

Derwent Valley Mills World Heritage Site Key Monitoring Indicators 2018

World Heritage Sites have an obligation to ensure that their Outstanding Universal Value is being maintained over time and interpreted to the public. To achieve this, monitoring indicators have been put in place, tailored to the specific values of each World Heritage Site. The data supports the annual report to stakeholders and the periodic report compiled every six years for UNESCO.

The aims of such monitoring indicators are:

- to assess the state of preservation & interpretation of the site in a given year and measure change over time (recording)
- to provide detailed data to the site managers so that they can improve the protection, interpretation & management of the site (informed action)

The information collected for the indicators is used to help measure impact against the World Heritage Site's Statement of Outstanding Universal Value, approved by the UNESCO World Heritage Committee in 2010.

That Statement of Outstanding Universal Value reads: *The cultural landscape of the Derwent valley was where the modern factory system was developed and established, to accommodate the new technology for spinning cotton developed by Richard Arkwright and new processes for efficient production. The insertion of industrial establishments into a rural landscape necessitated the construction of housing for the workers in the mills, and the resulting settlements created an exceptional industrial landscape. The change from water to steam power in the 19th century moved the focus of the industry elsewhere and thus the main attributes of this remarkable cultural landscape were arrested in time.*

All UK World Heritage Sites have been encouraged to base their own key indicators on an extensive list of generic indicators compiled by ICOMOS UK. The Partnership has selected the indicators relevant to this site and agreed responsibilities for each indicator with key stakeholders.

The following indicators cover the period **1 April 2017 to 31 March 2018**.

Theme	Indicator	Assessment
CONSERVATION		
Protection	1. Size of the WHS (ICOMOS INDICATOR 16)	The DVMWHS covers 1228.7 hectares. There have been no changes to the boundary in the period covered.
	2. Existence of a buffer zone (ICOMOS INDICATOR 17)	A buffer zone for the DVMWHS does exist and has been in place since inscription in December 2001. The buffer zone covers 4362.7 hectares.
	3. WHS Policy in the Planning Development Framework (ICOMOS INDICATOR 1)	<p>The Government published its revised National Planning Policy Framework on 24 July 2018 (replacing the original version published on 27 March 2012), shortly after the time period covered by this review. Together with its associated online Planning Practice Guidance of 6 March 2014, it reforms the planning system to make it less complex and more accessible, to protect the environment, and to promote sustainable growth. The online Planning Practice Guidance is updated on an ongoing basis as needed.</p> <p>LOCAL DEVELOPMENT PLANS District and borough councils are responsible for preparing plans and policies for the development and use of land (excluding minerals and waste) in their administrative areas. Derbyshire County Council prepares local planning policies for minerals and waste development, using the 'National Planning Policy for Waste' (16 October 2014) for waste matters. Local planning authorities prepare their Local Plans and determine planning applications in the context of the National Planning Policy Framework and regularly updated online Planning Practice Guidance.</p>

