2003 – RCM n.º 150/2003) is being revised to better adapted it to current needs and to link it to municipal development plans and planning tools.

A managerial structure – the Douro Mission (*Estrutura de Missão do Douro*) – was created in 2006. Its main objectives are: the enhancement, preservation and safeguard of the Alto Douro Wine Region landscape.

As experience has shown the large buffer-zone of 225.400 ha is difficult to manage, there is a need for the Management Plan to address this issue.

For this purpose, the State Party has approved legislative adjustments to incorporate the safeguarding and promotion of the property within the tasks and duties of the North Regional Coordination and Development Commission, nominating as Site Manager the President of this Institution, supported by two advisory bodies, the Permanent Coordinating Group and Advisory Committee and an operational technical team, responsible for the implementation of the Monitoring Plan, another key element of the Management system.

United States of America

Great Smoky Mountains National Park

Brief Synthesis

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.

Criterion (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.

Criterion (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.

Criterion (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.

Criterion (x): The Great Smoky Mountains is 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.

Integrity

At over 209,000 hectares, the property is one of the largest intact forest ecosystems in the southern Appalachian mountains, and contains one of the largest blocks of deciduous, temperate, old growth forests remaining in North America. Over 90% of the property is managed for wilderness values. The park adjoins several national forests on parts of its boundary, providing some additional protection and connectivity to the larger landscape.

In spite of the park’s size, it does face important challenges. Air pollution from outside park boundaries diminishes park views, damages plant life and degrades high elevation streams and soils. Non-native insects and invasive plant species threaten forest health, with potentially serious impacts on several tree species including hemlock, fir and ash. Non-native wild hogs can also have locally significant impacts on the park and park staff are also taking measures against several species of non-native trout.

One potential threat was resolved with a recent agreement not to build the long-proposed North Shore Road, thereby assuring protection to a significant portion of the property.

Of note is the All-Taxa Biological Inventory, a concentrated effort to identify and record every single species within the park. This will greatly assist park management in understanding and protecting the park’s resources.

Protection and management requirements

Designated by the U.S. Congress in 1934 as a national park, Great Smoky Mountains National Park is managed under the authority of the *Organic Act* of August 25, 1916 which established the United States National Park Service. In addition, the park has specific enabling legislation which provides broad congressional direction regarding the primary purposes of the park. Numerous other federal laws bring additional layers of protection to the park and its resources, including the Clean Air Act. Day to day management is directed by the Park Superintendent.

Management goals and objectives for the property have been developed through a General Management Plan, which has been supplemented in recent years with more site-specific planning exercises as well as numerous plans for specific issues and resources. In addition, the National Park Service has established Management Policies which provide broader direction for all National Park Service units, including Great Smoky Mountains.

Park management plans for the property have identified a number of resource protection measures, such as environmental assessment processes, zoning, ecological integrity and visitor monitoring, and education programs to address pressures arising from issues both inside and outside the property, including air pollution and non-native invasive species. The park has a robust research program with over 140 research permits issued in a given year. Air quality and water quality are closely monitored in the park along with several other vital signs indicating the health of the ecosystem. These other vital signs include brook trout distribution, aquatic macro-invertebrates, vegetation, soil chemistry and climate change. Extensive pest management efforts are in place to reduce the impact of forests pests and exotic, invasive plants on the integrity of the ecosystem.

Hawaii Volcanoes National Park

Brief Synthesis

Hawai'i Volcanoes National Park contains Mauna Loa and Kilauea, two of the world's most active and accessible volcanoes where ongoing geological processes are easily observed. This property serves as an excellent example of island building through volcanic processes. Through the process of shield-building volcanism, the park's landscape is one of relatively constant, dynamic change.

Criterion (viii): This property is a unique example of significant island building through ongoing volcanic processes. It represents the most recent activity in the continuing process of the geologic origin and change of the Hawaiian Archipelago. The park contains significant parts of two of the world's most active and best understood volcanoes, Kilauea and Mauna Loa. The volcano Mauna Loa, measured from the ocean floor, is the greatest volcanic mass on earth.

Integrity

The original national park, as inscribed on the World Heritage List, is nearly 88,000 hectares, large enough to protect the geologic values for which the property was inscribed. Of these 88,000 hectares, 73% is designated as wilderness under the Wilderness Act of 1964, providing a high degree of protection. In 2004 the national park was increased in size by adding another 47,000 hectares (the Kahuku Unit), providing additional protection to the inscribed property. Visitation, while significant, is carefully planned and managed and does not pose a threat to the park's geological resources.

