1.0 Introduction

Biodiversity became an important focus internationally following the global agreement at the COP10 Summit on biodiversity held in October 2010 in Nagoya, Japan, when over 190 countries around the world reached agreement to take urgent action to halt the loss of biodiversity. This was addressed at a national level when in 2011 and 2015 the English and Welsh governments retrospectively produced strategies to halt overall loss of biodiversity by 2020[1,2].

Although biodiversity conservation has not traditionally been a priority for many in the construction industry, there is a significant body of evidence demonstrating the value of biodiversity in terms of ecosystems services, health and wellbeing and place making[3]. As such, safeguarding biodiversity resources helps us improve the resilience of our business and the communities we work in.

The purpose of this strategy is to develop a structure to clearly layout how we incorporate biodiversity considerations into our day-to-day management systems in order to protect and enhance biodiversity through our regular operations in a way that contributes to business continuity.

2.0 The WD Biodiversity Strategy

2.1 Aim

The aim of the WD Biodiversity Strategy is to build on the work we are already doing to manage our impact on biodiversity and develop a strategic approach to enable a robust and consistent approach to be undertaken when considering biodiversity issues. We believe we can contribute to the protection of biodiversity at different levels and by doing so, we will see a number of direct and indirect business benefits; improved public reputation and improved employee satisfaction and retention.

2.2 Objectives

The objectives of the strategy are:

- To integrate biodiversity conservation considerations into environmental and social decision making in the search for sustainable development outcomes.
- To become recognised biodiversity leaders within the built environment, for the competitive advantage and reputational benefit this provides for the benefit of our customers and neighbours. By producing this strategy we will be the first construction company to have a Biodiversity strategy.
- The prevention, minimisation, and mitigation of biodiversity risks throughout the business cycle, as well as eradication of invasive non-native species and enhancement of biodiversity where opportunity allows and with client support.
- Responsible stewardship of the land we own.
- The identification and pursuit of biodiversity conservation opportunities.
- The involvement of customers, the communities where we work and building end-users, as well as and our supply chain partners in our influence on biodiversity issues.

By creating this strategy we believe we can do our part in creating sustainable projects that not only focus on energy conservation, supporting and enhancing local communities but also creating spaces where biodiversity can flourish.

2.3 Delivery

The strategy will be achieved through the development of Biodiversity Action Plans which will be updated and monitored on a regular basis to track progress.

We will adopt a Group Biodiversity Action Plan (BAP) and each company will develop local 'daughter' i.e. company BAPs based on the following structure;

- Management of our premises,
- Management of our sites and
- Management of our supply chain partners.

3.0 Why does Willmott Dixon need a Biodiversity Strategy?

Published in 2013, the Willmott Dixon Group Sustainable Development Strategy 'Transforming Tomorrow' lays out our targets through four key themes[4]. Under 'reducing our environmental impacts and our use of natural resources' we have committed to leaving a positive legacy on biodiversity; stating that we will:

- **Improve biodiversity at a site level**:
    - Deliver ecological surveys for projects as required and seek to create and implement mitigation and enhancement plans in conjunction with our clients wherever possible.
    - Work with communities to manage the legacy of measures installed
    - Active involvement in developing ideas for community projects that enhance biodiversity.
- **Develop a strategic approach to biodiversity**:
    - Develop a quantifiable measure for our impact on ecological value
    - Explore establishing a biodiversity off-setting policy in the medium to long term.

By clearly laying out how we incorporate biodiversity considerations into our day-to-day management systems, we can work towards achieving these commitments. Furthermore, a structured approach to biodiversity will allow the Group to realise a number of indirect benefits including:

- **Cost benefits** - green spaces and areas for wildlife have the potential to add value and increase desirability to developments by enhancing the overall design.
- **Brand and reputation**- with increased access to information on the services they purchase, clients are able to keep informed of the activities of companies more easily than ever before.
- **Improved relationships** - by adopting best practices on biodiversity and wider environmental and social issues, WD companies are more likely to establish good relationships with governments and local communities, thus improving their chances of winning work.
- **Attraction and retention of quality staff** - businesses which demonstrably care for the environment are more likely to attract and retain staff.