	<p>MINERALS AND WASTE PLANS</p> <p>Derbyshire County Council prepares local planning policies for minerals and waste development, using the National Planning Policy Framework, Planning Practice Guidance, and the updated national waste planning policy, 'National Planning Policy for Waste' (16 October 2014) which replaced 'Planning Policy Statement 10: Planning for Sustainable Waste Management' as the national planning policy for waste in England.</p> <p>The Derby and Derbyshire Minerals and Waste Local Plans contain policies which protect interests of acknowledged environmental importance, including the World Heritage Site.</p>
<p>4. Planning guidance for development in the WHS (ICOMOS INDICATOR 18)</p>	<p>In due course, all Derbyshire Local Planning Authorities will have newly adopted Local Plans, which will provide an up-to-date context for development. In the meantime, for those authorities which do not have such plans, all relevant (old) Local Plan policies have been "saved" that are needed to determine planning applications and guide development.</p> <p>The World Heritage Site is covered by policies in the Local Plans for the five planning authorities: Derbyshire Dales District Council, Amber Valley Borough Council, Erewash Borough Council, Derby City Council and Derbyshire County Council.</p> <p>Derbyshire Dales</p> <p>The Examination in Public of the Draft Local Plan took place in Summer 2017. The Derbyshire Dales Local Plan was formally adopted by Council on 17 December 2017.</p> <p>Derbyshire Dales District Council has adopted Supplementary Planning Documents (SPDs) relating to: The Conversion of Farm Buildings; Shop Fronts & Commercial Properties; and Landscape Character. These documents are currently under revision.</p> <p>Amber Valley</p> <p>The saved policies of the adopted Amber Valley Borough Local Plan (2006) includes a policy relating to the Derwent Valley Mills World Heritage Site, its buffer zone and Management Plan. Policy EN7 also relates to landscape character areas and includes reference to the presence and pattern of historic landscape features. Policy EN32 states that planning permission will not be granted for development proposals that would have an adverse impact on the landscape character of a registered Historic Park and Garden.</p> <p>Amber Valley Borough Council has adopted Supplementary Planning Documents on Residential Development (which includes extensions and the conversion of farm buildings), Shop Fronts and Advertisements, Listed Buildings and Buildings in Conservation Areas and Development and Recreational Open Space. A Supplementary Planning Document and Planning Brief for land between the A6 and the river Derwent has also been adopted by the Borough Council.</p> <p>The Council took the decision to withdraw its submitted Core Strategy in December 2015. A new Amber Valley Borough Local Plan which includes a specific policy relating to the Derwent Valley Mills World Heritage Site has been prepared and was submitted to the Secretary of State for examination on 2 March 2018. An Examination in Public took place in June 2018 (after the period covered in this review) but was suspended by the Inspector in July 2018 pending further work by Amber Valley Borough Council, particularly the need to carry out a strategic Green Belt</p>

Review of the Borough. It is likely that the Examination will reconvene in April 2019.

Derby

The Derby City Local Plan Part 1 (DCLP1) - was adopted in January 2017. The DCLP1 contains policies specifically relating to the DVMWHS as well as the preservation and enhancement of heritage assets more generally. The Plan also contains a policy specifically relating to the Darley Abbey Mills Complex to help guide sensitive regeneration.

As part of the regeneration of the mill complex, Work on the Local Plan Part 2 has now commenced, with public consultation on the Issues and Options stage taking place in early 2018. The consultation document highlighted a range of issues and topic areas that the Council consider should be addressed through the Part 2 Plan. This includes the review of 'saved' policies from the City of Derby Local Plan Review (2006) relating to for example conservation areas, listed buildings and archaeology. In addition the Part 2 consultation document identifies the issue of 'tall' buildings.

There has been a continuing trend towards 'tall' development in and on the edge of the city centre, optimising the density of sustainable locations, but also to provide the viability required to facilitate the development of constrained sites. These sites are often in sensitive locations with multiple heritage designations, such as the north and western parts of the city centre, close to the DVMWHS. The Part 2 Plan provides an opportunity to supplement the principles set out in the DCLP1, to incorporate a specific policy relating to tall buildings. A new policy has the potential to provide more detailed design guidance relating to the development of tall buildings, including advice on the use of the Council's 3D model and potentially provide more certainty about appropriate locations for such development. Work towards developing this policy is ongoing and draft policy wording will be incorporated into the Draft Plan stage, to be published later this year.

A planning application and Listed Building applications have been granted for the change of use to a wedding venue in West Mill and offices in Long Mill. The wedding venue is fully completed and in use. The offices have been implemented on the all floors except the top one and attic space. There have also been applications granted to repair both Long and West Mill rooves and high level work to the exteriors which has commenced this year. There have also a number of applications regarding; the conversion of the Mill Managers House to wedding associated residential use, an application for a photography studio in the Lamp shed, an application for a café, retaining alterations for offices and a photography studio within the gassing shed, polishing shed and former Fire station. These applications have been granted, whilst the Mill Managers House works have been completed.

Erewash

The Erewash Core Strategy (Local Plan) was adopted on 6 March 2014.

In addition to the strategic policies from the development above, the Borough Council continues to protect the character and

appearance of the extent of the Derwent Valley Mills World Heritage Site that falls within its boundaries. Specifically, **Saved Policy EV19** demonstrates the planning circumstances in which development will be deemed acceptable within the WHS area as identified through the Council's policies map, whilst also siting key factors which require consideration when planning proposals for this part of the Borough are received (visual impact, traffic generation, scale of design, construction material, loss of historic landscape/cultural heritage and impacts on the wider environment).

