

JURASSIC COAST Partnership Plan 2020-2025

Management Framework for the
Dorset and East Devon Coast
World Heritage Site



United Nations
Educational, Scientific and
Cultural Organization



Dorset and East Devon Coast
inscribed on the World
Heritage List in 2001

Accessibility

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Your Views

Everyone who values the Jurassic Coast, for whatever reason, has a stake in its future. Please get in touch with us if you would like to share your aspirations for the Site or your thoughts about how it is managed.



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FOREWORD

Strength in Partnership

In Dorset and East Devon we are extraordinarily lucky to be home to England's only natural World Heritage Site. A stretch of coastline of Outstanding Universal Value (OUV), globally recognised for its scientific importance as well as beloved by its residents and visitors for its beauty and the cultural and economic opportunities and advantages it provides. The Jurassic Coast is an exceptional place, unique and complex, existing as both a window into deep time and the history of our planet and as an important vantage point into contemporary issues such as climate change and environmental sustainability.

Spread over 95 miles, our World Heritage Site thrives upon partnership and collaboration between all of us who have a role or interest in its protection and care. This Partnership Plan is the way in which we coordinate and galvanise our individual and collective efforts, covering the day to day essential steps we must take to look after the Site through to shared ambitions for how we can enhance access, engagement, learning and lasting benefit to all from this place.

Previously this document was called a Management Plan but the change in title to Partnership Plan is more than

just a change in wording. It represents the increased emphasis upon the contributions which all the partners can make and is the culmination of enormous effort to build relationships, understanding, consensus and shared objectives. Partners include Government departments and agencies, Local Authorities, landowners, conservation organisations, local Trusts, museums and visitor centres, fossil collectors and businesses. Indeed, everyone who lives here, or visits, has a stake in ensuring that we care for the Jurassic Coast and ensure it is left in good condition for future generations, and as such we have consulted widely to develop this document, as well as reviewing and learning from the work that has been happening here since we received World Heritage inscription in 2001.

The Jurassic Coast Trust (JCT) has guided and facilitated this work and, as the only organisation set up exclusively focused upon the World Heritage Site and the protection of its OUV (Outstanding Universal Value), we have been overwhelmed by the engagement and spirit of partnership that has been brought to bear in creating this new plan. The understanding and cooperation we have forged in getting to this point means we are filled



with excitement and optimism at how we and our partners will now move forwards, turning this document and its aspiration into tangible activity and positive outcomes that are owned and committed to by everyone involved.

Here at the JCT our passion for the World Heritage Site means that we seek to underpin the work of our partners with expertise, research, support, and innovation and we are incredibly excited about the opportunities that this new Partnership Plan is presenting for us all. There are so many ways in which we can strengthen and promote the OUV of the Jurassic Coast and there are many projects and activities that we can now start to develop with our partners including looking at inclusion and access, climate change, sustainability and learning. While there continue to be challenges facing our Site and to all of us as organisations, many of us as not-for-profit and charitable establishments, we are undoubtedly stronger through working together and collaborating around the shared aims, policies and objectives contained within this plan.

Thank you to everyone who has contributed to this Plan which we believe is a powerful foundation for the next five years of work on the Jurassic Coast World Heritage

Site. This is an extraordinary stretch of coast and we have a partnership of extraordinary talent, commitment, knowledge and insight to look after it. The World Heritage story here in Dorset and East Devon can only grow stronger from here.

Alexandra O'Dwyer

Chair of The Jurassic Coast Trust



John Wokersien

Chair of the Jurassic Coast Partnership Advisory Committee

1. INTRODUCTION

"What makes the concept of World Heritage exceptional is its universal application. World Heritage Sites belong to all the peoples of the world, irrespective of the territory on which they are located."¹



1.1 World Heritage

In 2001, the Dorset and East Devon Coast, more commonly known as the Jurassic Coast, became a World Heritage Site (WHS), joining a global family of unique and exceptional places that illuminate humanity's collective history, identity and relationship with nature.

The purpose of the World Heritage List is to identify properties that have "Outstanding Universal Value"; a "cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity"²

Those responsible for managing World Heritage properties have a "common obligation" to ensure that they are protected for present and future generations, not just through legal means, but through responsible, inclusive and sustainable management practices. This is the primary reason why a World Heritage Site must have an appropriate, agreed management framework in place.

The Convention concerning the Protection of the World Cultural and Natural Heritage, commonly referred to as the World Heritage Convention, defines the mandate for managing World Heritage Sites. This document was agreed in 1972 and ratified by the UK Government in 1984. It is a political commitment supporting the mission of the United Nations Educational, Scientific and Cultural Organisation (UNESCO) to promote peace "built upon the intellectual and moral solidarity of humanity".

A wide partnership of stakeholders works collectively to manage the Dorset and East Devon Coast World Heritage Site. This Plan sets out how that partnership aspires to safeguard its future and deliver the vision of UNESCO, taking particular inspiration from articles 4, 5 and 27 of the World Heritage Convention, paraphrased below:

Recognise the duty of ensuring the protection, conservation, presentation and transmission to future generations of the natural heritage of this World Heritage Site.

Endeavour to give World Heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes.

Endeavour by all appropriate means, and in particular by educational and information programmes, to strengthen the appreciation and respect people have towards the natural heritage of this World Heritage Site.



United Nations
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Cultural Organization



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¹ whc.unesco.org

² Operational Guidelines for the World Heritage Convention 2013, Para 49

1.2 The Jurassic Coast Partnership

Effective management of this landscape-scale World Heritage Site has always been achieved through a partnership approach, and this continues to be the case.

The Jurassic Coast Trust is the body with the delegated authority for the co-ordination and facilitation of Site management. Its duties are undertaken with advice from the Partnership Advisory Committee (PAC), which is a designated committee of the Jurassic Coast Trust. The PAC is comprised of representatives from key stakeholders, as well as advisors from specialist areas. Details of the PAC are accessible online at www.jurassiccoast.org.

All Jurassic Coast stakeholders are invited to embrace the following values in our collective effort to protect, conserve, present, and transmit the Dorset and East Devon Coast World Heritage Site to future generations.

Advocate the global significance of the Jurassic Coast, England's only natural World Heritage Site (WHS) and most important geological site.

Protect and promote the unique geology, landscapes, and flora and fauna associated with the Jurassic Coast World Heritage Site, and do our best to ensure that any development or changes to the WHS support net environmental gain.

Collaborate in the development and delivery of projects and programmes to support the policies in the Partnership Plan.

Develop and share research into issues about or affecting the Jurassic Coast, in particular, the earth sciences.

Deliver specific actions relating to Aims and Policies in the Partnership Plan, either individually or in collaboration.

Communicate with other stakeholders to keep all parties abreast of relevant work areas and priorities in order to seek collaborative opportunities.

Celebrate and share the achievements and successes of the Jurassic Coast partners in delivering our shared goals for the WHS.

The String of Pearls

The 'String of Pearls' metaphor is referred to several times within this Plan. It has, for many years, been used to describe the informal group of autonomous visitors' centres and museums that work together to help people to explore and learn about the Jurassic Coast. They each explain the global value of the Site, but due to the way geology changes along the WHS, these locally focused facilities emphasise their own particular or unique aspect of the overall story and offer distinctive experiences to the public.

The 'String of Pearls' is a valuable strategic concept, helping museums, visitors' centres and communities to understand the nature of the World Heritage Site, the opportunities it provides and the potential for collaboration and mutual support. For this reason, it is integral to the Interpretation Framework for the World Heritage Site; the Jurassic Coast Story Book.

Our Vision for the Jurassic Coast World Heritage Site

World Heritage Status in Dorset and East Devon will inspire people to understand, celebrate and safeguard the Jurassic Coast for future generations.

Our Strategic Aims

Aim 1

Protect the Site's Outstanding Universal Value and World Heritage Status.

Aim 2

Conserve and enhance the Site, its attributes, presentation and setting.

Aim 3

Inspire and engage people with the Site and deepen their understanding of its values.

Aim 4

Maintain and improve access to and experience of the Site.

Aim 5

Enable the Site's World Heritage Status to be of benefit to people and communities.

1.3 The Purpose of this Plan

What is this Plan for?

This plan is a formal requirement of both UNESCO and the UK Government for managing the World Heritage Site. It is a public document which outlines the aims, policies and priority objectives for managing the Site over the coming years. It also explains the reasons for the Site's World Heritage designation and how it is protected and managed. This Plan is the central tool of the partnership that looks after the Jurassic Coast as it helps to facilitate collaboration and provides a strategic context for investment and action.

Who is it for?

As a framework to help guide activities that might affect the Outstanding Universal Value of the World Heritage Site, this Plan has relevance to local communities, businesses, landowners, authorities, utilities and other organisations and groups operating within or with an interest in the area. In the context of the World Heritage Convention, this plan is also created on behalf of the all the peoples of the world.

What have previous Plans helped to achieve?