- **Climate change mitigation, adaptation and resilience** - businesses' ability to provide services will be challenged by the impacts of climate change. To protecting and enhancing biodiversity helps maintain resilience and mitigate these impacts (e.g. flooding).

4.0 Our Approach to Biodiversity

To assist us in managing the opportunities and risks associated with biodiversity, we believe we can best achieve this by adopting the principles of *BS 8583 Biodiversity – Guidance for businesses on managing the risks and opportunities*. Given that we already have existing Management Systems embedded in the business, the principles of this standard can be easily merged into these (e.g. Project Environmental Plans) to address biodiversity issues.

There are three broad management streams within the standard into which consideration of biodiversity can be incorporated, see below;

1. Management of premises and facilities i.e. our offices

Willmott Dixon has a responsibility to protect biodiversity, and although we do not own any of our offices, there is still scope for WD to improve biodiversity at our premises in liaison with landlords and encouraging the adoption of green leases.

2. Management of day-to-day business operations i.e. our sites *(which we identify poses the highest risk);*

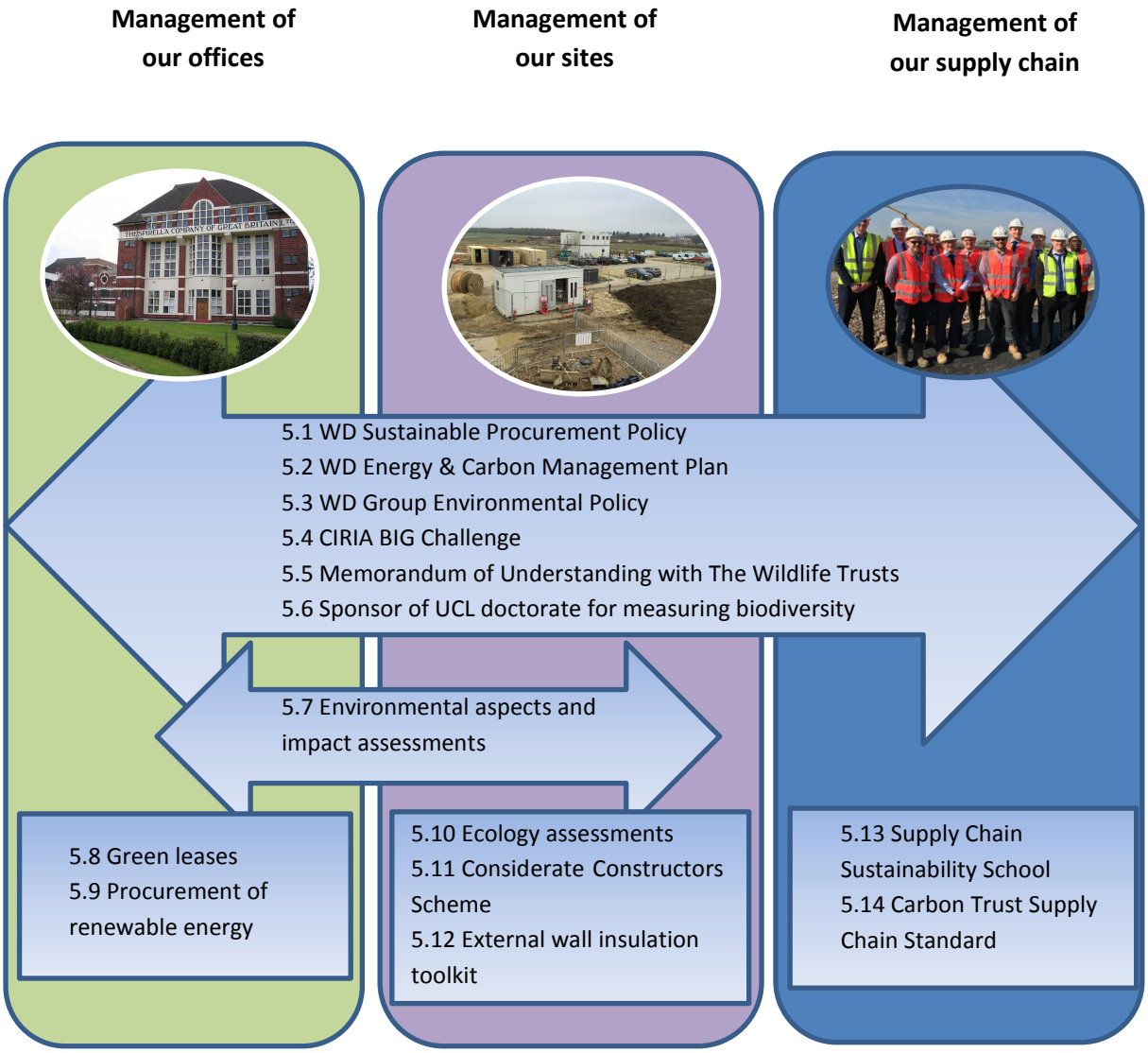
There are significant opportunities for the construction industry to make a valuable contribution to conserving and enhancing biodiversity within local communities through effective management of construction activities. As such, we will seek to monitor biodiversity on our site, to mitigate negative impact of our operations, enhance habitat and space for nature where practicable and to eradicate invasive non-native species to prevent spread.