A number of other local policy instruments exist which, both individually and collectively, help to protect the WHS from inappropriate forms of development that if approved would threaten to harm its character and/or setting. Most notably, the WHS also corresponds with Erewash's designated Green Belt (see Policy 3 of the adopted Erewash Core Strategy), offering the WHS strong policy protection that sees many forms of development considered acceptable in non-GB locations to be viewed as inappropriate by the Borough Council.

In addition to the protection afforded to the WHS through its inclusion within the Erewash Green Belt, a number of other policies are in place to help preserve the characteristics of the WHS. Of note, these include Core Strategy **Policy 10: Design & Enhancing Local Identity**, **Policy 11: The Historic Environment** and **Policy 13: Culture, Sport & Tourism**. The WHS given its proximity to the River Derwent also supports a number of water-based ecological assets helping to maintain a thriving and diverse biodiversity within its extent inside Erewash, and **Policy 17: Biodiversity** provides protection to such assets.

A range of more Development Control-orientated policies can be found throughout the Saved Policies document. Policies such as **H12: Quality & Design** (of Residential Development), **EV5: Conservation Areas** (Rigga Bank CA is located wholly within the extent of the WHS, whilst a small element of the Little Eaton CA is also situated within the area defined by EV19) and **EV6 & EV7** establish the Borough Council's approach to development affecting Listed Buildings and Buildings of Local Interest.

National guidance

The Government published its revised National Planning Policy Framework on 24 July 2018 (after the period covered by this review), together with its associated online Planning Practice Guidance on 6 March 2014, as part of its reforms to make the planning system less complex and more accessible, to protect the environment, and to promote sustainable growth. The online Planning Practice Guidance is updated on an ongoing basis as needed.

The heritage section does include World Heritage Sites. Circular 709 and the Historic England guidance which accompanied it have now been replaced. In the new guidance, World Heritage Sites are highlighted as being of the highest significance as heritage assets and such assets are an irreplaceable resource and should be conserved in a manner appropriate to their significance. The new Framework reaffirms that Heritage Impact Assessments are good practice, and changes to World Heritage Attributes must only be in exceptional circumstances. Historic England weren't able to put the protection of WH Sites, their settings and Buffer Zones in the

		Appeals Section. World Heritage Sites and their exceptional significance, including Buffer Zones and setting, are covered but buried deep within the document.
	5. Designations (ICOMOS INDICATOR 19)	There are over 859 listed buildings in the WHS, 13 Scheduled Monuments and 795 entries on the Historic Environment Record. The percentage of the WHS protected by designations (including Scheduled Monuments; Conservation Areas; Local Wildlife Sites; Special Protection Areas; Special Areas of Conservation; Ramsar sites; National Nature Reserves; Sites of Special Scientific Interest; Local Nature Reserves) is 51.3%. The percentage of the buffer zone covered by the same designations is 31.7%.
Condition of site	6. List and number of cultural features in poor condition (ICOMOS INDICATOR 2)	<p>A condition survey of key features based on the Outstanding Universal Value of the WHS, including fixed point photography, has been achieved. It has been agreed this survey take place every five years, as part of the quinquennial review for the Management Plan. The latest survey took place in April 2017, with the next planned for April 2022.</p> <p>Buildings at Risk A general air of prosperity throughout the settlements of the World Heritage Site obscures several instances of significant buildings seriously at risk from neglect and under-use.</p> <p><u>Amber Valley</u> Due to the addition of East Mill, there are 10 buildings at risk in the Borough that lie within the World Heritage Site, 3 of which are also on the Historic England 'Register of Heritage at Risk' (grade I and II* listed). Repairs and conversion of Brook Cottage is almost complete, but vacant so remains on the list. The North Mill, Bridgefoot, Belper is the earliest example of a completely iron framed mill in the world and is currently in poor condition. The Borough Council is monitoring the situation but also preparing to take formal action should this be necessary.</p> <p><u>Derby</u> There are a number of buildings at risk in the City that lie within the World Heritage Site. A number of these are included within 3 entries on the Historic England 'Register of Heritage at Risk' (grade I and II* listed) which are:</p> <ul style="list-style-type: none"> ▪ Darley Abbey Mills (South complex) Long Mill and West Mill - will remain on list until repairs have been completed and carried out on all buildings within this entry where needed. ▪ Darley Abbey Mills (North complex) North Mill, Engine House and Boiler House, ▪ Darley Abbey Mills (North Complex) preparation building, cottage, workshop & cart sheds. Old Lane, Darley Abbey. <p>There were 2 entries on the (grade II listed) Local Building at risk register, The Mill Manager's House (and other listed buildings within the Darley Abbey Mill complex not covered by the entries on the National list above) and Darley Abbey Stables. Darley Abbey Stables have now been repaired and will come off the list. The Mill Managers House has been repaired and is in use so it can now come off the list. Within the buffer zone there was one entry on the Historic England National List; Allestree Hall.</p> <p><u>Derbyshire Dales</u></p>