Previous plans for the Jurassic Coast have underpinned many of the partnership's achievements. World Heritage Status itself is thought to influence around £100 million a year of economic activity in the local area, evidencing the value of ongoing Site protection and management. Policy frameworks have helped draw in funding for strategic projects, catalysed a range of outreach and engagement programmes and inspired action from national partners. More details on what has been achieved will be available on www.jurassiccoast.org.

The Partnership Plan and the Jurassic Coast Trust

Whilst the Jurassic Coast Trust has delegated authority for the co-ordination and facilitation of Site management, there are many areas of delivery for which it is not directly responsible. The Jurassic Coast Trust itself is a charity without statutory funding and may change or be vulnerable over time. It is therefore desirable that this Management Framework for the Site exists independently. It is hoped that the internal business and activity plans of partners will reflect or be guided by the policies and priorities in this Partnership Plan. For the Jurassic Coast Trust this will be a necessity. These relationships will be clarified further through the creation of a delivery plan for the World Heritage Site where roles will be indicated against specific actions (see chapter 5 for further information).



2. OUR WORLD HERITAGE

On the 13th of December 2001, the undeveloped cliffs and beaches between Orcombe Point near Exmouth in East Devon and Studland Bay near Poole in Dorset were inscribed on the World Heritage List³ by the UNESCO World Heritage Committee. The Site was granted World Heritage Status under UNESCO's criteria viii - Earth's history and geological features - which indicated that its geology, palaeontology and geomorphology are of Outstanding Universal Value.



Chalk cliffs near to Studland Bay
by Steve Belasco - Jurassicphotographic.co.uk




The value of the Site's geology has been summarised in the concept of the 'Walk through Time', derived from the way the geology is exposed. A gentle eastward tilt in the rocks has created a progressive exposure of younger and younger layers working west to east (see Figure 1). The walk along the cliffs from Exmouth to Studland becomes a walk forward through roughly 185 million years of Earth's history, recorded in Triassic, Jurassic and Cretaceous geology. Imprinted and inscribed into the 'Walk Through Time' are more recent geological features, including Eocene gravels, Alpine tectonic structures and interglacial raised beaches. The environmental and biological changes

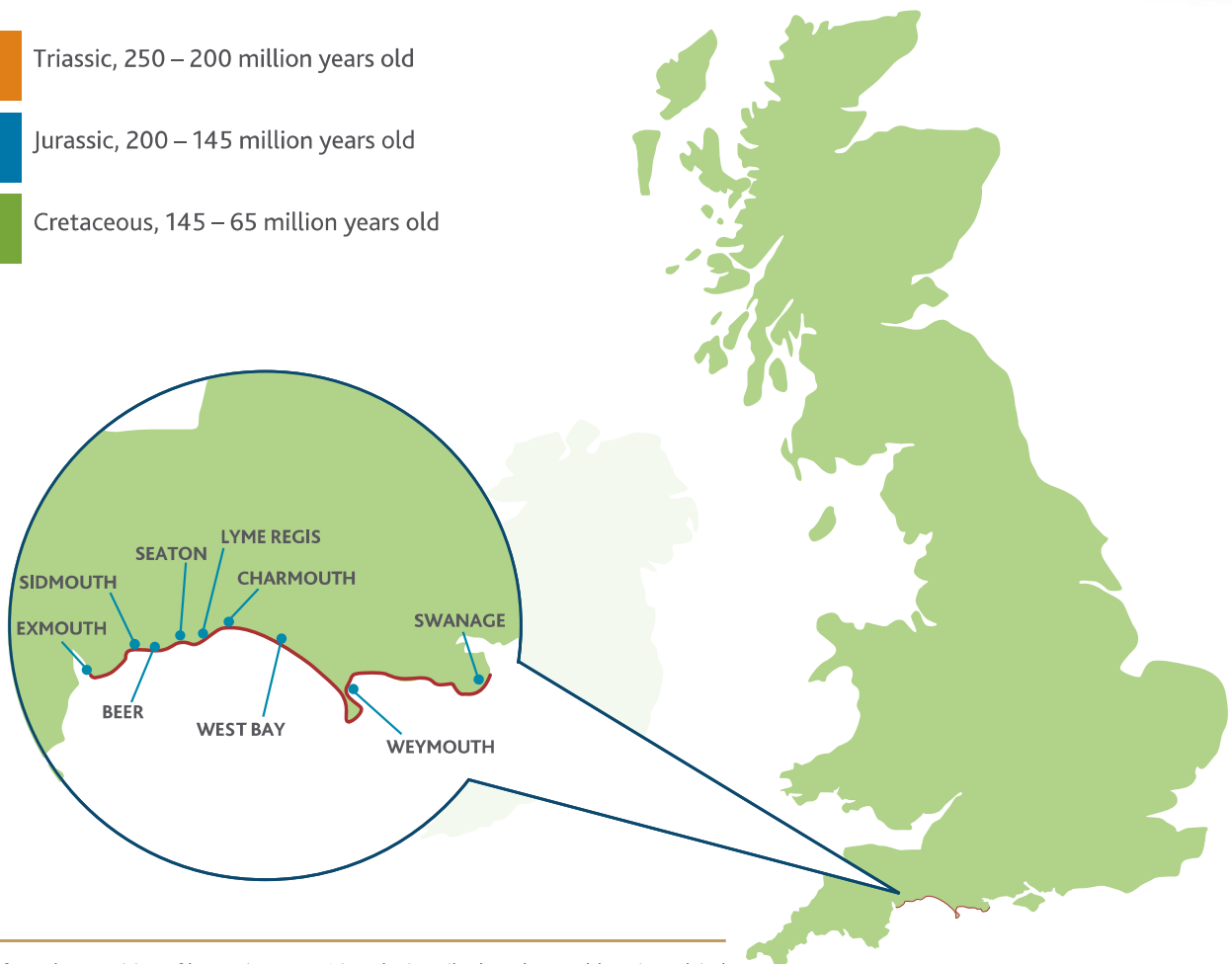
through time can clearly be seen in the exposed rocks of the cliffs and in the outstanding fossil record found along the length of the Site. The varied geology is further expressed through the tremendous diversity of the coastal landscape and a series of iconic coastal landforms and ongoing coastal processes.

The technical evaluation by the International Union for Conservation of Nature (IUCN) on the nature of the values for which the Site was inscribed can be found at the end of appendix 1.



Figure 1: Map showing the general geology of the Jurassic Coast.

-  Triassic, 250 – 200 million years old
-  Jurassic, 200 – 145 million years old
-  Cretaceous, 145 – 65 million years old



³ The formal recognition of becoming a WHS is to be inscribed on the World Heritage 'List'

The importance of Erosion

The coast is where land, sea and sky meet. It is a dynamic landscape where drama is found both in its nature and in how we as human beings interact with it.

Conservation of the Jurassic Coast World Heritage Site starts with the rock exposures, fossils and natural landforms that form the basis of its Outstanding Universal Value. The coastline we know today was created by the natural process of erosion. Over time it has exposed world-class geology and palaeontology and created iconic and much-loved landforms, such as Chesil Beach, Durdle Door, Lulworth Cove and Ladrham Bay. Natural change is ongoing and part of the evolving story of the Jurassic Coast.

Allowing natural erosion to continue is the most effective way to maintain the Outstanding Universal Value of the Jurassic Coast and safeguard its World Heritage Status. However, this can be in conflict with the needs or desires of coastal communities to protect themselves from flooding and coastal retreat. A pragmatic approach to resolving this conflict where it arises usually leads to positive outcomes. This is often best done through collaboration in order to find an acceptable balance between the needs of people and the needs of the natural environment.

2.1 The Outstanding Universal Value of the Dorset and East Devon Coast

UNESCO requires that the reasons for inscription onto the World Heritage List are presented in the form of a Statement of Outstanding Universal Value (SOUV) which "...will be the key reference for the future effective protection and management of the property"⁴.

The SOUV for this Site was finalised in June 2010 and agreed at the World Heritage Committee Meeting of

the same year. It is key to the Management of the Site and reflects the operating basis at the time of inscription.

Further to the SOUV, a set of Attributes are defined for the Site that help in understanding its integrity and management requirements. Attributes are aspects of a property which are associated with or express the Outstanding Universal Value (OUV) and can be tangible or intangible.

Statement of Outstanding Universal Value (SOUV)⁵

Dorset and East Devon Coast United Kingdom of Great Britain and Northern Ireland

Id. N° 1029 Date of inscription 2001⁶

Brief synthesis


The Dorset and East Devon Coast has an outstanding combination of globally significant geological and geomorphological features. The property comprises eight sections along 155 km of largely undeveloped coast. The property's geology displays approximately 185 million years of the Earth's history, including a number of internationally important fossil localities. The property also contains a range of outstanding examples of coastal geomorphological features, landforms and processes, and is renowned for its contribution to earth science investigations for over 300 years, helping to foster major contributions to many aspects of geology, palaeontology and geomorphology. This coast is considered by geologists and geomorphologists to be one of the most significant teaching and research sites in the world.