3. Management of the supply chain

Engagement with our supply chain is crucial to ensure success of all our strategies and targets. All our supply chain partners have a part to play and we realise, be they consultants, contractors or sub-contractors. We must work with our supply chain wherever possible to influence and improve biodiversity impact from the earliest stage of design.

5.0 Current performance

How we currently manage our impact on biodiversity (directly and indirectly) is summarised in this graphic with further explanation on each policies and procedure below.



5.1 Willmott Dixon Group Sustainable Procurement Policy

Within the Policy, there are requirements which relate to biodiversity, namely;

- Our trade contractors must have a full and relevant environmental policy and to have or be working towards a full environmental management system e.g. EMAS, ISO 14001 or BS8555 from a UKAS registered certification body
- All fixed timber & temporary timber to be from legal and sustainable sources (PEFC or FSC)
- Preference for timber which is assured as 'Grown in Britain'
- Preference for construction product manufacturers to have responsible sourcing of materials to BES 6001 and/or BS 8902

5.2 Willmott Dixon Energy & Carbon Management Plan 2015-2020

We are standard bearers of the Carbon Trust Standard in 2012 and again in 2015. By the end of 2014, we reduced our carbon emissions by 30% from 2010 (surpassing our previous target of a 15% reduction over the period) and have publically committed to a 50% reduction by 2020 based on a 2010 baseline. Through our partners, The Natural Capital Partners (formerly the CarbonNeutral Company), we have identified carbon offset projects which bring significant benefits in line with the Willmott Dixon values, including protecting the environment; subsiding the sale of fuel-efficient biomass and charcoal cookstoves across Uganda to improve cooking conditions and reduce indoor air pollution and the burning of wood. These benefits are one of a number of considerations for us when selecting offset projects.

5.3 WD Group Environmental Policy

As stated in the WD Group Environmental Policy, we will protect wildlife habitats and archaeological sites, safeguard our natural and cultural capital and return sites through client co-operation to an acceptable environmental balance, with enhancement where possible.

5.4 CIRIA BIG Biodiversity Challenge

Willmott Dixon continue to be a main sponsor of the CIRIA BIG Biodiversity Challenge - in 2014 we won 'small scale category' award for creating a wildflower buffer strip at our Brentford Lock site. Willmott Dixon is also a member of the CIRIA Biodiversity Interest Group (and the All-Party Parliamentary Group on Biodiversity).

5.5 Memorandum of Understanding with The Wildlife Trusts

In early 2014, we signed a nationwide agreement with The Wildlife Trusts (TWT), to enable us to access the ecology and consultancy services offered by them around the UK. Our collaboration can gain contribution from and with the wider pool of local natural environment knowledge, collected through local records centres, and help us to leave a lasting legacy. The fees we pay have resulted in approximately £40,000 profit from Willmott Dixon contracts being gifted back to Trusts in 2015 to support projects such as the Warwickshire Wildlife Trust's Hedgehog Improvement Area in Solihull; this is the first area in the UK dedicated to hedgehog conservation.