		<p>Planning permission and listed building consent have expired for the reinstatement of the Aqueduct (valid until end of 2010). Whilst discussions have taken place with the Arkwright Society, the District Council and Derbyshire County Council, reinstatement is being delayed by the requirements of the Highway Authority. Talks are still continuing with the Arkwright Society and Derbyshire County Council Highways Authority.</p> <p>At the end of March 2018, Derbyshire Dales District Council had 1 entry within the WHS included on the Historic England 'Register of Heritage at Risk' which includes:-</p> <ul style="list-style-type: none"> - Buildings 1, 17, 18 & 26, Cromford Mill, Mill Road (Grade I)* and - The Aqueduct, Mill Road (Grade I)* <p>In the annual assessment for the Historic England 'Register of Heritage at Risk', carried out in April 2016, the Local Planning Authority advised them that Building 17 (only) should now be removed from the Register as works to this building have been completed. In the 2017 Historic England 'Register of Heritage at Risk' (published in October 2017) Building 17 has been removed from the Register.</p> <p>* The buildings at the Cromford Mill site are identified as a single entry.</p> <p>The above Grade I structures and a further entry, as follows, are included on the DDDCs own 'Buildings at Risk' Register:-</p> <ul style="list-style-type: none"> - Lea Bridge Cottages (Grade II). <p>In respect of Lea Bridge Cottages, the Authority has dealt with applications for the repair and refurbishment of the row and their use as three small dwellings. The approved works on the row were commenced in Spring 2018 and are nearing completion (as of July 2018). They are due to be fully completed by September/October 2018. Once fully completed they will be removed from DDDC's Buildings at Risk Register.</p> <p><u>Erewash</u> Erewash does not have any entries on the Buildings at Risk register which relate to buildings situated within the extent of WHS located inside the Borough.</p>
	<p>7. List and condition of natural features within the WHS (ICOMOS INDICATORS 3 & 4)</p>	<p><u>Woodland</u> There are 1045ha of woodland of all types and all sizes in the WHS and the Buffer Zone.</p> <ul style="list-style-type: none"> • The area of ancient semi-natural woodland (excluding plantation on ancient woodland site) is 413 ha of which 220 ha is known to be managed positively (53%). • The area of PAWS is 113.5 ha of which 65.5 ha is managed (57%). • The area of secondary woodland is 399.39ha (c.110 ha known to be managed). • 5.76 ha new (since 1980) woodland (2.63ha managed). <p><u>Grassland</u> There have been a number of minor changes in grassland due to new data, corrections/improvements to boundaries etc. The total area of semi-natural grassland in the WHS and the Buffer Zone is 251 ha. This figure includes semi-improved and unimproved grassland (whereas before semi-improved was excluded) Of which –</p> <ul style="list-style-type: none"> • 27.86 ha lowland dry acid grassland (priority habitat) – a slight decrease due to better mapping/data