The park does contend with a number of invasive species which threaten its numerous endemic and endangered plant and animal species. Most of the park is fenced, which has helped greatly in reducing the threat from ungulates. However, fencing is not effective against smaller mammals or against reptiles, birds and spores and seeds. While invasives do not impact the park's Outstanding Universal Value under criterion (viii), they do pose a threat to the park's ecological integrity and require active management.

Protection and management requirements

Designated by the U.S. Congress in 1916 as a national park, Hawai'i Volcanoes is managed under the authority of the *Organic Act* of August 25, 1916 which established the United States National Park Service. In addition, the park has specific enabling legislation which provides broad congressional direction regarding the primary purposes of the park. Numerous other federal laws bring additional layers of protection to the park and its resources. Day to day management is directed by the Park Superintendent. The park was designated as a Biosphere Reserve in 1980.

Park management plans for the property have identified a number of resource protection measures, such as environmental assessment processes, zoning, ecological integrity and visitor monitoring, and education programs to address pressures arising from issues both inside and outside the property. A new General Management Plan was completed in 2016 which provides an updated 15-20 year vision for park management. The new General Management Plan recommends wilderness designation for nearly 49,000 hectares within the Kahuku unit.

Part of the park's mandate is to provide access to volcanic resources and lava. Visitor safety is therefore a serious concern and management direction and actions are designed to protect visitors and employees from any effects of the active volcano, including lava, fumes, earthquakes, or tsunamis.

In addition, the National Park Service has established Management Policies which provide broader direction for all National Park Service units, including Hawai'i Volcanoes.

The national park works closely with other land and water management agencies on the island of Hawai'i to protect resources within the larger landscape. In particular, the park is a member of the Three Mountain Alliance, the largest watershed partnership in the state. The Three Mountain Alliance brings together federal, state and private landowners to identify and develop strategies for landscape-scale conservation on an area of over 450,000 contiguous hectares on the island of Hawai'i.

The park honors Native Hawaiian people, protects Native Hawaiian historic and archeological sites and resources and preserves Native Hawaiian culture and values. Native Hawaiians believe that the park land is, 'Aina a ke akua e noho ai- the land where the god dwells and that the Goddess Pelehonuamea makes her home in the crater Halema'uma'u at the summit of Kilauea. Mauna Loa and Kilauea are sacred cultural landscapes and the park supports Native Hawaiian practices and consults with Native Hawaiian communities in order to ensure that the Hawaiian culture lives on.

Mammoth Cave National Park

Brief Synthesis

Mammoth Cave is the most extensive cave system in the world, with over 285 miles (458 km) of surveyed cave passageways within the property (and at least another 80 miles [128 km] outside the property). The park illustrates a number of stages of the Earth's evolutionary history and contains ongoing geological processes and unique wildlife. It is renowned for its size and vast network of extremely large horizontal passages and vertical

shafts. Nearly every type of cave formation is known within the site, the product of karst topography. The flora and fauna of Mammoth Cave is the richest cave-dwelling wildlife known, with more than 130 species within the cave system.

Criterion (vii): Mammoth Cave is the longest cave system in the world. The long passages with huge chambers, vertical shafts, stalagmites and stalactites, splendid forms of beautiful gypsum flowers, delicate gypsum needles, rare mirabilite flowers and other natural features of the cave system are all superlative examples of their type. No other known cave system in the world offers a greater variety of sulfate minerals.

Criterion (viii): Mammoth Cave exhibits 100 million years of cave-forming action and presents nearly every type of cave formation known. Geological processes involved in their formation continue. Today, this huge and complex network of cave passages provides a clear, complete and accessible record of the world's geomorphic and climatic changes. Outside the cave, the karst topography is superb, with fascinating landscapes and all of the classic features of a karst drainage system: vast recharge area, complex network of underground conduits, sink holes, cracks, fissures, and underground rivers and springs.

Criterion (x): The flora and fauna of the cave is the richest cavernicolous wildlife known, numbering over 130 species, of which 14 species of troglobites and troglophiles are known only to exist here.

Integrity

With nearly 500 km of surveyed cave passageways within the property and over 21,000 hectares above ground, the property is large enough to offer a high level of protection to the outstanding universal value for which it was inscribed. A portion of the site has development (roads, visitor facilities, park operational and administrative infrastructure), but most of the area remains undeveloped in a natural zone. As a national park, protection of the property's integrity takes first priority in management decisions.