5.6 Sponsor equipment for a UCL doctorate for monitoring and measuring biodiversity

Willmott Dixon is one of the sponsors for monitoring equipment and resources provided to UCL engineering industrial doctorate Alison Fairbrass who is undertaking a doctorate on to investigate efficient and effective means to measure and monitor biodiversity in the built environment, as means to understand current species density and monitor change after improvements to the built environment green infrastructure.

5.7 Environmental aspects and impact assessments

As per the Willmott Dixon Environmental Management System, we carry out environmental aspects and impact assessments at our offices and on our sites. The purpose is to identify impacts and mitigation measures. These include undertaking a detailed survey of the habitat and species and geological resources directly and indirectly affected by the process.

5.8 WD Green Lease Memorandum of Understanding

With regard to new or renewal leases for our fixed offices, we aim to put in place the WD Green Lease Memorandum of Understanding with our landlords, covering energy and environmental issues. This document embraces the principles of the Better Buildings Partnership's (BBP) Green Lease Toolkit

5.9 Procurement of renewable energy

Smartest Energy, the UK's leading supplier of renewable energy and the UK's first renewable electricity supply product with support from the Carbon Trust, provides power to 11 of our main offices (where we have are responsible for the procurement energy) with energy from natural renewable[1] sources. During 2016/2017 we are investigating the options to procure renewable energy for our sites.

5.10 Ecology assessments

Undertaken due to a Planning and/or BREEAM requirements, a number of our projects directly engage Ecologists to carryout survey work to quantify existing biodiversity and any impacts the proposed works may have. In line with our Memorandum of Understanding we have a preference to use the national ecology framework with The Wildlife Trusts' Ecological Consultancies. We are committed to procuring such services based upon the principles of the Scope of Works for Ecological Assessment Services (as prepared by the UK Contractors Group). Within the BREEAM Land Use and Ecology section there are six credits and one of the six credits within this section must be achieved if a BREEAM rating of Very Good or higher is to be awarded. In 2015, 53 Willmott Dixon projects were BREEAM certified.

5.11 Considerate Constructors Scheme

The CCS score is included within our 10 Point Plan and we are targeting ever-higher scores and on a higher percentage of sites every year. The monitor's checklist includes a section on 'Protect the Environment' and the inspectors score each site out of 10. Within this section they consider protection of biodiversity, waste and water management. During 2015, the average Willmott Dixon CCS score achieved was 40.29 out of 50, 13% higher than the industry average for that year.

5.12 External wall insulation toolkit

Led by Ceredigion County Council, Willmott Dixon Energy Services contributed to the development of an ecological guidance toolkit (soon to be published) for use by local authorities and contractors involved in energy improvement schemes, with particular emphasis on external wall insulation and associated works.

5.13 Supply Chain Sustainability School

Willmott Dixon is one of the founding companies of the Supply Chain Sustainability School and we work closely with our Supply Chain members to raise the profile of Sustainability within the industry. This includes encouraging Supply Chain members to avail of the free sustainability resources including an e-learning module on 'Introduction to Biodiversity'.

[1] From sources such as solar, wind and hydro-electric

5.14 Carbon Trust Supply Chain Standard

In 2015 we became the first in our sector (and one of seven companies) to achieve The Carbon Trust's Supply Chain Standard – the world's first accreditation for companies monitoring and managing supply chain carbon emissions. During 2016 we identified our top Supply Chain members according to spend and are now working with those who have high carbon emissions and will also look at assessing their biodiversity impact if it is considered a high impact

6.0 Timescales

Launch an Implementation of the Strategy

Short term (0-6 months):

- Issue the WD Biodiversity Strategy
- Hold a Biodiversity Strategy launch event with the Environmental and Sustainability Managers to help support the development of local Company BAPs.

Medium (6-12 months):

- Hold a series of local company roadshows to assist in implementing the local BAPs.

Long Term (12-24 months):

- Review BAPs and gather data from their implementation.
- Amend and update plans as necessary.

Please refer to Appendix A for the proposed targets of the Group BAP and Appendix B for an example of a company BAP (exact targets and associated timelines to be developed by each local company).