		<ul style="list-style-type: none"> • 1.73 ha lowland calcareous grassland (priority habitat) – a slight increase due to better mapping/data. • 81.53 ha lowland meadow (priority habitat) – a slight increase of 4.10 ha. <p>This represents:</p> <ul style="list-style-type: none"> • 9% of the total Ancient Woodland in Derbyshire • 11.29% of acid grassland in Derbyshire (outside PDNPark) <ul style="list-style-type: none"> • 0.3% of calcareous grassland in Derbyshire (outside Peak District National Park) • 11.5 % of neutral grassland in Derbyshire (outside Peak District National Park)
Development pressure	8. Number of planning applications in the WHS (ICOMOS INDICATOR 15)	<p>Amber Valley Borough Council Total number of applications in the WHS =150 . Permitted – 118 ; Refused – 13 ; Withdrawn – 11 .</p> <p>Total number of application site in the Buffer Zone = 208 . Permitted – 167 ; Refused 16; Withdrawn –17 .</p> <p>Derby City Council No. of Applications in the WHS = 24. No of Applications in the Buffer Zone = 106. Total = 130 <u>In WHS (not buffer zone)</u> 16 were approved with conditions; 3 were refused; 1 was not determined; with 1 prior approval was not required. <u>In the Buffer Zone</u> 70 were approved with conditions; 5 were refused; 2 were approved unconditionally; 2 were withdrawn; for 1, prior approval was not required; for 1, a prior approval was approved; 6 were not determined.</p> <p>Derbyshire Dales District Council Applications received between 1 April 2017 and 31 March 2018:</p> <ul style="list-style-type: none"> • No of Applications in the WHS = 24. • No of Applications in the Buffer Zone = 38. <p>Total =62 In WHS (not buffer zone): 22 Approved with Conditions; 0 Refused; 1 Permitted with No Conditions; 1 Withdrawn; 0 raised No objections; 11 for Listed Building Consent; 11 for Planning Permission; 0 for Outline; 1 Variation of Condition; 0 County Matters; 0 for Telecommunications; 0 Agricultural Notifications; 0 Non Material Amendment; 1 Adverts; 0 Certificate of Lawful Use/Development. In the Buffer Zone: 21 Approved with Conditions; 8 Refused; 6 Permitted with No Conditions; 2 Withdrawn; 1 raised No objections; 5 for Listed Building Consent; 26 for Planning Permission; 1 for Outline; 0 Variation of Condition; 1 County Matters; 0 for Telecommunications; 0 Agricultural Notification; 0 Non Material Amendments; 2 Adverts; 3 Certificate of Lawful Use/Development; 0 Temporary Permission.</p> <p>Erewash Borough Council Total planning applications approved in the World Heritage Site and Buffer Zone = 9. These were 4 x tree works, 1 x property refurbishment (internal and external works), 1 x prior notification – agricultural and 3 x extensions to residential dwellings.</p>
Change and Setting	9. List of physical changes within the WHS, particularly with	Over 40 monitoring views of the World Heritage Site were established and recognised by the Derwent Valley Partnership members in 2007/8. The establishment of a baseline reference in