Criterion (viii): The coastal exposures along the Dorset and East Devon coast provide an almost continuous sequence of Triassic, Jurassic and Cretaceous rock formations spanning the Mesozoic Era and document approximately 185 million years of Earth's history. The property includes a range of globally significant fossil localities – both vertebrate and invertebrate, marine and terrestrial – which have produced well preserved and diverse evidence of life during Mesozoic times. It also contains textbook exemplars of coastal geomorphological features, landforms and processes. Renowned for its contribution to Earth science investigations for over 300 years, the Dorset and East Devon coast has helped foster major contributions to many aspects of geology, palaeontology and geomorphology and has continuing significance as a high quality teaching, training and research resource for the Earth sciences.

⁴Operational Guidelines for the Implementation of the World Heritage Convention

⁵A full description of the significance of the Site can be found in appendix 1. Details of the protection and management arrangements for the Site can be found in Chapter 2.2

⁶SOUV agreed by UNESCO WH Committee meeting 2010



Integrity: The property contains all the key, interdependent elements of geological succession exposed on the coastline. It includes a series of coastal landforms whose processes and evolutionary conditions are little impacted by human activity, and the high rate of erosion and mass movement in the area creates a very dynamic coastline which maintains both rock exposures and geomorphological features, and also the productivity of the coastline for fossil discoveries. The property comprises eight sections in a near-continuous 155 km of coastline with its boundaries defined by natural phenomena: on the seaward side the property extends to the mean low water mark and on the landward side to the cliff top or back of the beach. This is also in general consistent with the boundaries of the nationally and internationally designated areas that protect the property and much of its setting. Due to the high rate of erosion and mass movement, it is important to periodically monitor the boundaries of the properties to ensure that significant changes to the shoreline are registered.

Protection and management requirements: The property has strong legal protection, a clear management framework and the strong involvement of all stakeholders with responsibilities for the property and its setting. A single management plan has been prepared and is coordinated by the Dorset and Devon County Councils. There is no defined buffer zone as the wider setting of the property is well protected through the existing designations and national and local planning policies. In addition to its geological, paleontological and geomorphological significance, the property includes areas of European importance for their habitats and species which are an additional priority for protection and management. The main management issues with respect to the property include: coastal protection schemes and inappropriate management of visitors to an area that has a long history of tourism; and the management of ongoing fossil collection, research, acquisition and conservation. The key requirement for the management of this property lies in continued strong and adequately resourced coordination and partnership arrangements focused on the World Heritage property.

Attributes for the Dorset and East Devon Coast World Heritage Site

The Earth science interests of the Dorset and East Devon Coast World Heritage Site are recognised within the Geological Conservation Review (GCR): a UK-wide audit of the best sites of their type in Great Britain. The GCR supports the Sites of Special Scientific Interest (SSSI) that provide the legal framework to protect the coast. The Site is currently monitored through the SSSI's but by looking at the GCR sites within them uses a set of **very detailed attributes** for the Site. Furthermore, the GCR sites on this coast lie within four categories; **stratigraphy, palaeontology, geomorphology** and **structure**, and are available on request.

Attributes

1. Stratigraphy (the rock record) and structure

The property includes a near-continuous sequence of Triassic, Jurassic and Cretaceous rock exposures, representing almost the entire Mesozoic Era (between 251 and 66 million years ago), or approximately 185 million years of Earth history. Because the overall tilt or 'dip' of the rocks is gently to the east, each section of coast contains its own unique part of the story that add up to the whole; a globally significant site.

2. Palaeontological record

The property contains a diverse range of internationally important Mesozoic fossil localities, including key areas for Triassic reptiles, and for Jurassic and Cretaceous mammals, reptiles, fish and insects. These chart virtually one third of the entire evolution of complex life forms. The ammonite zonation is also important as these animals changed rapidly through time and can therefore be used to date the relative ages of the rocks and place them in a time context with other sites.

3. Geomorphological features and processes

A wide range of significant geomorphological features and processes are also represented within the property. It is renowned for its demonstration of landsliding, and of beach formation and evolution in relation to changing sea level, including raised beaches and offshore peat deposits. The coast demonstrates spectacularly how geological structure controls the evolution of bays and headlands and how erosion on a discordant and concordant coastline creates these features. There are also superb examples of the formation of caves, arches and sea stacks.

4. Ongoing scientific investigation and educational use, and role in the history of science

The coast played a key role in the development of the Earth sciences over the last two centuries and continues to provide an outdoor classroom for teaching, and an unparalleled resource for ongoing research. The continuous rock sequence contained in the naturally eroding cliffs allows scientists to test existing theories and generate new ones. Fossils new to science continue to be found through responsible collecting efforts, and thus contribute to maintaining the OUV of this Site. The ability to study erosional processes is also important, and is also now benefiting from the application of new monitoring techniques.





5. Underlying geomorphological processes in the setting of the Site

The reasons for the form, diversity and quality of the coastal landscape are found in the underlying geology and the geomorphological processes acting on it. Much of the landscape is dominated by relic features and dates back to a time of active processes under very different climatic conditions from today. The long-term preservation of the Site's OUV depends on the maintenance of dynamic natural processes in the setting, and the awareness that processes acting in the land or sea setting may impact on the Site itself.



2.2 Protecting the World Heritage Site

Pillars of Outstanding Universal Value

All Site protection and management efforts should be seen through the lens of Outstanding Universal Value (OUV). The World Heritage Committee describe OUV as having three supporting pillars (see figure 2 below). This simple visual aid helps to explain how criteria, integrity and protection and management are integral components that collectively comprise OUV.

Criteria: 'Why is this place important?'

To be included on the World Heritage List, sites must be of Outstanding Universal Value and meet at least one out of ten selection criteria. The Dorset and East Devon Coast World Heritage Site is inscribed under criteria viii.

Integrity: 'Does it tell the whole story? Is it truthful?'

Integrity is about ensuring a Site has the complete representation of the features and processes which convey the property's significance. It is "a measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes." and a question of whether a Site "contains all or most of the key interrelated and interdependent elements in their natural relationships"⁷.

Protection and Management: 'What is needed to assure its future?'

UNESCO state that "outstanding universal value, the conditions of integrity and/or authenticity at the time of inscription are sustained or enhanced over time."⁸ and that "properties must be protected from all threats or inconsistent uses. These developments can often take place beyond the boundaries of a property."⁹

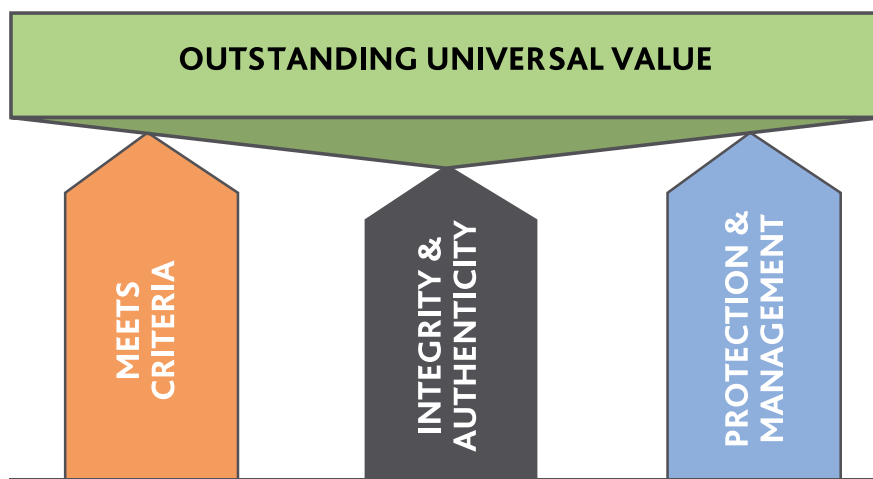


Figure 2: Illustration of the three pillars of Outstanding Universal Value. All three must be in place for a property to meet the requirements of the World Heritage List. Note: Authenticity is not applicable to natural World Heritage Sites.

⁷ Para 93, Operational Guidelines for the Implementation of the World Heritage Convention

⁸ Para 96, Operational Guidelines for the Implementation of the World Heritage Convention

⁹ UNESCO Guidelines on nominations of cultural or natural properties on the WH List

Boundaries of the Site

The boundaries of the Site were drawn and agreed at the time of nomination to ensure the “*full expression of the outstanding universal value and the integrity and/or authenticity of the property*”¹⁰ and remain unchanged. They are based on 66 Geological Conservation Review (GCR) sites and exclude the commercial port area at Portland and the man-made frontages of Sidmouth, Seaton, Lyme Regis, West Bay, Weymouth and Swanage.

In recognition of ongoing natural change along this dynamic World Heritage Site, UNESCO recognise a moving boundary that keeps pace with erosion. Therefore, a written definition for its boundary is used, rather than a line on the map. There are some exceptions however and detailed descriptions and reference maps of the Site boundaries can be found in appendix 2.