REFERENCES

1. Biodiversity 2020: A strategy for England's wildlife and ecosystem services, DEFRA, August 2011. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf

2. The Nature Recovery Plan for Wales Setting the course for 2020 and beyond, December 2015. http://gov.wales/docs/desh/publications/160225-nature-recovery-plan-part-1-en.pdf

3. Biodiversity and the Built Environment, A report by the UK-GBC Task Group, March 2009. http://www.ukgbc.org/sites/default/files/Biodiversity%2520and%2520the%2520Built%2520Environment%2520-%2520Full%2520report%2520and%2520appendices.pdf

4. Willmott Dixon Group Sustainable Development Strategy 'Transforming Tomorrow', 2013. http://www.willmottdixon.co.uk/how-we-do-it/sustainable-development-strategy

Appendix A – Draft Group Biodiversity Action Plan

	Action	How it will be delivered	Who is responsible	Timescale
Short term (0-6 months)	Continue to monitor biodiversity on our sites and where necessary, ensure controls are in place.	SD Site Reviews and regular Environmental Audits	Re-Thinking and Environmental Managers	Ongoing
	Continue support to UCL engineering industrial doctorate and look to implement relevant actions that result.	Through ongoing regular updates	GEM	Ongoing
	Support each company in beginning to develop a Biodiversity Action Plan	A Biodiversity Action Plan template to be developed	Re-Thinking with Environmental Managers, Sustainability Managers and GEM	Sept 2016
	Continue to work with the TWT to find a way to improve the recording and monitoring of ecology assessments undertaken on our sites.	TWT to collate the number of assessments undertaken with the associated outcomes and report to the GEM who will then feedback progress to the Re-Thinking Board	GEM	Dec 2016
Medium term (6 – 12 months)	Begin to engage with our key Supply Chain members on their approach to biodiversity.	Through working towards assisting them to achieve the Carbon Trust Supply Chain Standard	Re-Thinking to work with the Supply Chain Managers & key supply chain members	Q1 2017
	Consider including a biodiversity action within Sustainability Action Plan criterion of the 10 Point Plan	Link to BREEAM Land Use and Ecology credit requirements	Re-Thinking with Environmental Managers and GEM	Q1 2017
	Begin to develop a quantifiable measure for our impact on biodiversity	Work with TWT to develop a metric	GEM and Re-Thinking	Q2 2017
Long term (12 – 30 months)	Once a metric has been developed, set informed targets and report against them to protect to enhance biodiversity at a site specific level. Consider using this measure as a specific criteria within the 10 Point Plan	Performance vs target improves.	Re-Thinking with Environmental Managers and GEM	From Q4 2017
Next Strategy	Focus on achieving 'net positive impact' on biodiversity for a percentage of our sites.	Choose exemplar WD sites with support from TWT	Re-Thinking, Env Managers and GEM	By end 2019
	Establishing a biodiversity off-setting policy to address residual impacts after appropriate avoidance, minimisation and restoration measures have been applied.	Adopt an off-setting policy	Re-Thinking and GEM	2019

Appendix B – <u>Example</u> Local Company BAP (separated into the 3 management sections)

1. Management of premises i.e. our offices

EXAMPLE	Action	How it will be delivered	Who is responsible	Timescale
Short term (0-6 months)	Continue to segregate waste materials and recycle whatever possible and investigate the option to compost food waste generated from our offices.	Revise and update office environmental plans ensure compliance with existing targets investigate composting options.	LCO Environmental Managers	Dec 2016
Medium term (6 – 12 months)	Investigate opportunities to support local wildlife projects and charities - sponsorship or contribution of materials, working in partnership with, and volunteering staff time.	Review existing LCO Community engagement plans to see if such relationships already exist and if not, to be explored.	LCO Environmental Managers and Community Engagement Managers	Q2 2017
Long term (12 – 30 months)	Carry out biodiversity surveys on our offices and then put forward suggestions to landlord to improve the biodiversity at the office location e.g. improve the look and feel to the façade of an office by planting native trees and/or installing a trellis with native climbers, harvesting of rainwater for landscape maintenance, installing bat and bird boxes.	Engage TWT to undertake the surveys on our behalf	GEM with support from Re-Thinking	Q1 2018