	identified iconic views, & record of any loss (ICOMOS INDICATORS 5, 6, 9 & 46)	2007/8 has allowed visual monitoring of these views to begin. It has been agreed this survey take place every five years, as part of the quinquennial review for the Management Plan. The latest survey took place in April 2017.										
USES & INTERPRETATION												
Population	10. Number of people living in WHS (ICOMOS INDICATOR 28)	<p>Latest figures are for 2011: World Heritage Site: 6,368. Buffer Zone: 28,561.</p> <p>Age breakdown:</p> <table> <tr> <td>0-15</td> <td>WHS 967; BZ 4970</td> </tr> <tr> <td>16-29</td> <td>WHS 887; BZ 4352</td> </tr> <tr> <td>30-44</td> <td>WHS 1331; BZ 5785</td> </tr> <tr> <td>45-59/64</td> <td>WHS 1867; BZ 8317</td> </tr> <tr> <td>Retirement Age</td> <td>WHS 1332; BZ 5133</td> </tr> </table>	0-15	WHS 967; BZ 4970	16-29	WHS 887; BZ 4352	30-44	WHS 1331; BZ 5785	45-59/64	WHS 1867; BZ 8317	Retirement Age	WHS 1332; BZ 5133
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Tourism	11. Number profile and satisfaction of visitors to the WHS (ICOMOS INDICATORS 8 & 10)	<p>In 2017-2018 the recorded visitors for Masson Mill (Museum & Shopping Village), Middleton Top, High Peak Junction, Leawood Pumphouse, John Smedley, Strutt's North Mill, Belper River Gardens, Cromford Mill, Derby Museums (Silk Mill, Pickfords and Museum and Art Gallery), Birdswood, and Discovery Days were 571,440.</p> <p>A survey of visitors during the 2017 Discovery Days Festivals showed that 94.2% ranked the event they were attending as very good or excellent.</p>										
	12. Economic impact (ICOMOS INDICATORS 12 & 14)	<p>For the period covered by this report in Belper 13 businesses were supported; at Cromford Mills 12 new businesses located to the mill complex and this created 17 new jobs; at Darley Abbey Mills 4 new businesses moved into the mills and this created 20 jobs.</p> <p>The value of secondary spend in the DVMWHS was worth £12,887,735 (this is calculated on visitor numbers using the Economic Value of the Independent Museum Sector: Toolkit)</p>										
	13. Local Community Involvement (ICOMOS INDICATOR 37)	<p>Community groups which support one or more of the aims of the Derwent Valley Mills World Heritage Site include: The Arkwright Society; Friends of Cromford Canal; Belper Historical Society; Belper North Mill Volunteers; Darley Abbey Community Association; Darley Abbey Society; Friends of Belper River Gardens; Friends of Darley Open Spaces; Belper Clusters Group, Belper Neighbourhood Plan Group, Accessible Belper, Darley Abbey Historical Group, Milford and Makeney Community Group and The Belper Strutts Society.</p> <p>There are about 60 active volunteers helping at the key mill sites. This increases dramatically during the Discovery Days Festival, when many more people volunteer their time and knowledge to provide over 100 activities over nine days.</p> <p>Community engagement projects are diverse and manifold across the site. Some are aligned closely with the work of the Derwent Valley Mills World Heritage Site team; others involve the work of partners but take place within the World Heritage Site itself and help promote the site. Specific examples of community engagement projects which have taken place in the reporting period include the continuing development of "cluster" groups of volunteers, local businesses and site representatives in Belper and Darley Abbey to explore ways of encouraging local pride in the world heritage site and to train local shop-keepers (known as Belper Ambassadors) in ways to disseminate the site's offer to visitors to the valley.</p> <p>Over the year 40,679 volunteer hours were recorded from Leawood Pumphouse, Strutt's North Mill, Cromford Mill, Derby Museums & Birdswood.</p> <p>There were no new ambassador sessions delivered in the WHS during this year, although preparation on refreshing the sessions</p>										

		<p>began. Currently there are 133 Belper Ambassadors from 52 businesses, and at Darley Abbey there are 23 Ambassadors, representing residents and 5 businesses.</p>
<p>Education and Promotion</p>	<p>14. Educational resources and activities (ICOMOS INDICATOR 11)</p>	<p>Following a governance review The Derwent Valley Mills World Heritage Site (DVMWHS) now has a Learning and Research Panel with two separate Learning and Research Sub-Groups meeting throughout the year. The panel aims to develop the strategic learning and research aims of the DVMWHS and has set its focus on better communicating the Outstanding Universal Value (OUV) of the DVMWHS to all audiences as its main aim for the future. The Learning Sub-Group and Research Sub-Groups bring together staff, organisations and individuals from along the valley to share best practice, coordinate Derwent Valley Mills related education, learning and research projects and work together to promote learning about, within and for the site. In this context ‘education’ covers all elements of learning for all ages, abilities and groups. The DVMWHS Learning Sub-group is continuing to develop a learning strategy aiming to gather information about the ‘as is’ offer across the site and look for gaps and opportunities to develop our offer further. The Research Sub-group is working on promoting engagement and use with the themes in the DVMWHS Research Framework compiled in 2016.</p> <p>Derbyshire Environmental Studies Service (DESS), part of Derbyshire County Council, continues to support the learning work of the DVMWHS sitting on both the panel and learning sub-group. They continue to offer a range of curriculum linked pupil learning days relating to the DVMWHS. One explores Outstanding Universal Value and the values and attributes of the DVMWHS, one focuses on the impact of the Strutt family on Belper and one on the engineering achievements of the DVMWHS linked to STEM and involving a design and build waterwheel challenge.</p> <p>In October 2017 Georgina Greaves from Derbyshire Environmental Studies Service attended the Ironbridge Institute days of the World Heritage UK annual conference and gave a presentation as part of the ‘Communicating World Heritage’ theme sharing the work done across the DVMWHS particularly focusing on the work using the defined values and attributes to communicate OUV.</p> <p>In March 2018 DESS with the DVMWHS central team led a second visit from the Ironbridge International Institute for Cultural Heritage (IIICH) University of Birmingham. Students on the MA courses in International Heritage Management and World Heritage Studies toured the site to support their studies focusing on site management, attractions and opportunities.</p> <p>The website for the DVMWHS, which was developed in partnership with the Heritage Lottery Funded DerwentWISE landscape partnership, continues to host a wide range of learning resources about the site as well as opportunities for visits, new offers and chances to get involved with DVMWHS learning projects. These pages are available at: http://www.derwentvalleymills.org/learn/.</p> <p>Redevelopment of the education offer at Strutt’s North Mill Museum, Belper was completed in 2017 and has been well-received by visiting schools, colleges and youth and adult education groups. The modernised offer, now better aligned to the current National Curriculum, was assisted with support from Museum Development East Midland and the Arts Council and involved the creation of a new Education Team, comprised entirely of volunteers. There are presently four team members, plus a number of helpers. Education</p>