General written description for the boundary of the Dorset and East Devon Coast World Heritage Site

Landward

- On cliff coastline, the boundary is taken at the break in slope at the top of the most landward cliff-scarp
- On coastline with no cliffs, the boundary is taken at the back of the beach
- The Site includes The Fleet lagoon and the boundary will be taken at the top of the low cliffs that lie on its northern shore



Seaward

- Mean Low Water Mark, as defined by the UK Ordnance Survey



¹⁰ Para 99, Operational Guidelines for the Implementation of the World Heritage Convention

The Setting of the Site

Guidance from UNESCO describes the need to protect an area around the World Heritage Site, generally referred to as its setting. In an applied sense, the setting of the Jurassic Coast provides the functional and experiential context for the Site's attributes and should therefore be sensitively managed as part of the protection of OUV.

The partnership has agreed the definitions for setting below.



Experiential setting

The setting should be regarded as the surrounding landscape and seascape, and concerns the quality of the cultural and sensory experience surrounding the exposed coasts and beaches. Although the Coast was not inscribed on the World Heritage list for its natural beauty, UNESCO recognised its value with respect to this criterion as 'nationally important'¹¹, justified further by the UK Government's decades-long designation of the East Devon and Dorset Areas of Outstanding Natural Beauty (AONB), which cover more than 80% of the WHS area. An assessment of landscape¹² and seascape¹³ character provides a starting point for evaluation of the impact of change in the setting. The special qualities of the AONBs, such as tranquillity and undeveloped character of coast and seascapes, are important for helping to determine how people experience and enjoy the setting of the WHS.



Photo by Sam Rose

Functional setting

In the context of a moving boundary that keeps pace with erosion, the setting is important because development and activity within it may sooner or later impact on the World Heritage Site itself. The development of housing, for instance, may lead to a need for future coastal defences. In order to maintain OUV, the cliffs need to be allowed to erode into a natural setting. Secondly, the Site, most notably the coastal landforms and processes, are defined and explained by past and present geomorphological and hydrological systems that extend landward and seaward. Developments that impact on these systems may well have a resulting impact within the Site itself.



Photo by Alan Holiday

¹¹ See IUCN Technical evaluation in appendix 1

¹² Developed by the Devon Landscape Policy Group, and the Dorset AONB Team and Dorset CC

¹³ Seascape assessment is led by the Marine Management Organisation (MMO), with evidence in Dorset from the CScope project

In addition to the experiential and functional setting of the WHS there is an important contextual role played by geodiversity outside of the Site boundaries. For example, recent surveys of the bathymetry adjacent to the Jurassic Coast have revealed a spectacular seabedscape that contains a wealth of information that supports and expands our understanding of the Site's OUV. Landwards of the WHS a host of rock exposures in quarries, cuttings and stream banks offer similar insights, sometimes providing unique opportunities to experience details of the 'Walk Through Time' that are present but inaccessible on the coast itself. These inland features are also often connected to cultural or historic practices and help to demonstrate the intimate links between geodiversity, distinctive communities and landscape character.

It is becoming increasingly straightforward to identify submarine and terrestrial aspects of wider geodiversity and describe their particular contribution in support of the WHS, but more work is required to understand and define them as part of the Site's setting. In particular, it will be desirable to understand the potential contribution of historic environment assets such as Scheduled Monuments, Listed Buildings, Registered Parks and Gardens and conservation areas.

Buffer zone

A buffer zone is an area that surrounds a World Heritage Site that has complementary legal restrictions placed on its use and development to give an added layer of protection to the property. The nomination document and first Management Plan for the Dorset and East Devon Coast WHS established that the existing conservation protection and planning policies relating to the Site and its surrounds were sufficiently robust as to make a buffer zone unnecessary. This opinion has not changed and the partnership's position is stated in appendix 2.



Legal framework for the Protection of the Site and Setting

Although the World Heritage Convention has been ratified by the UK Government, the designation is not recognised in statute. The Site, as with all others in the UK, is protected by existing UK planning and conservation laws and by specific planning guidance on World Heritage Sites.

This section outlines the extent of this protection for the Dorset and East Devon Coast, through international and national statute, and through non-statutory plans, policies and designations.

National planning

The National Planning Policy Framework (NPPF), updated in February 2019, and the supporting National Planning Practice Guidance (NPPG), provide the key protection for the WHS within the planning system. NPPF defines World Heritage Sites as designated heritage assets and relevant detail in respect of their protection can be found in NPPF paragraphs 11, 184, 185, 189, 190, 193, 194, 200, 201 and 205. Paragraph 184 is key in that it identifies World Heritage Sites as being of the highest significance and therefore the designated heritage assets of the greatest importance.

Of additional particular note are paragraph 11, 185, 193 and 194. Paragraph 11 emphasises that the presumption in favour of sustainable development should apply unless policies within the framework '*that protect areas or assets of particular importance*' provide strong reasons for restricting or refusing a development proposal. NPPF defines a number of designations as '*areas or assets of particular importance*', among them designated heritage assets. Paragraph 185 concerns the need for plans to set out a positive strategy for the conservation and enjoyment of the heritage assets. Paragraph 193 states that '*When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be)*' and paragraph 194 states '*Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of... World Heritage Sites, should be wholly exceptional*'.

In support of the NPPF, the National Planning Practice Guidance (NPPG) includes several paragraphs that specifically relate to World Heritage Sites, found under the section on 'Conserving and enhancing the historic environment' and 'Designated heritage assets'. These cover a range of issues including setting, local plans and what consultation is required for proposals that may affect a WHS.

It is also important to note that, in general, the various heritage and natural environment policies within NPPF serve to protect a range of designated and undesignated sites and landscapes, a number of which are important to the conservation, understanding and enjoyment of the WHS and its setting.

In addition to the NPPF the following planning circular remains relevant:

- *Circular 06/05: Biodiversity and Geological Conservation* provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England.

Finally, the UK Government's coastal concordat for England sets out a simplified process for consenting to coastal developments in England where several bodies have a regulatory function¹⁴. This is relevant to regulatory processes rather than legislation, particularly for coastal defences.

¹⁴ <https://www.gov.uk/government/publications/a-coastal-concordat-for-england>



Sub-national planning

The Localism Act 2011 introduced the Duty to Cooperate to deliver regional outcomes. This requires local councils to work together when preparing their local policies and plans, to ensure that 'bigger than local' issues which cross local boundaries are dealt with properly. Therefore, Local Plans should address WHS issues consistently the length of the Site.

Responsibility under marine planning runs to the mean high water mark with land-use planning to the mean low water mark, meaning a shared responsibility for the Marine Management Organisation (MMO) and public authorities planning in the intertidal zone¹⁵. The Marine and Coastal Access Act 2009 ensures that the MMO must take all reasonable steps to secure that marine plans are compatible with development plans in the land-use planning system¹⁶. In addition, there is also a requirement when preparing a marine plan to have regard to other plans connected with the management or use of the sea or coast adjoining or adjacent to the marine plan area¹⁷.