2. Management of day-to-day business operations i.e. our sites;

EXAMPLE	Action	How it will be delivered	Who is responsible	Timescale
Short term (0-6 months)	Continue to encourage and champion entries for the CIRIA 'BIG Challenge' awards.	Through ongoing internal communication	LCO Environmental Managers and GEM	Ongoing
	Ensure biodiversity training needs identified during the 2015/2016 Personal Performance Reviews (PDR) is undertaken as planned	Identified through the use of the Environmental and SD training matrix as part of the PDR process. Training delivered online (e.g. SCSS) or by external facilitator	HR, Environmental and Sustainability Managers	Dec 2016

Medium term (6 – 12 months)	Ensure each site appoints a 'Biodiversity Champion' to ensure the appropriate method statements are produced and that licenses and permits are obtained when necessary and to promote biodiversity awareness on site using toolbox talks.	A staff member for each project, with the required biodiversity training (as mentioned above) is nominated within the site specific Project Environmental Plan.	Environmental Managers	Q2 2017
Long term (12 – 30 months)	Work towards leaving a positive biodiversity legacy on a number of sites	Through this strategy and site specific BAPs (incorporated into Project Environmental Plans)	LCOs with support from GEM and Re-Thinking	Q4 2017
	Work towards achieving net positive biodiversity impact on our sites	Select suitable projects with interested parties	LCOs with support from GEM and Re-Thinking	Q1 2018

3. Management of our supply chain;

EXAMPLE	**Action**	**How it will be delivered**	**Who is responsible**	**Timescales**
Short term (0-6 months)	Improve the biodiversity value of our schemes by actively considering it during design.	Work with our design partners, landscape architects and ecologists to reflect biodiversity considerations in the design of schemes.	Pre-Construction Mangers	From Q4 2016
Medium term (6 – 12 months)	Continue to work closely with our Supply Chain members to raise the profile of Biodiversity and engage with our members on this topic.	Supply Chain Sustainability School e-modules and road shows	Supply Chain Managers, Env Managers with support from Re-Thinking	Q3 2017
Long term (12 – 30 months)	Following the same approach that we have adopted for carbon, we can begin to engage with our top Supply Chain members (according to spend) on their approach to biodiversity.	Through management of the Carbon Trust Supply Chain Standard	Supply Chain Managers, Env Managers with support from Re-Thinking	Q1 2018

Appendix C - TERMS AND DEFINITIONS

Biodiversity

"biological diversity" is the variety of life on earth, including plants, animals and micro-organisms, the genes they contain and the ecosystems of which they form a part. It provides the basis for all our food, fuels, fibres, pharmaceuticals and building materials.

Biodiversity Action Plan

plan setting out how a country, business, operation or organization intends to act to preserve and enhance biodiversity.

Biodiversity Offsetting

Biodiversity offsetting is a formalised approach that can increase compensation levels against the residual damage of new developments and in so doing, contribute to a reversal of incremental and cumulative biodiversity loss.

Ecology

The branch of biology that deals with the relations of organisms to one another and to their physical surroundings.

Ecological impact assessment

Process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components, and usually performed as one element of environmental impact assessment.

Ecological value

The importance, worth, or usefulness of a species, habitat or ecosystem in terms of its impact on other species and/or habitats, as well as the other environmental, social and economic value that can be delivered from species and habitats and their interactions (ecosystem services) specific to a geographical frame of reference.

Ecosystem

Natural system consisting of all interacting plants, animals and other organisms and all the physical factors in the environment environmental management system part of the management system used to manage environmental aspects, conform to compliance obligations and address risk associated with threats and opportunities

Natural Capital

Refers to the elements of nature that produce value (directly and indirectly) to people, such as the stock of forests, rivers, land, minerals and oceans". It includes the living aspects of nature (i.e. stocks) as well as the non-living aspects (i.e. minerals and energy resources). Natural capital underpins all other types of capital (man-made, human and social) and is the foundation on which our economy, society and prosperity is built.

Nature

The phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations.