Key Monitoring Indicators

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 will be used for the annual report to stakeholders and the periodic report compiled every five 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 Significance, approved by the UNESCO World Heritage Committee in December 2001.

That Statement of Significance reads: The cultural landscape of the Derwent valley is of outstanding significance because it was here that the modern factory system was established, to accommodate the new technology for spinning cotton developed by Richard Arkwright. 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 that has retained its qualities over two centuries.

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. These indicators will be reviewed in 2010 and assessed as to how appropriate and achievable they are for the DVMWHS.

The following indicators cover the period April 2009 to March 2010.

Theme	Indicator	Assessment
CONSERVAT	L TION	
Protection	Size of the WHS (ICOMOS INDICATOR 16)	The DVMWHS covers 1260 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 4314 hectares.
	3. WHS Policy in the Planning Development Framework (ICOMOS INDICATOR I)	EAST MIDLANDS REGIONAL PLAN (RSS8) During 2010/11, the Government outlined its proposals to change the planning system, including the intention to simplify and condense national planning policy guidance and statements into a single national planning policy framework (NPPF) and to revoke Regional Spatial Strategies (RSSs) as set out in the Localism Bill. The part of the Bill that revokes RSSs is likely to be enacted during 2012; in the meantime the East Midlands Regional Plan (EMRP) remains part of the development plan.
		The EMRP contains a reference to the Derwent Valley Mills WHS as a vital component of the region's cultural heritage (para 3.3.6). Policy 12 requires that development should respect environmental constraints and, in this context, mentions in particular the DVMWHS and the surrounding countryside. Policy 26 requires that development should ensure the protection, appropriate management and enhancement of the Region's natural and cultural heritage. It requires the application of the principle that the Region's internationally and nationally designated natural and historic assets

should receive the highest level of protection.

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 council areas. Derbyshire County Council prepares local planning policies for minerals and waste development. Until changes proposed to national planning policy guidance and set out in the Localism Bill are brought in, local planning authorities prepare their development plans (now known as Local Development Frameworks) and determine planning applications in the context of existing National Planning Policy Guidance, Statements, Circulars and the EMRP (see 4 below).

MINERALS AND WASTE PLANS

The Derby and Derbyshire Minerals and Waste Local Plans contain policies which protect interests of acknowledged environmental importance, including the World Heritage Site.

4. Planning guidance for development in the WHS (ICOMOS INDICATOR 18)

In due course, all policies in each Local Planning Authority's Local Plan will be replaced by new policies in the Local Development Framework (LDF). The earliest this is anticipated to happen is late 2012, dependent on the passage of the Localism Bill. In the meantime, all relevant Local Plan policies have been "saved" that are needed to determine planning applications and guide development.

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.

The Derbyshire Dales Adopted Local Plan includes policies relating to the protection of listed buildings, conservation areas, archaeological sites and heritage features, landscape character, features important within the landscape and for the conservation of historic parks and gardens. Policy NBE 25 relates specifically to the Derwent Valley Mills World Heritage Site. For full details of this policy see page 84 of the plan, which can be

http://www.derbyshiredales.gov.uk/planning and building control/planni ng policy/local plan/default.asp. In addition Derbyshire Dales District Council has Supplementary Planning Documents relating to: Conversion of Farm Buildings; Shop Fronts; and Landscape Character.

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.

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.

Until the new Local Development Framework is adopted, the saved policies of the City of Derby Local Plan Review January 2006 can be seen at http://www.derby.gov.uk/Environment/Planning/LandUsePlanning/A

dopted+City+of+Derby+Local+Plan+Review.htm . These include policy E29 which states that proposals which would have an adverse impact on the special character of the World Heritage Site will not be allowed, it also protects its setting. Policy E22 seeks to secure the retention, restoration, maintenance and continued use of locally important historic parks and gardens, these include Darley Park and Derwent Park. R6 allows for the conversion of existing buildings in the Darley Abbey Mills complex for certain uses to secure the retention, restoration, maintenance and continued use of listed buildings, providing they are compatible with its architectural and historic character, respecting its important contribution to the World Heritage Site.