Mammoth Cave and its karst terrain face threats and challenges, most of which are from external sources. Because large portions of the Mammoth Cave watershed lie outside park boundaries, activities conducted in these privately-owned areas greatly influence water quality and quantity within the park. Water quality is influenced by sewage and waste disposal, farming and forestry practices, oil/gas wells, railroads and highways. Water quantity is influenced by flood-control dams on the Green and Nolin Rivers, and a small lock and dam immediately downstream of the park.

The integrity of Mammoth Cave has been strengthened as a result of five significant measures that have been taken since Mammoth Cave National Park was inscribed in 1981: an updated General Management Plan in 1983; the establishment of the Mammoth Cave Area International Biosphere Reserve in 1990 and subsequent expansion in 1996; a regional sewage system, installed in the early 1990s, which serves both the park and three adjacent communities; the establishment of the Mammoth Cave International Center for Science and Learning in 2004; and the discovery and mapping of 140 additional miles (225 km) of cave passageways over the past 31 years.

The regional sewer system has greatly increased protection of the park's sensitive cave system by servicing most of the areas that drain into the Mammoth Cave. The 1996 expansion of the Mammoth Cave Area Biosphere Reserve to 367,993 hectares has also played an important role in securing the property's integrity and maintaining water quality. The Biosphere Reserve now includes all or portions of six counties near Mammoth Cave National Park, encompassing the ecologically sensitive hydrological recharge area for Mammoth Cave National Park as well as a large interaction zone. This has helped address common concerns regarding water quality, has provided an impetus for protection and has reinforced the World Heritage Site values inside the park in combination with the connected ecologically sensitive areas outside of the park.

In 2004, the Mammoth Cave International Center for Science and Learning was established through a partnership between Mammoth Cave National Park and Western Kentucky University. Part of a national network of learning centers located within national parks, it facilitates the use of parks for scientific inquiry, supports science-informed decision making, and promotes science literacy and resource stewardship. The learning center has contributed to "sister park" agreements with other World Heritage sites (China and Slovenia) that protect cave and karst resources.

Fine particles of air pollution often cause haze in the park, affecting how well and how far visitors can see vistas and landmarks. Air pollutants of concern can have serious effects on park air quality, human health, wildlife, vegetation, upland ponds, streams, soils, and visibility.

Protection and management requirements

Designated by the U.S. Congress in 1941 as a national park, Mammoth Cave National Park is managed under the authority of the *Organic Act* of August 25, 1916 which established the United States National Park Service. In addition, the park has specific enabling legislation which provides broad congressional direction regarding the primary purposes of the park. Numerous other federal laws bring additional layers of protection to the park and its resources. Day to day management is directed by the Park Superintendent.

Management goals and objectives for the property have been developed through a General Management Plan, which has been supplemented in recent years with more site-specific planning exercises as well as numerous

plans for specific issues and resources. In addition, the National Park Service has established Management Policies which provide broader direction for all National Park Service units, including Mammoth Cave.

Approximately 600,000 people visit the property each year, and 400,000 of those tour Mammoth Cave. Access to the cave is strictly controlled and visitation is confined to 10 miles of developed passageway. On the surface of the park, some trail use activities produce soil erosion and equine waste. Invasive species crowding out native plants is another area of great concern.

Protection of the site from current and potential threats will require continued monitoring of resource conditions, such as through the NPS Inventory and Monitoring program, which has developed nine "vital signs" for the park, including five cave vital signs (aquatic biota, bats, crickets, meteorology, woodrats), forest vegetation communities, invasive species early detection, ozone/foliar injury, and water quality. Continued collaboration at the landscape scale, such as through the Biosphere Reserve, is also essential to long term protection of the site.

Olympic National Park

Brief Synthesis

Olympic National Park features a spectacular coastline, scenic lakes, majestic mountains and glaciers, and a magnificent virgin temperate rainforest. Olympic National Park has a wealth of geological formations – including rocky islets along the coast formed by a continuously receding and changing coastline, deep canyons and valleys formed by erosion and craggy peaks and beautiful cirques sculpted by glaciation. Olympic National Park is also the lowest latitude in the world in which glaciers form below an elevation of 2000 meters and occur below an elevation of 1000 meters. The park's relative isolation, high rainfall, strong west-to-east precipitation gradient, ten major watersheds and rugged topography have combined to produce varied and complex life zones – from coastline to temperate forest to alpine meadows to glaciated peaks. As a result, the park is rich in biological diversity and has a high rate of endemism.

Criterion (vii): Olympic National Park is of remarkable beauty, and is the largest protected area in the temperate region of the world that includes in one complex ecosystems from ocean edge through temperate rainforest, alpine meadows and glaciated mountain peaks. It contains one of the world's largest stands of virgin temperate rainforest, and includes many of the largest coniferous tree species on earth.

Criterion (ix): The park's varied topography from seashore to glacier, affected by high rainfall, has produced complex and varied vegetation zones, providing habitats of unmatched diversity on the Pacific coast. The coastal Olympic rainforest reaches its maximum development within the property and has a living standing biomass which may be the highest anywhere in the world. The park's isolation has allowed the development of endemic wildlife, subspecies of trout, varieties of plants and unique fur coloration in mammals, indications of a separate course of evolution.

Integrity

At over 373,000 hectares, of which 95% is federally protected wilderness, the property is large enough to contain on-going geological processes (glaciation and changing coastline) and evolution of the many and varied forest types. The park's proximity to eight federally recognized tribal reservations - of which it shares boundaries with four - provides opportunities for cooperation to protect park resources. The Olympic Coast Marine Sanctuary provides a buffer for marine protection, and federal and state forest lands offer additional opportunities for boundary protection and connectivity with the larger landscape.

Protection and management requirements

Designated by the U.S. Congress in 1938 as a national park, Olympic National Park is managed under the authority of the *Organic Act* of August 25, 1916 which established the United States National Park Service. In addition, the park has enabling legislation which provides broad congressional direction regarding the primary purposes of the park. Numerous other federal laws bring additional layers of protection to the park and its resources. Day to day management is directed by the Park Superintendent.

Management goals and objectives for the property have been developed through a General Management Plan, which has been supplemented in recent years with site-specific planning exercises as well as numerous plans for specific issues and resources. In addition, the National Park Service has established Management Policies which provide broader direction for all National Park Service units, including Olympic.

The National Park Service works closely with other land and water management agencies in larger North Pacific region to protect shared resources. One example is the North Pacific Landscape Conservation Cooperative, which brings together science and resource management to inform climate adaptation strategies to address climate change and other stressors within this ecological region.

Mountain goats (*Oreamnos americanus*), introduced to the property in the 1920s, may be causing significant changes in the natural ecosystem. Research has suggested that the mountain goats have reduced plant cover, increased erosion, and shifted plant-community dominants toward more resistant or less palatable species; they have been recorded feeding on at least three of the endemic plants, and some concern has been expressed that these species may be endangered by the mountain goat. Habitat loss outside the park also appears to be

impacting other species within the park such as the endangered marbled murrelet and the near threatened northern spotted owl. In the longer term, climate change may impact the ranges of dominant plant species, altering habitat and threatening endemic species in the park.

The Elwha Ecosystem Restoration Project is the second largest ecosystem restoration project in the history of the National Park Service after the Everglades. With the removal of the 64 meter Glines Canyon Dam and the 33 meter Elwha Dam, along with the draining of their reservoirs, the park is now revegetating the slopes and river bottoms to prevent erosion and accelerate ecological recovery. The primary purpose of this project is to restore anadromous stocks of Pacific Salmon and Steelhead to the Elwha River, which had been denied access to the upper 105 km of river habitat for more than 95 years by these dams.

In 2008, the fisher (*Martes pennanti*) was reintroduced into the park, restoring an important component of the park's native wildlife and enhancing the ecosystem's integrity.

Long-term protection and effective management of the site from potential threats requires continued monitoring of resource conditions, such as through the NPS Inventory and Monitoring (I&M) program. The North Coast and Cascades I&M network, of which Olympic National Park is a part, has developed several "vital signs" to track a subset of physical, chemical and biological elements and processes selected to represent the overall health or condition of park resources. In Olympic National Park, these vital signs include water quality, climate, landscape dynamics, intertidal ecosystems, landbird populations, and others.

Yellowstone National Park

Brief Synthesis

Yellowstone National Park is a protected area showcasing significant geological phenomena and processes. It is also a unique manifestation of geothermal forces, natural beauty, and wild ecosystems where rare and endangered species thrive. As the site of one of the few remaining intact large ecosystems in the northern temperate zone of earth, Yellowstone's ecological communities provide unparalleled opportunities for conservation, study, and enjoyment of large-scale wildland ecosystem processes.

Criterion (vii): The extraordinary scenic treasures of Yellowstone include the world's largest collection of geysers, the Grand Canyon of the Yellowstone River, numerous waterfalls, and great herds of wildlife.

Criterion (viii): Yellowstone is one of the world's foremost sites for the study and appreciation of the evolutionary history of the earth. The park has a globally unparalleled assemblage of surficial geothermal activity, thousands of hot springs, mudpots and fumaroles, and more than half of the world's active geysers. Nearly 150 species of fossil plants, ranging from small ferns and rushes up to large Sequoia and many other tree species, have been identified in the park's abundant fossil deposits. The world's largest recognized caldera (45km by 75km – 27 miles by 45 miles) is contained within the park.

Criterion (ix): The park is one of the few remaining intact large ecosystems in the northern temperate zone of the earth. All flora in the park are allowed to progress through natural succession with no direct management being practiced. Forest fires, if started from lightning, are often allowed to burn where possible to permit the natural effects of fire to periodically assert itself. The park's bison are the only wild, continuously free-ranging bison remaining of herds that once covered the Great Plains and, along with other park wildlife, are one of the greatest attractions.

Criterion (x): Yellowstone National Park has become one of North America's foremost refuges for rare plant and animal species and also functions as a model for ecosystem processes. The grizzly bear is one of the world's most intensively studied and best-understood bear populations. This research has led to a greater understanding of the interdependence of ecosystem relationships. Protection of the park's flora and fauna, as well as the natural processes that affect their population and distribution, allow biological evolution to proceed with minimal influence by man.

Integrity

At nearly 900,000 hectares, Yellowstone National Park is a large property, and is at the heart of the vast "Greater Yellowstone Ecosystem," (GYE) encompassing over 7 million hectares. The park, along with the GYE, is one of the last remaining intact large ecosystems in the northern temperate zone. All wildlife species found in the region pre-European contact can still be found in the park. The property itself is of sufficient size to ensure the protection of the scenic, geologic, and geomorphological values for which it was inscribed.

Only about 2% of Yellowstone National Park is developed (visitor and park infrastructure, roads, etc.), while over 90% of the park is managed for wilderness values with relatively light use by park visitors.

The overall ecological integrity of the property was significantly enhanced with the restoration of the gray wolf in 1994-95, with positive impacts on a wide range of species and functions, ranging from aspen to trout.

Concerns remain over threats to integrity from invasive species, particularly lake trout, and possible impacts of climate change. Park management plans for the property have identified a number of resource protection

measures, such as environmental assessment processes, zoning, ecological integrity and visitor monitoring, and education programs to address pressures arising from issues both inside and outside the property.

Protection and management requirements

Designated by the U.S. Congress in 1872 as the world's first national park, Yellowstone is managed under the authority of the *Organic Act* of August 25, 1916 which established the United States National Park Service. In addition, the park has specific enabling legislation which provides broad Congressional direction regarding the primary purposes of the park. Day to day management is directed by the Park Superintendent.

Management goals and objectives for the property have been developed through a General Management Plan, which has been supplemented in recent years with more site-specific planning exercises as well as numerous plans for specific issues and resources. In addition, the National Park Service has established Management Policies which provide broader direction for all National Park Service units, including Yellowstone.

Protection of some of the park's Outstanding Universal Value requires cooperation with adjacent land managers and private property owners. This is particularly true with wide-ranging wildlife species such as grizzly bears, gray wolves, and especially bison. There are concerns about increasing development around and within the GYE that may impact wildlife movement. In addition, neighboring states have specific concerns regarding bison movement outside park boundaries, though there has been success in expanding bison corridors outside the park on the northern and western boundaries. Managing visitation during all seasons to ensure good public access to the park but without detracting from the park's unique natural values is also an ongoing challenge. Impacts from visitation range from the footprint of visitor-related infrastructure to air pollution; monitoring these impacts is essential.

The national park works closely with other land management agencies in the GYE through the Greater Yellowstone Coordinating Committee (GYCC). The park was also named a Biosphere Reserve in 1976.

Long-term protection and effective management of the site from potential threats requires continued monitoring of resource conditions, such as through the NPS Inventory and Monitoring (I&M) program. The Greater Yellowstone I&M network, of which Yellowstone National Park is a part, has developed several "vital signs" to track a subset of physical, chemical and biological elements and processes selected to represent the overall health or condition of park resources. In Yellowstone National Park, these vital signs include land use, climate, amphibians, water resources, whitebark pine, and others.