Local planning

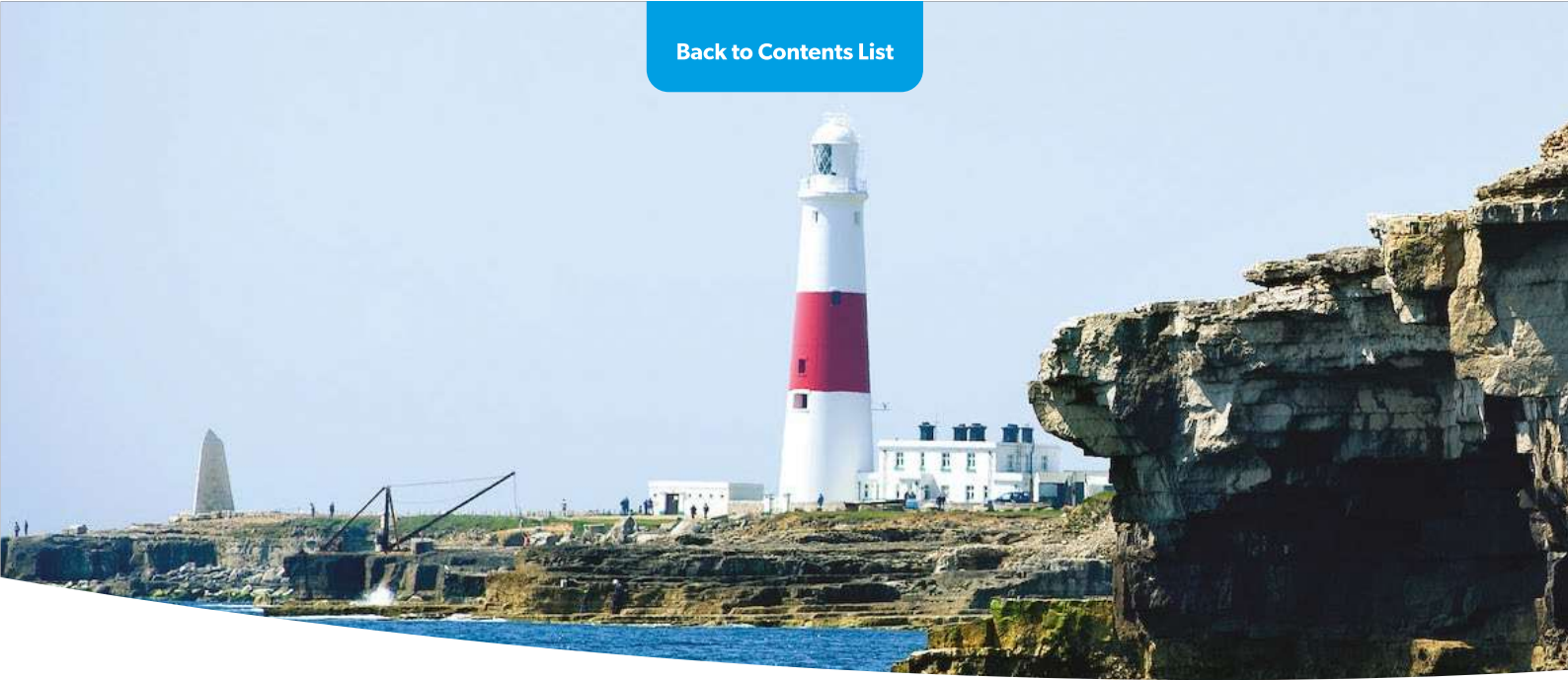
Close integration within Local Plans is fundamental to the success of Site management. Local Plans, along with any Neighbourhood Plans (introduced under the Localism Act 2011), provide the basis for determining all non-minerals or waste planning applications and future development within the Site and its setting. Separate policy is provided in Minerals and Waste Local Plans. To ensure the WHS's long term protection, Local Plans must be consistent with the NPPF regarding World Heritage and in line with the policies of this Partnership Plan. This process is supported by paragraph 24 in the NPPF, which states that '*Local planning authorities and county councils (in two-tier areas) are under a duty to cooperate with each other, and with other prescribed bodies, on strategic matters that cross administrative boundaries*'. Prescribed bodies include Natural England, Historic England and the Environment Agency. Helpfully, the evidence base that supports statutory development plans can also support WHS plan policies e.g. national and local landscape and seascape character assessments.

At the time of writing this plan, Dorset Council was in the process of creating a new Local Plan for the Dorset area. The East Devon Local Plan (2013 – 2031) includes various strategies and policies throughout that give appropriate regard for the WHS.

¹⁵ <https://www.gov.uk/guidance/do-i-need-a-marine-licence>

¹⁶ Paragraph 3 of Schedule 6 to the Marine and Coastal Access Act 2009

¹⁷ Paragraph 9(h) of Schedule 6 to the Marine and Coastal Access Act 2009



AONB Management Plans

Of particular significance to this Plan, and the conservation of the Site and setting, are the statutory Management Plans for the Dorset and East Devon Areas of Outstanding Natural Beauty (AONB). Not only are the special qualities of each AONB important in understanding the setting of the WHS, the policies in their respective management plans provide some of the protection that negates the need for a buffer zone for the WHS. In addition, there is a great deal of synergy between those plans and this Plan in terms of sustainable landscape management.

Non-statutory plans

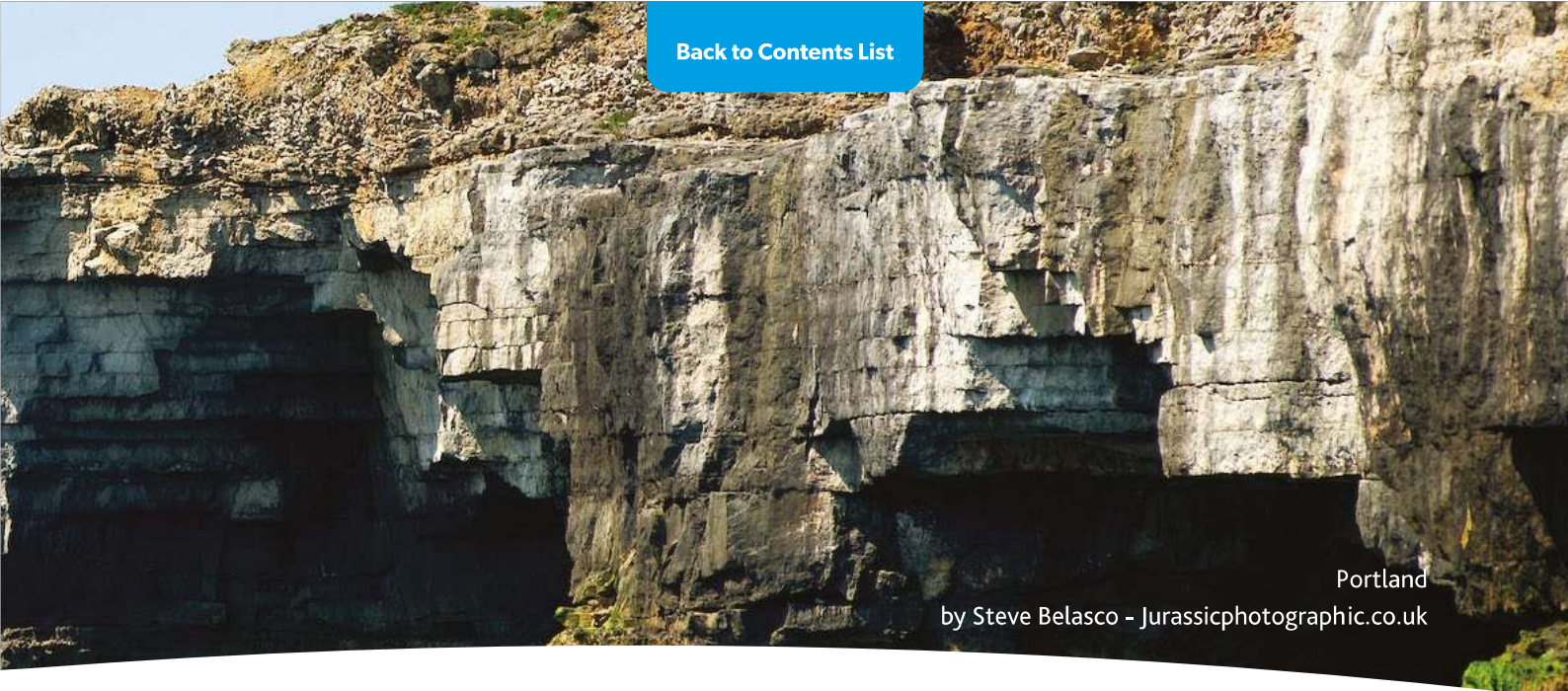
Statutory planning policies at local and national level are supplemented by a great many other non-statutory plans and policy documents. Shoreline Management Plans (SMPs) are the most significant strategic plans for the World Heritage Site. Any updates or revisions to relevant SMPs need to take account of the policies in this plan and accurately reflect the values and interests of the WHS. Other non-statutory plans that have a significant bearing on the management of the Site include the Dorset Coast Strategy and local site management plans e.g. for the National Trust properties, Local Nature Reserves and so on.

Call-in regulation

The NPPG states "*Planning authorities are required to consult the Secretary of State for Communities and Local Government before approving any planning application to which Historic England maintains an objection and which would have an adverse impact on the Outstanding Universal Value, integrity, authenticity and significance of a World Heritage Site or its setting, including any buffer zone or its equivalent. The Secretary of State then has the discretion as to whether to call-in the application for his/her own determination.*"¹⁸

The Jurassic Coast is currently in a unique position as the only natural World Heritage Site in England. Historic England does not have the remit or expertise to advise on impacts on a natural World Heritage Site, but can advise on UNESCO processes in relation to notification to the Department for Digital, Culture, Media and Sport (DCMS) and the World Heritage Committee. NPPG indicates that Natural England should be consulted on proposals that might affect natural WHS, and in the context of call-in regulation their views should be taken into account in combination with those of Historic England.

¹⁸ National Planning Practice Guidance



Portland
by Steve Belasco - Jurassicphotographic.co.uk

Protection from threats from the marine environment

The principal threat to the Site from the marine environment is posed by heavy crude or fuel oil from the many cargo vessels that use the English Channel. In terms of the OUV of the Site, this oil would significantly change the behaviour of shingle beaches, particularly Chesil Bank. This could have enormous implications for shingle landforms and their associated areas such as The Fleet lagoon, also part of the Site. Provisions for reducing risks of this type are put in place by the Government through the powers of the Maritime and Coastguard Agency (MCA) and the Department of Transport and through the identification of Marine Environmental High Risk Areas.

From a response point of view, the MCA will activate the National Contingency Plan in any major pollution incident. Local plans developed in conjunction with the Local Resilience Forums (LRF) also play a major role in response to coastal pollution incidents. For example, a Dorset Coastal Pollution Plan has been produced by Dorset Council's Emergency Planning Service, which integrates with the National Contingency Plan and details the shoreline clean-up procedures to be followed in the event of a Tier 2 or 3 pollution incident. The plan covers the entire coastline of Dorset from Lyme Regis to Christchurch.