Saved policy MP4 in the Derby and Derbyshire Minerals Local Plan gives protection to interests of acknowledged environmental importance from irreparable or unacceptable damage resulting from mineral development proposals, including the DVMWHS. The Derby and Derbyshire Waste Local Plan applies the precautionary principle relating to the risk of environmental damage from proposed waste development (Policy W4) and Policies W5, W6 and W7 give protection to identified interests of natural and built environmental importance, landscape and other visual interests. The saved policies and progress on preparing the Minerals and Waste Plans is available at

http://www.derbyshire.gov.uk/environment/planning/planning_policy/minerals waste development framework/default.asp

Key documents to help in the development of supplementary planning documents within World Heritage Sites were issued in 2009/10:

- Protection of World Heritage Sites Circular (DCLG/DCMS) of July 2009
- Protection of World Heritage Sites Guidance Note (English Heritage – endorsed by Ministers)

Core Strategies and Future Policies/Strategies

The English Heritage Guidance Note (paragraph 7.4) states: It is essential that appropriate policies are included in the Core Strategy of the Local Development Framework. The Core Strategy can be complemented by a variety of other documents including area action plans and supplementary planning documents. These may cover a range of issues, both thematic and site specific, which may expand policy or provide further details to policies in a development plan document. Depending on the nature of the specific World Heritage Site, it may be appropriate to supplement policies in the Core Strategy in either Area Action Plans (AAP) or Supplementary Planning Documents (SPD). It is essential that both AAP and SDP are directly related to a policy in the development plan. Given the need to protect the setting of World Heritage Sites, appropriate policies should be included as appropriate in the Local Development Frameworks of planning authorities bordering a World Heritage Site as well as of the authority in which the site is located.

It was recommended that all future policies and strategies relating to the area covered by a World Heritage Site should refer to OUV and the Statement of OUV, the latter being included as an appendix where possible. As Supplementary Planning Documents (SPDs) provide detail on policy, and don't make policy, it is important that the Statement of OUV, and the values and attributes of the WHS should be clearly stated and understood within any new policies and strategy documents.

Buffer Zones

		The English Heritage Guidance Note (paragraph 7.7) states: A buffer zone is defined in the Operational Guidelines as "an area surrounding the World Heritage Site which has complementary legal restrictions placed on its use and development to give an added layer of protection to the World Heritage Site". This is achieved through the planning system in the same way as for the World Heritage Site itself and World Heritage Sites and their buffer zones should be identified clearly in Local Development Framework maps and the regional spatial strategy plans. Call In Regulations The English Heritage Guidance Note (paragraph 6.4) states: The Town and Country Planning (England) Direction 2009 requires local planning authorities to refer to the Secretary of State any development proposals affecting World Heritage Sites which they are minded to approve but to which English Heritage has objected, that objection not having been withdrawn. This applies to development 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
	5. Designations (ICOMOS	equivalent. There are 846 listed buildings in the WHS, and 326 entries on the
	INDICATOR 19)	Sites and Monuments 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
Condition of	6. List and number of	designations is 31.7%. A condition survey of key features based on the Outstanding
site	cultural features in poor condition (ICOMOS INDICATOR 2)	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 next survey will therefore take place in April 2012.
		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. Amber Valley There are I I buildings at risk in the Borough that lie within the World Heritage Site. 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 working with the owners but also preparing to take formal action should this be necessary. Derby 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 English Heritage National Buildings at Risk Register (grade I and II* listed) which are: Darley Abbey Mills (South complex) Long Mill and West Mill, 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.
		There are 2 entries on the (grade II listed) Local Building at risk register, which includes 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.