Yosemite National Park

Brief Synthesis

Yosemite National Park vividly illustrates the effects of glacial erosion of granitic bedrock, creating geologic features that are unique in the world. Repeated glaciations over millions of years have resulted in a concentration of distinctive landscape features, including soaring cliffs, domes, and free-falling waterfalls. There is exceptional glaciated topography, including the spectacular Yosemite Valley, a 1 kilometer (1/2 mile) deep, glacier-carved cleft with massive sheer granite walls. These geologic features provide a scenic backdrop for mountain meadows and giant sequoia groves, resulting in a diverse landscape of exceptional natural and scenic beauty.

Criterion (vii): Yosemite has exceptional natural beauty, including 5 of the world's highest waterfalls, a combination of granite domes and walls, deeply incised valleys, three groves of giant sequoia, numerous alpine meadows, lakes and a diversity of life zones.

Criterion (viii): Glacial action combined with the granitic bedrock has produced unique and pronounced landform features including distinctive polished dome structures, as well as hanging valleys, tarns, moraines and U-shaped valleys. Granitic landforms such as Half Dome and the vertical walls of El Capitan are classic distinctive reflections of geologic history. No other area portrays the effects of glaciation on underlying granitic domes as well as Yosemite does.

Integrity

The property consists of over 300,000 hectares, one of the largest and least fragmented areas in California's Sierra Nevada mountain range. Approximately 95% of the park is designated wilderness. The entire park is surrounded by four national forests, several adjacent portions of which are designated wilderness areas, thereby providing connectivity with the larger landscape. However, there are concerns about increasing development outside park boundaries.

There are no significant threats to the property's geologic or geomorphological values. Visitation numbers, while high in certain areas, are largely restricted to the small portion of the park that has been developed, though preventing overcrowding in developed areas is an ongoing concern.

Threats to park resources and the integrity of park ecosystems include loss of natural fire as a process, air pollutants and air-borne contaminants, global climate change, direct impacts to resources from high visitation in some areas of the park such as human-wildlife conflicts, habitat fragmentation from both outside and inside park boundaries, and the invasion of non-native plant and animal species. The park is actively attempting to control the non-native plant species that pose the most serious threat, such as yellow star-thistle, bull thistle, and Himalayan

blackberry. The presence of wild turkeys, bullfrogs, introduced fish and other non-native animal species in Yosemite threaten the park's native species including such rare species as the Sierra Nevada yellow legged frog.

Protection and management requirements

Park management plans for the property have identified a number of resource protection measures, such as environmental assessment processes, zoning, ecological integrity and visitor monitoring, and education programs to address pressures arising from issues both inside and outside the property.

Designated by the U.S. Congress in 1890 as a national park, Yosemite National Park is managed under the authority of the *Organic Act* of August 25, 1916 which established the United States National Park Service. In addition, the park has specific enabling legislation which provides broad congressional direction regarding the primary purposes of the park. Numerous other federal laws bring additional layers of protection to the park and its resources. Day to day management is directed by the Park Superintendent.

Management goals and objectives for the property have been developed through a General Management Plan, which has been supplemented in recent years with more site-specific planning exercises as well as numerous plans for specific issues and resources. In addition, the National Park Service has established Management Policies which provide broader direction for all National Park Service units, including Yosemite.

The national park has a large and well-trained staff and works closely with other land and water management agencies in the larger Sierra Nevada region to protect shared resources. One example is the California Landscape Conservation Cooperative, which brings together science and resource management to inform climate adaptation strategies to address climate change and other stressors within this ecological region.

Long-term protection and effective management of the site from potential threats requires continued monitoring of resource conditions, such as through the NPS Inventory and Monitoring (I&M) program. The Sierra Nevada I&M network, of which Yosemite is a part, has developed several "vital signs" to track a subset of physical, chemical and biological elements and processes selected to represent the overall health or condition of park resources. In Yosemite, these vital signs include bird populations, weather and climate, water chemistry, plant communities, fire regimes and others.

Yosemite is the sacred ancestral homelands of several traditionally-associated American Indian tribes and groups. The landscape reflects generations of American Indian land management, attesting to their deep ecological, cultural and spiritual ties to the area. Traditional cultural practices continue today and the ceremonies, and spiritual and traditional practices are critically important in retaining the sacred nature of Yosemite and its native culture.