group visits continue to build and by March 2018, there have been 11 visits, numbering 379 participants, mainly in the latter part of the review period. With a lack of dedicated education space, issues of transport costs for visits and the newness of the offer this is a promising start. Visiting groups have provided a good cross-section of the market, including primary and secondary schools, a special school, colleges and universities (both graduate and post-graduate), U3A and Beaver groups, plus two parties from German educational institutes. A programme of children's activities have been put together and was trialled during the February 2018 half-term when it attracted 75 participants over 3 days and will be continued in the future. Future plans for the extension of the education offer to encompass early learners and outreach is being investigated, along with strengthening the Education Team itself.

During this period 1000 pupils have visited the Derbyshire Wildlife Trust's Whistlestop Centre in Matlock Bath (on the edge of the DVMWHS) which has involved young people learning about the wildlife, countryside and wider landscape of the DVMWHS. 650 people also attended family events at the Whistlestop Centre.

The Heritage Lottery Funded DerwentWISE Landscape partnership is now in its final year. Some members of the DVMWHS Learning Sub-Group are leading on learning projects in the wider world heritage landscape.

The 16, Level 3 Forest School Leaders trained during the 'ForestWISE' project delivered by Derbyshire Environmental Studies Service continue to take groups of young people out regularly to use, understand, manage and engage with the woodlands and landscape of the lower Derwent Valley.

Derbyshire Wildlife Trust are delivering the 'Learning My Landscape' and 'Derwent Explorers' projects as part of the scheme. This year these projects worked with 10 schools/youth groups to help students learn about the rich and distinctive landscape of the World Heritage Site. Through site visits and work in school grounds children learnt more about the area's geology, cultural history and wildlife heritage.

'Delving in to Quarry Heritage' is an adult education project, and participants are researching the rich quarrying history of the DVMWHS. A report about the findings will be made available on the partnership website.

'Wildlife Guardians' provides both formal and informal wildlife survey training for species including bees, butterflies and birds in the DVMWHS. 5 sites in the DVMWHS are now being regularly surveyed and results fed into national statistics. Through this project Derbyshire Wildlife Trust also run a Wildlife Youth Rangers programme for 4-14year olds to provide them with opportunities to get involved in practical management of key sites in the WHS such as woodland enhancement in Lea, flood alleviation at Darley Island and wildflower meadow creation at Allestree Park.

Derbyshire Adult and Community Education Service (DACES) have been delivering 'Get Skilled for DerwentWISE', this period has involved 7 adults with mental health problems gaining a John Muir Conserver award by engaging with wild spaces around the DVMWHS and doing landscape maintenance tasks.

In October 2017 The Heritage Lottery Fund, Arts Council England and Historic England awarded the DVMWHS Partnership a £1.5m Great Place scheme – Vital Valley. Vital Valley's vision is to inspire and enable people to have a sense of pride in and belong to the