		Within the buffer zone there are currently 2 entries on the English Heritage National List; Allestree Hall, St Helen's House. Derbyshire Dales
		Planning permission and listed building consent have now 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.
		At the beginning of 2010/11, the entries for the WHS within Derbyshire Dales District Council included :- - The Aqueduct, Mill Road - Buildings 17, 18 & 26, Cromford Mill, Mill Road - Carlines Butchers, No. 7 The Hill & Outbuildings - Lea Bridge Cottages - Former Fishing Lodge, Mill Road
	7. List and condition of natural features within the WHS (ICOMOS INDICATORS 3 & 4)	The following are for the WHS and the Buffer Zone. All Woodland – 847.16ha of which 292.06 (34.47%) is currently being managed positively Woodland made up of – 252.88 ha ASNW (42.85ha managed) • 198.13ha PAWS (141.06ha managed) • 399.39ha Secondary woodland (105.52ha managed) • 5.76ha new (since 1980) woodland (2.63ha managed) All Semi-Natural grassland – 120.33ha Of which – • 30.33ha acid grassland • 10.32ha calcareous grassland • 77.4ha neutral grassland This represents: • 14% of the total Ancient Woodland in Derbyshire • 13.7% of acid grassland in Derbyshire (outside PDNPark) • 11.4% of calcareous grassland in Derbyshire (outside Peak District National Park)
Develop- ment pressure	8. Number of planning applications in the WHS (ICOMOS INDICATOR 15)	Derby City Council Period 1/4/10 – 31/3/11 No. of Applications in the WHS = 18 No of Applications in the Buffer Zone = 81 Total = 99 In WHS (not buffer zone) 12 were approved with conditions; I was refused 4 raised no objections 0 were withdrawn. Of these 18: 9 were for full planning permission. 3 were for Listed Building Consent. I was a Full Application for Article 4 works 4 was for applications regarding Trees in Conservation Areas. I was for Local Council own Development Reg 3 In the Buffer Zone only (81 Applications) 48 were approved with conditions; I was granted II was refused 17 raised no objections 4 were withdrawn. Of these 81: 31 were for full planning permission. 4 were for Listed Building Consent. 18 was a Full Application for Article 4 works

17 was for applications regarding Trees in Conservation Areas. 6 were for works to trees with Tree Preservation Orders 3 were for Advertisement Consent I was for a Certificate Lawful Proposal I was for Variation of condition. There were no outline applications or applications for Conservation Area Consent either in the WHS or it's buffer zone. **Derbyshire Dales District Council** Period - April Ist 2010 - March 31st 2011 (Based on Decision Dates) No of Applications in the WHS = 30No of Applications in the Buffer Zone = 37Total = 67In WHS (not buffer zone) 23 were approved with conditions; 3 were refused 2 raised no objections; 0 were withdrawn. 2 were permitted with on conditions Of the 30 applications in the WHS: 14 were for Full Planning Permission 10 were for Listed Building Consent; 2 were for an extension of time I was an advertisement I was a minor amendment 2 were County Matters (both with no objections) **Amber Valley Borough Council** No. of Applications in the WHS = 128. In the Buffer Zone = 198. Total = 326In the WHS (not buffer zone) 107 were approved with or without conditions; 4 were refused; 10were withdrawn; Of these 46 were for Full Planning Permission; 23 were for Listed Building Consent; 3 were for Conservation Area Consent; 9 were for Advertisement Consent 39 were householder applications, 9 were for a change of use, 3 were sertificates of lawfulness of lawful use, 2 were high hedges and 5 were extension of time limit. 0 Applications were referred to ICOMOS UK. **Appeals** Amber Valley: One appeal was allowed within the World Heritage Derby: None within the World Heritage Site. Derbyshire Dales District Council: One appeal was allowed and one dismissed within the World Heritage Site and one appeal was allowed within the Buffer Zone. Change and 9. List of physical Over 40 monitoring views of the World Heritage Site were established and recognised by the Derwent Valley Partnership Setting changes within the WHS, particularly with members in 2007/8. The establishment of a baseline reference in identified iconic views, & 2007/8 has allowed visual monitoring of these views to begin. It has record of any loss been agreed this survey take place every five years, as part of the (ICOMOS quinquennial review for the Management Plan. The next survey will **INDICATORS 5, 6, 9 &** therefore take place in April 2012. 46) **USES & INTERPRETATION Population** 10. Number of people Latest figures are for 2005: living in WHS (ICOMOS World Heritage Site: 5,152. Buffer Zone: 28,164. **INDICATOR 28)** Age breakdown: 0-15 WHS 813; BZ 5352 16-29 WHS 673; BZ 3971 30-44 WHS 1196; BZ 6786 45-59/64 WHS 1277; BZ 6664