Individual Harbours (such as Weymouth, Portland, Poole) have developed specific oil spills contingency plans, which are regularly exercised in conjunction with the MCA, contractors, and local emergency responders. Other industrial sites that may pose a pollution risk due to the nature of their business have developed specific response plans, to include pollution response elements. Control of Major Accident Hazards Regulations 2015 applies to two sites in Dorset (Perenco UK based on the Isle of Purbeck, and Portland Bunkers UK, based in Portland Port) and both have such plans in place that are regularly updated and exercised under statutory requirements.

Conservation designations

The Site is covered in its entirety by at least one or more conservation designations, made either for geological, wildlife or landscape value. There are designations set out under international and UK law as well as others that have no legal status, but carry varying degrees of weight in the planning system. These are summarised in Table 1 and in the accompanying maps (appendix 2M). Even though some of these designations are not protected for their geology, they depend upon a naturally eroding coastline and so are consistent with the needs of the WHS.

This complex blend of designations affords a high level of protection which, combined with planning policy, should provide long term security for the natural values of the World Heritage Site. However, gaps in coverage remain.

The Landscape Review by Julian Glover, published in 2019, makes several recommendations to strengthen

AONB designations and suggests that a National Park for Dorset and East Devon could be considered. The resulting implications for the conservation of the WHS are unclear, but will need careful consideration.

Finally, the marine environment adjacent to the World Heritage Site has recently been afforded better protection through the designation of the Studland to Portland, and Lyme Bay to Torbay marine Special Areas of Conservation (SACs)¹⁹. The provisions in the Marine and Coastal Access Act 2009, and the marine spatial planning and Marine Conservation Zones (MCZ) processes established therein may well also provide stronger statutory protection for the future. In addition, the International Maritime Organisation (IMO) have a series of measures available, including through the International Convention for the Prevention of Pollution from Ships (MARPOL), and Particularly Sensitive Sea Areas (PSSAs).

¹⁹ Currently still candidate SACs, but all provisions in place

Table 1: Conservation designations. For more information about these designations go to the following websites:
 A – I: www.naturalengland.org.uk, C, E, F & J: www.jncc.gov.uk K: www.devon.gov.uk

Designation	Purpose	Number and list	Legal status
A. Site of Special Scientific Interest (SSSI)	Geology and biodiversity	13: covering all of the Site except for c. 10.5km in East Devon. Full list available in appendix 2	Statutory UK
B. Area of Outstanding Natural Beauty (AONB)	Landscape	2: East Devon, Dorset, covering all of the Site and setting except East Devon inter-tidal areas, small areas around Sidmouth, Seaton, Beer, Weymouth and all of Portland	Statutory UK
C. European Special Area of Conservation (SAC)	Wildlife	4: Sidmouth-West Bay, Chesil and The Fleet, Isle of Portland to Studland Cliffs, St Alban's Head to Durlston Head: approx 75% of the Site	Statutory European Habitats Directive
D. National Nature Reserve (NNR)	Nature conservation	2: Axmouth to Lyme Regis Undercliffs and Durlston Country Park	Statutory UK
E. Special Protection Area (SPA)	Bird	2: Chesil Beach and The Fleet lagoon, Exe Estuary	Statutory European Birds Directive
F. RAMSAR Site for wetlands conservation	Wetlands	2: Chesil Beach and The Fleet lagoon, Exe Estuary	Statutory International convention
G. Local Geological Sites	Regionally important geology	Many, including much of Portland	Non-statutory
H. Site of Nature Conservation Importance (SNCI) / County Wildlife Sites	County level site of biodiversity value	Some within the setting of the Site	Non-statutory Planning system embedded
I. Heritage Coast (HC)	Landscape	3: East Devon, West Dorset and Purbeck. Covers most of the WHS and setting except Portland	Non-statutory planning designation
J. Geological Conservation Review (GCR) sites	Nationally important geology	66: full list available in appendix 2	Non-statutory
K. Coastal Preservation Area (CPA)	Protective planning policy	1: East Devon coastal area	Planning designation
L. European Marine Sites	To protect seabed properties and specific species	Lyme Bay and Torbay cSAC, Studland to Portland cSAC Chesil beach and Stennis ledge MCZ, South Dorset MCZ	Statutory European Habitats Directive, Marine Act 2009

3. ISSUES AND OPPORTUNITIES

This chapter looks at some of the key issues and opportunities in managing the World Heritage Site, meeting the Convention and working towards international Sustainable Development Goals. They inform the policies and actions within this plan, support future priorities and identify aspirations which may take longer to achieve but are nevertheless important. The items are not included in any priority order.



SUSTAINABLE DEVELOPMENT GOALS



The Jurassic Coast Trust supports the Sustainable Development Goals.

3.1 Political

Brexit

The development of this Plan was carried out while the UK's withdrawal from the European Union was still being negotiated. Whilst the European Union (Withdrawal) Act 2018 has retained EU derived laws in domestic legislation, including those relating to nature conservation, future changes to environmental legislation, trade and international cooperation remain a possibility. Additionally, changes to migration legislation could impact staff recruitment in the local tourism industry. However, the partnership is in a strong position to be able to respond constructively to these and other changes as they become clear.

Austerity

Since 2010 there have been consistent funding reductions to large parts of the public sector. Investment in heritage is, in general, much reduced, leading to increased competition for charitable grants and other funding sources. Diminishing investment presents a considerable risk for the management of the WHS and its supporting infrastructure of coastal amenities, landscape conservation, visitor centres and museums. There is risk too in providing the day-to-day management and partnership coordination for the Site through an independent charity – the Jurassic Coast Trust. However, the partnership itself is a crucial means to respond to these issues, providing a platform for strategic planning, joint funding bids and co-ordinated heritage and conservation initiatives.

Environmental Policy

National Environmental Policy direction is being framed within the Government's 25-year environment plan "A Green Future: Our 25 Year Plan to Improve the Environment", published in 2018. The general trend within the plan towards landscape scale environmental conservation is a huge opportunity for the WHS, particularly in areas such as enhancing beauty, heritage and engagement with the natural environment, and adapting to climate change. A specific issue for this WHS arises from the fact that, at the highest level, World Heritage is covered by DCMS and Historic England. This is further expressed in the National Planning Policy Framework for England where World Heritage is included as a part of the historic environment. This has resulted in some procedural uncertainty and confusion when responding to developments along this natural WHS. Continued collaboration between Natural England, Historic England and DCMS is helping to resolve the issue.

Other opportunities include:

- The proposal to create a Dorset and East Devon National Park, although the position of the WHS and its management in this proposal remains unclear at this time and must be carefully considered
- The Government's Landscapes Review, led by Julian Glover
- The implications for Site access and management from the implementation of the England Coast Path
- The potential for the WHS to contribute to nature recovery networks

Coastal Communities

A report from the House of Lords' Regenerating Seaside Towns and Communities Select Committee²⁰ identified the key issues facing seaside towns and made a series of recommendations for their regeneration. Significantly for the WHS, the recommendations emphasised that investment in heritage assets is of paramount importance in supporting the wider economy of seaside towns. Growth in affordable housing in seaside towns is also

recommended by the report, an ambition already supported nationally by Government. The WHS has the potential to be a key driver in the regeneration of seaside towns, but in order to provide that benefit the Site's OUV must be protected by a sustainable approach to development. In particular, this will require coastal communities to adapt to sea level rise and climate change.



²⁰ www.parliament.uk/regenerating-seaside-towns

3.2 Socio-economic

Inspiration and wellbeing

The ideas behind World Heritage are profound and inspirational. The OUV of the Jurassic Coast provides astonishing insight into the history of our planet and its geodiversity underpins the biodiversity and cultural life of the area. It is a powerful, place-making story that continues to seep into the identity of Dorset and East Devon. The health benefits of spending time in natural environments and near 'blue spaces' (lakes, rivers and the sea) are becoming increasingly clear. Encouraging people to explore the beauty and diversity of the Jurassic Coast offers tremendous opportunities to promote active and healthy lifestyles. People's outdoor experiences are bolstered by a rich provision of learning and interpretation materials that create emotional and intellectual access routes into the landscape. The partnership is committed to helping people connect with the WHS and improve access to the countryside for all. Volunteers are a fundamental part of that endeavour, providing essential support to heritage and conservation organisations and freely sharing their passion for this special place with others.

Participation and inclusion

The Government 2019 Landscape Review recommends that more work is needed across the environmental and heritage sectors to consider audiences carefully and develop approaches that are sensitive to the needs of Black, Asian and Minority Ethnic (BAME) groups, LGBTQ people, religious groups, socially and economically disadvantaged people, people with visible or hidden disabilities or other underserved parts of our communities. There is a great opportunity for the partnership to try and improve the ways in which the needs of these groups are met along the Jurassic Coast (for example gender neutral toilets at visitor centres) and also to engage communities that are underrepresented or underserved more proactively. A more detailed discussion on this topic is included in Chapter 5.

Life on a World Heritage Site

The World Heritage programme supports UNESCO's global ambition to promote peace through 'the intellectual and moral solidarity of humanity'. The challenge for the partnership is to develop working practices that strive for that ideal. On the Jurassic Coast, the 'String of Pearls' is a concept that encapsulates the principles of co-operation, mutual benefit, accessibility, inclusion and sustainability, enabling every part of the Site to make an important contribution to the whole. It is central to the process of creating experiences for visitors and residents that are distinctive, complementary and responsive to the Jurassic Coast's overarching identity as a WHS. The 'pearls' have traditionally included the visitors' centres and museums, but in reality, could extend to cover the additional facilities and amenities that together inform the way people experience the Site.

Particular issues and opportunities for the String of Pearls group and the wider partnership include:

- Data collection and sharing to help with visitor management, targeted marketing, and easing pressure points along the coast
- Understanding changing tourism demands, such as cruise ship visits and the benefits they might bring to the local economy
- The need to deal with influxes of visitor numbers and over-tourism in certain areas
- Promotion of sustainable transport options and collaboration around signposting and connectivity
- Promoting the use of local service providers by visitors and by the partnership – e.g. expert guides, unique activities such as coasteering, specialist skills such as fossil preparation
- Collaboration to help improve diversity and social inclusion, following the recommendations in the Government's 2019 Landscape Review.

Understanding the value of OUV

Through the concept of OUV, the geodiversity of the Jurassic Coast is identified as having a global natural capital value. Research is key to understanding the economic, social and environmental benefits it offers to local communities and people around the world. Research across multiple disciplines, and in particular collaborative research, can create new ways to communicate the benefits of World Heritage status and engage people with the Site. At the time of writing in 2020, the Proceedings of the Geologists Association has published a special volume titled 'Jurassic Coast: geoscience and education'. It contains a series of papers covering earth science, interpretation and learning and represents an important moment of reflection on the value of this WHS. Research also has an intrinsic value for the Jurassic Coast because the early career scientists that come here to train and develop their skills will be the next generation of experts that will be called on to help understand and defend the OUV of the Site. The importance of engaging with them positively in order to develop their relationship with the WHS should not be underestimated.



Fossil collecting, acquisition and display

Collectors have been finding and rescuing the great majority of important fossils from the cliffs and beaches of Dorset and East Devon for over 200 years, and continue to play this essential role in the management of the WHS. Without their intervention, most fossils, once exposed by the effects of weathering in the cliffs and erosion by the sea, would inevitably be damaged or destroyed sooner or later by those same processes.

The Jurassic Coast partnership supports the continued management of collecting within the Site in ways that, in general, follow Natural England's principles on responsible collecting, in combination with certain landowners' additional requirements along specific parts of the coast. It is also important that the fossil collecting codes for West Dorset, and the Axmouth to Lyme Regis Undercliffs National Nature Reserve, continue to operate.

An aim within the Jurassic Coast partnership is that scientifically important and display quality fossils from the WHS should be acquired by local accredited museums for research and display and thus remain close to the Site. It is considered that keeping their specimens local to the Jurassic Coast would be preferred by collectors and so help with acquisition. It would also ultimately lead to local employment opportunities, economic benefits and significant social and cultural benefits through associated learning and engagement programmes.

Towards this aim, during the past 5 years there have been several developments and projects that have expanded or otherwise improved the storage, research possibilities and display of important fossils, most notably the Etches Collection at Kimmeridge, that houses an internationally important collection

of fossils from the Kimmeridge Clay. However, there remains a considerable backlog of fossils from the WHS that would be suitable candidates for acquisition, but for which there is little or no display space (and uncertain storage space), and the backlog continues to grow. The major re-build and refit of the Dorset County Museum will provide an opportunity for them to make new acquisitions but further possibilities to expand other existing local museums appear to be very limited, although there is great potential to improve support for the curation, conservation, documentation and display of their existing collections.

There is a distinct opportunity here for major project work that seeks to improve the conservation of the palaeontological collections that support the Site's OUV. For a number of years, there has been a view held by some, particularly among the fossil collecting community, that a new high quality museum featuring a magnificent display of Jurassic Coast fossils to complement existing local museums, perhaps incorporating a centre for study and research, should be central to these ambitions, and would help to illustrate the scientific importance, quality of preservation, variety and in many cases the aesthetic appeal of fossils to be found along the WHS. A capital project of that kind would need a secure business case and evidence to demonstrate need. A vehicle for delivery would be required with the capacity to take on the work of designing, promoting, fund raising and delivering such a scheme. For it to be achieved, a strong case will need to be made for it and with widespread support. Work such as the Jurassic Coast Collection project being developed by the Jurassic Coast Trust should be a useful source of evidence, with the potential to catalyse major projects such as a new museum and future investment in fossils in general along the length of the World Heritage Site.

International connections

There is an important opportunity to build better connections with the international community of UNESCO sites and other protected landscapes. There would be particular value in developing relationships with other geological WHSs in order that the Sites' communities might learn from one another but also to improve our own understanding of the Jurassic Coast's place amongst the assets that protect global geodiversity. World Heritage status provides a platform to reach out to a global audience, which could be achieved with considerable success by utilising new technologies. UNESCO also expect all WHSs to respond to the UN Sustainable Development Goals. The Jurassic Coast's contribution towards these is set out in appendix 4. More generally there is an opportunity to promote understanding of the role of UNESCO itself and the various international programmes it supports.



© Dorset County Museum and Moonfleet Photography

3.3 Environmental

Climate change and sea level rise

The International Panel on Climate Change (IPCC) Global Climate Projections²¹ and the most recent UK Climate Projections²² indicate worrying trends that will undoubtedly have significant consequences for the Jurassic Coast.

According to the UK Climate Projections, within the next 100 years sea levels along the Jurassic Coast could rise by around one metre, causing the seaward boundary of the WHS to move higher up the foreshore. As a result, access to parts of the foreshore and any features that exist there may be reduced or lost altogether. Higher sea levels will also mean an increase of erosion rates, causing the landward boundary of the WHS to retreat. This will inevitably lead to additional issues such as the loss of cliff-top paths and, in some places, the migration of the WHS out of mapped SSSI units and the statutory protection they provide. These issues will be exacerbated by the predicted increases in annual rainfall and the frequency of extreme weather events such as major storms, both of which will serve to drive coastal processes at an accelerated rate.

These general trends provide important context, but the specific impacts they may have will vary along the WHS. In part this will be down to the particular geology and geomorphology of a given location, but it will also depend on natural weather variations that have long been understood to drive geomorphological processes and cycles along the coast (e.g. the North Atlantic Oscillation). If these existing patterns change, the wave systems that we regard today as typical could be altered. This kind of detail is not covered by the current climate projections, but could have profound implications for the future of the WHS, with the potential to permanently transform the behaviour of beach systems and other coastal features. The WHS may not evolve in the way it was expected to at the time of designation.

As climate change progresses there is likely to be an increase in pressure to build new coastal defences. This is the single biggest threat to OUV and it is imperative that the partnership works towards a collective response that safeguards the Site. Coastal zone management will be an important tool, including Shoreline Management Plans and the emerging Coastal Change Management Areas. In order to effectively protect the Site's OUV, the partnership needs to emphasise the benefits of sustainable coastal management, adaptation and working with natural processes. When it comes to taking practical action, the differences between general trends and localised impacts are of tremendous importance because, in essence, the changes caused by the global climate crisis will not necessarily cause a local crisis everywhere along the WHS. Identification of the locations that are most vulnerable should be prioritised in order to help take preparatory action. This applies not only to decisions around coastal management, but for research, site conservation, and investment in visitor infrastructure and sustainable tourism.

In terms of engaging people with these issues, the Jurassic Coast is an excellent teaching tool to help people understand the patterns and consequences of past climate change and mass extinction. It can be used to illustrate actual impacts through the evidence of extinction events and environmental change, adding context and substance to the implications of the current climate and biodiversity crisis. Perhaps more importantly, it can also help catalyse discussion and action. The various potential impacts discussed above are ultimately driven by CO₂ emissions, with low or high emission scenarios making a huge difference to the rate of sea level rise (see figure 3). It is sensible then to aspire to engage people with the need to reduce their environmental impact and for each stakeholder within the Jurassic Coast partnership to make their own appropriate commitments in this regard.

²¹ <https://www.ipcc.ch/report/ar4/wg1/global-climate-projections/>

²² <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/index>

More widely, as part of measures to combat climate change, the pressure to create more green energy developments such as wind farms may increase. Such developments would contribute to the mitigation of climate change impacts and would be in line with certain UN Sustainable Development Goals i.e. 7. Affordable

and Clean Energy and 13. Climate Action. Previous green energy development has been resisted along the WHS due to potential negative impacts on OUV and setting, so it is important that the partnership seeks to balance the need to protect the Site with our commitment to the UN Sustainability Goals.