		<p>Derwent Valley Mills World Heritage Site and to do this by celebrating of the Valley's heritage and through arts. There are a small number of projects that have a learning focus which were beginning to be tendered and awarded at the end of this reporting period. In the future Derby Museums Trust will be developing a Mobile Museum of Making to provide outreach during the current closure and re-imagining of the Silk Mill. Derbyshire Environmental Studies Service will be delivering a series of four 'learning tours' for different audiences and a 'Young Entrepreneurs' project working with secondary school age students. Derbyshire Adult Community Education Service (DACES) are delivering the 'Great Works' project as part of Vital Valley. This project is supporting work placements around the WHS, so far 5 young people furthest from the workplace have been engaged in a work placement with Derby Museums and the University of Derby.</p> <p>The DVMWHS team provided training for students on Derby University's new Public History and Heritage MA Course in the Autumn of 2017.</p>
	15. Number of visitors to website (ICOMOS INDICATOR 35)	<p>The www.derwentvalleymills.org website once again provides a globally-accessible source of in-depth information about the Derwent Valley Mills during 2017/18. There were 114,677 page views, 44,451 sessions and 33,967 users. The average number of pages viewed per visit was 2.58 and the average time spent on the website per visit was 2 minutes 9 seconds. The WHS Facebook page has a small but growing number of followers (722) and the Twitter account is followed by 4429 people.</p>
Sustainable transport	16. % of visitors arriving or travelling within the WHS by other means than car (ICOMOS INDICATOR 40)	<p>Trying to establish a percentage of people not using a car to visit and move around the WHS has proven to be difficult, as so much movement within the Site is not recorded. However, the popularity and reliability of the hourly Derwent Valley Line train service has continued during 2017/18. There has been an increase of 2% in passenger journeys at local stations. Duffield and Matlock Bath saw 6% and 14% increases respectively.</p> <p>Discovery Days 23% of visitors questioned during the Discovery Days weekend said they had used the bus or train to travel, whilst 24% had walked.</p>
Green agenda	17. Environmental policy (ICOMOS INDICATOR 42)	<p>Units of electricity produced by Hydro-power from turbines at the mill sites in the DVMWHS, between April 2017 and March 2018 are as follows: Milford - 1042 MWh Belper - 1745 MWh Masson – 758 MWh Total – 3545 MWh</p> <p>The amount of CO2 emissions saved can be calculated in two main ways. A general offset in CO2 emissions can be calculated using a 0.43 multiplier per mega Watt hour, or an offset in emissions that would have been produced by a coal fired power station can be calculated using a 0.86 multiplier per mega Watt hour. These methods give us a figure of either 1524 tonnes of CO2 saved per year as a general offset or 3049 tonnes per year as an offset against what would have been produced by a coal fired power station. These are rules of thumb, since the UK energy mix varies over time.</p> <p>Support for Transition Groups has peaked in the DVMWHS. Transition Belper actively promotes a green agenda for the area, and has a steady number of subscribers to its e-bulletins. This fell from 797 in March 2017 to 793 in March 2018.</p>

Climate change	18. Number of floods (ICOMOS INDICATOR 43)	Objective 10 of the Derwent Valley Mills WHS Management Plan states: 'Ensure that effective measures are in place to deal with risks and hazards that may threaten the site'. The Environment Agency has identified significant parts of the Derwent Valley floodplain which should remain undeveloped, thereby allowing for emergency water storage capacity in the event of flooding, helping to protect more vulnerable sites within the valley. Emergency Flood Plans are in existence, which refer to the World Heritage Site under "Special Considerations". These plans are regularly reviewed by the relevant Emergency Planning Authority. There were no serious flooding incidents in 2017/18 within the DVMWHS.
MANAGEMENT		
WHS management (All in ICOMOS INDICATOR 7)	19. Management Plan	A Management Plan does exist for the Derwent Valley Mills WHS. This was adopted in 2002, with amendments in 2003 and again in 2007 following the quinquennial review. A full review took place in 2011-13, and was adopted in 2015. The next review process will begin in 2017.
	20. Steering Group	Management of the World Heritage Site was reviewed in 2015/16, and the Board of 2010-15 replaced with a Steering Group. Further changes resulting from the governance review saw the creation of a new Learning and Research Panel, to replace the Research and Publications Panel, and a Development Panel, replacing the Site Operations and Development Panel.
	21. Officer or WHS team	A Director for the Derwent Valley Mills WHS began in post on April 1 2011. This post was amalgamated with the Derbyshire County Council post of Conservation and Design Manager in March 2017 to create a new post of Head of Conservation, Heritage and Design, under which the World Heritage Site team sits. The full-time permanent posts of Heritage and Development Co-ordinators remain as part of this amalgamation, with the full-time post of Business Services Assistant now shared with Derbyshire's Environmental Studies Service.