		Retirement Age WHS 1194; BZ 5392
Tourism	II. Number profile and satisfaction of visitors to the WHS (ICOMOS INDICATORS 8 & 10)	In 2010-2011 the recorded visitors for Masson Mill (Museum & Shopping Village), Middleton Top, High Peak Junction, John Smedley, Strutt's North Mill, Belper River Gardens, Cromford Mill, Derby Museums (Silk Mill, Pickfords and Museum and Art Gallery) were 566,110.
		A survey of visitors during the 2010 Discovery Days Festival showed that 90% ranked the event they were attending as very good or excellent. All attendees who filled in the survey found the activities informative.
	12. Economic impact (ICOMOS INDICATORS 12 & 14)	For the period covered by this report, at Darley Abbey Mills 8 new businesses located to the mill complex and this created 26 new jobs; in Amber Valley 49 businesses were supported through a number of schemes by the local authority including business support information and workshops. In Derbyshire Dales, the district council does not record the information on the Tractivity system so no information is currently available.
	I3. Local Community Involvement (ICOMOS INDICATOR 37)	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 Civic Forum; Belper Historical Society; Belper North Mill Volunteers; Darley Abbey Community Association; Darley Abbey Society; Friends of Belper River Gardens; Friends of Darley Open Spaces. There are 70 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. A two-year project called <i>Threads</i> has captured the memories, stories and reminiscences of people who used to work in the Mills of the Derwent Valley Mills World Heritage Site. Fleet Arts employed artists and workshop facilitators who are experts in oral history, website development, storytelling, poetry, music, film and photography to work with local people to capture their stories in written and spoken words and pictures. More than 50 people took part, generously sharing their memories. The website is built in 4 main sections, showcasing the way in which the artists have interpreted the reminiscence material; all of these sections are based on the interviews. There is also an archive section, containing searchable transcripts of all the interviews. <i>re:connaissance</i> was a one-year project which re-interpreted, through visual art and oral history, the wartime stories of Belper and the wider Derwent Valley Mills World Heritage Site, as well as unearthing memories and memorabilia. Dee Shiels, a visual artist, interviewed a number of older people with memories of World War II in Belper and the Derwent Valley Mills World Heritage Site, and some people who were evacuated to Belper from Southend-on-Sea. Workshops were held at local schools, to help local school children understand the impact of WWII on their town. Dee Shiels also put together three "Make Do & Mend" educational packs, which are now available to schools, museums and
Education and Promotion	14. Educational resources and activities (ICOMOS INDICATOR	On the run up to the 2010 Discovery Days presentations were given in five schools along the valley, to 718 pupils. The interactive presentation saw pupils becoming John Lombe, Richard Arkwright and Jedidiah Strutt and slowly converting a blue washing line of textiles items into a map of the Derwent Valley with the key sites, mills and communities all in place. Once the young people understood the importance and significance of this world heritage