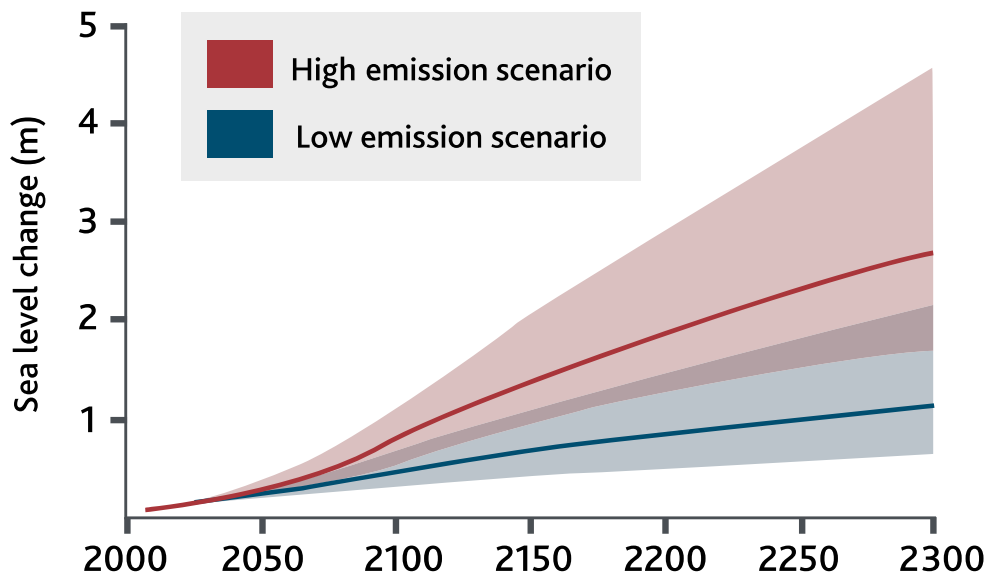


Figure 3: Sea Levels beyond 2100 (MET Office) Sea levels will continue to rise beyond 2100, however the uncertainty also increases further into the future.



Figure 3a: Ammonite pavement 2011



Figure 3b: Ammonite pavement 2019

Natural break-up of the ledges on Monmouth beach since 2011 has seen a huge part of the iconic ammonite pavement near Lyme Regis lost to the sea.

Promoting geodiversity

There is a significant opportunity to use the WHS to promote the role of geodiversity within our landscapes. The concept of OUV challenges us to carefully consider the tangible and intangible benefits provided by geodiversity. In doing so it highlights the importance of the resources directed in support of geoheritage and becomes a driver for further investment. There is tremendous value in the collective experience of the partnership in managing this Site since 2001, and the lessons we have learned could help others nationally and internationally who are working to parallel objectives. Similarly, there are likely to be valuable lessons that we could learn from others. Perhaps the best opportunity lies in building closer relationships between the Jurassic Coast and other UNESCO sites in the UK, particularly Geoparks. Closer involvement with the network of protected landscapes would also be of value as they too are working to make the most of their geodiversity and geoheritage assets. Organisations such as the National Trust, Geologist's Association and Association of Heritage Interpretation are often sources of best practice and innovation in engaging people with geodiversity. The Jurassic Coast partnership certainly has an important contribution to make to this wider community and may be able to draw considerable benefit from growing our connections to it.



Photo by Steve Belasco

Links between geology, culture and social history

UNESCO is placing increasing emphasis on the fact that nature and culture are closely related, and is encouraging all World Heritage Sites to incorporate this approach as part of their management practices.

There are deep connections between the globally important geodiversity of the Jurassic Coast and the cultural stories of Dorset and East Devon. The intimate relationship between people and geodiversity has developed over thousands of years, as geology has influenced the origins, historic fabric, traditional industries and heritage collections of distinctive local communities. For example, high quality flint from Beer in East Devon was used throughout the South West in the Stone Age and then actively quarried during the English civil war for use in muskets. In a sense, the World Heritage designation itself is a part of a continuing story of human interaction with the coast, reflecting a modern appreciation for this special landscape and a desire to protect it for future generations. Crucially, this pattern of interconnectivity helps to develop the 'String of Pearls' concept by providing further impetus for telling truly rich and distinctive local stories.

One key area of interaction between the World Heritage Site and culture has come through the arts. There is a long history of artists drawing inspiration from the Dorset and East Devon coast and targeted projects, such as the Jurassic Coast arts programme, have highlighted how collaborations with the arts sector can contribute to Site management and help to develop professional practice for all involved. A recent report by the Heritage Alliance²³ reveals how often heritage and arts depend on each other, and calls for more work to be done to strengthen this connection.

Exploring the relationships between geology, culture and social history can help people to better understand their communities and, in turn, nurture an appreciation of the World Heritage Site and geodiversity in general.

²³ Inspiring Creativity, Heritage and the Creative Industries – a Heritage Alliance report, 2019

3.4 Technological

Data

A huge variety of data relates to the WHS, from statistics about visitor behaviour to the boundary co-ordinates for SSSIs. This offers an opportunity to work towards better data sharing, where appropriate, especially in support of conservation, research, marketing, communications and visitor management. There could be great benefit in creating a standardised format for certain data sets and perhaps even in creating a dedicated and publicly accessible GIS platform for the WHS.

Social media

The increasing importance of social media is a significant issue and one certainly not to be neglected. There is already evidence to suggest that information shared via social media is driving an increase of interest in the WHS. For example, in the last five years several informal fossil hunting or fossil-related face book pages have been set up for Dorset and different parts of the Jurassic Coast. These have proved to be very popular and their appearance has been accompanied by a marked rise in the number of people engaged in fossil collecting, although the connection is unproved. This has caused concern in some cases, where parts of the coast not normally promoted as suitable for fossil collecting are receiving increased attention. Another example is that social media may possibly be encouraging people to put themselves in danger on cliff edges or accessing restricted parts of the coast in order to take 'selfies' and other photographs. This has been prevalent around Lulworth and also West Bay. However, there is an important opportunity, especially for the 'String of Pearls' group, to create a strong social media presence that carries an authentic voice on behalf of the WHS and its needs. Platforms such as Instagram and YouTube in particular can be powerful tools to showcase the Jurassic Coast whilst promoting responsible behaviour.

New technologies

Technologies such as detailed bathymetric surveys, photogrammetry and LIDAR are creating ever richer sources of material that can be used to engage people with the WHS. Outputs from these kinds of investigations can be varied and far wider than was originally intended. For example, the Dorset Integrated Seabed Study (DORIS) was intended to identify important seabed habitats but has led to a new geological map for Weymouth Bay to Durlston Bay, a fresh interpretation of the quaternary history of Dorset and a major increase in the understanding of the geology of the WHS. The potential for these technologies for conservation and engagement is huge as they provide brand new ways to record, research, visualise and present the geoheritage value of the Site.



4. POLICIES AND PRIORITY OBJECTIVES

This framework sets out the principles, aims, policies and priority actions for the management of the World Heritage Site. As a partnership we recognise that the aims and policies are, to some extent, cross-cutting but in general are laid out here to reflect the World Heritage Convention, aligning this plan to the aspirations of UNESCO. Critical success factors provide the basis for a top-line measure of the success of the Plan overall whilst the principles are ways of working that should be considered at every level of delivery.

Principles

Working from Evidence

One of UNESCO's strategic aims is that World Heritage Sites should be credible. Therefore, Site management will be based on evidence, sound science and our best knowledge and understanding of the coastline.

Aspiring to World Heritage Values

The Jurassic Coast is the name of an authentic and unique heritage asset. It brings many benefits to the area, binds our community together and connects us to wider, global values. As the custodians of this World Heritage Site we are challenged to encourage inclusivity, sustainability and a celebration of Outstanding Universal Value in ways that help our community to thrive.

Collaboration and cooperation

The protection and presentation of this World Heritage Site requires people to come together in support of a common cause. In order to safeguard the quality of this landscape and create inspiring experiences for visitors and residents that embody the Site's OUV, collaboration and cooperation are essential.

Theme 1

Protecting Outstanding Universal Value

The World Heritage Convention states that each State Party recognises the duty of ensuring the identification and protection of natural heritage that possesses Outstanding Universal Value (OUV) and to integrate the protection of that heritage into comprehensive planning programmes.

Strategic Aim 1:

Protect the Site's Outstanding Universal Value and World Heritage Status

Policies within this section set out the parameters for clear, unambiguous long-term protection for the World Heritage Site (WHS) and setting through integration in the planning system and based on rigorous scientific evidence. The emphasis is on the prevention of activities that might negatively affect the OUV of the Site, or on the mitigation of the negative impact of activities that are unavoidable. There is a focus on allowing the natural processes of erosion to continue; thus maintaining the coastal processes, landforms and exposures that underpin the Site's OUV.

Critical Success factors

- Developments do not cause negative impact on Site's OUV
- Responsible fossil collecting continues to be widely adopted as a management approach across the World Heritage Site
- The community of the Jurassic Coast WHS acts in a sustainable way that maintains and enhances the Site's OUV