		site they were told about the additional opportunities to come and
		find out more during the Discovery Days and given leaflets about the events.
		Another learning project leading in to Discovery Days saw pupils from three schools becoming geocachers. With equipment funded by SEEDS (Supporting Environmental Education in Derbyshire Schools) the pupils explored their own area of the Derwent Valley Mills World Heritage Site and found out about how things can be located using a GPS (Global Positioning System) and satellite technology. The young people were then helped to create their own 'cache' and treasure box putting in information about why this place in the world heritage site is special to them and sharing this online. There were over 100 visits to the six new DVMWHS geocache sites logged online in the first two weeks. The geocaches are still in place, regularly visited and offering an alternative way of finding out about the World Heritage Site.
		This was the third year of working collaboratively with trainee teachers from Derby University. The collaborative project saw groups of students working with staff from Derby Museums and Galleries, Crich Tramway Village, Strutt's North Mill in Belper, Cromford Mill and Masson Mills to develop learning outside the classroom resources for young people. These were trialled with visiting young people from around the county and included investigating the landscape and habitats around Cromford with bug hunts, nature trails and den building to finding out about cotton manufacturing and pupils 'becoming' giant textiles machinery at Masson to understand the technology and engineering processes.
		Throughout the year, Derbyshire Environmental Studies Service supported the Derwent Valley Mills to develop information and interpretation materials, designing new activities and resources that will help to enhance the learning experiences on site at the mills and around the communities in the valley.
	15. Number of visitors to website (ICOMOS INDICATOR 35)	The www.derwentvalleymills.org website continued to provide a globally-accessible source of in-depth information about the Derwent Valley Mills during 2010/11. Data is unavailable for May and June 2010, but over the remaining ten months of the period covered in this report, there were 16,374 visits to the website by 13,071 visitors; in all, 68,355 pageviews. Visits accessed the website from 100 countries. In March 2011, the website was supplemented by new Facebook and Twitter accounts for the WHS.
Sustain-able transport	I6. % of visitors arriving or travelling within the WHS by other means than car (ICOMOS INDICATOR 40)	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 2010/11. During 20/11, 93% of trains have ran to time and there has been an overall 12% increase in passenger journeys at local stations. Following the introduction of the hourly service at Cromford and Whatstandwell stations in December 2009, these stations have seen the largest percentage increase in 2010/11 with 30% and 40% increases respectively on 2009/10. Other Stations in the World Heritage site have also increased this year - Ambergate 11%, Belper 19% and Duffield 24%. Over the last three years comparing the number of passenger journeys in 2010/11 with 2007/8 (before the hourly timetable) there has been an overall 94% increase in passenger journeys. The increases by station are Ambergate 100%, Belper 103%, Cromford 79%, Duffield 129% and Whatstandwell 83%.
		Discovery Days

		Only 4% of visitors questioned during the Discovery Days weekend said they had used the train to travel, the same as in 2009.
Green agenda	17. Environmental policy (ICOMOS INDICATOR 42)	Units of electricity produced by hydropower from turbines at the mill sites in the DVMWHS, between April 2010 and March 2011 are as follows: Milford - 829421kW Belper - 1548034KW Masson - 556350kW The amount of CO ₂ emissions saved can be calculated in two main ways. A general offset in CO ₂ 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 1261 tonnes of CO ₂ saved per year as a general offset or 2522 tonnes per year as an offset against what would have been produced by a coal fired power station.
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 2010/11 within the DVMWHS.
MANAGEMEN	T	
WHS manage- ment (All in ICOMOS	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 quinquenniel review. The next review will be in 2012.
INDICATOR 7)	20. Steering Group	The World Heritage Site is managed by a Board of ten which met for the first time during the period covered in this report, replacing a partnership of local authorities, agencies and local organisations which managed the site from 2001-2010 and now acts as a supporting forum. A Technical Panel met six times over the year to discuss management issues but its future is currently under review now the board has been fully established.

21.	Officer or WHS
	team

The one full-time permanent post of Co-ordinator and one full-time post of Economic Development Co-ordinator (now extended to June 2011) were joined by a Business Services Assistant from February 2011. A Director for the Derwent Valley Mills WHS was appointed, to begin in post on April 1 2011.

World Heritage Site Coordinator – job description: To manage on behalf of the Derwent Valley Mills Partnership the Derwent Valley Mills World Heritage Site (DVMWHS) in accordance with the 1972 World Heritage Convention to which HM Government is a signatory. To develop the Derwent Valley Mills Management Plan and co-ordinate its implementation; provide a key point of contact for the World Heritage Site; and seek financial resources for core funding and development of projects to implement the Management Plan.

Economic Development Co-ordinator – job description:
To deliver the first stage of the implementation of the DVM WHS
Economic Development Plan, in particular to realise the
implementation of the projects as listed on the DVM WHS
Economic Development Plan Project Steering Group approved
project list

Business Services Assistant – job description: To support the WHS team in delivering the objectives of the DVMWHS Management Plan.