## **ENHANCING NATURE**

Our approach





## NATURE AT THE HEART OF PLACEMAKING

We believe that new developments should add to nature, instead of taking away. So in 2016 we became the first homebuilder to commit to measurably increasing biodiversity on every new site we develop.

Delivering a net gain in biodiversity across all new projects has involved a major change to the way we design, build and look after new places. The needs of local wildlife are carefully considered alongside those of people. and we are now weaving more ambitious, varied and beautiful natural networks through our neighbourhoods.

Crucially, we look to connect these biodiverse landscapes with surrounding habitats, so they form part of wider nature recovery networks in which wildlife has room to roam and the conditions to thrive. In time this can help to reverse the decline in biodiversity across our towns and cities, while making them more resilient to the challenges of climate change.

So far our drive to enhance biodiversity has been warmly welcomed by the communities within and around our sites. They value and enjoy nature, and we firmly believe that access to a beautiful open landscape can enhance people's quality of life. The onset of the global pandemic has reinforced this view and brought the link between nature and wellbeing into even sharper focus.

We are very proud to have led the industry on net biodiversity gain and laid the path for it to become a national legal requirement for all developments. We want to go further and are now developing a more challenging approach which will deliver a more valuable and holistic 'environmental net gain' on every project.

Ultimately, this will ensure that our projects leave behind a healthier and more sustainable environment for future generations to enjoy.

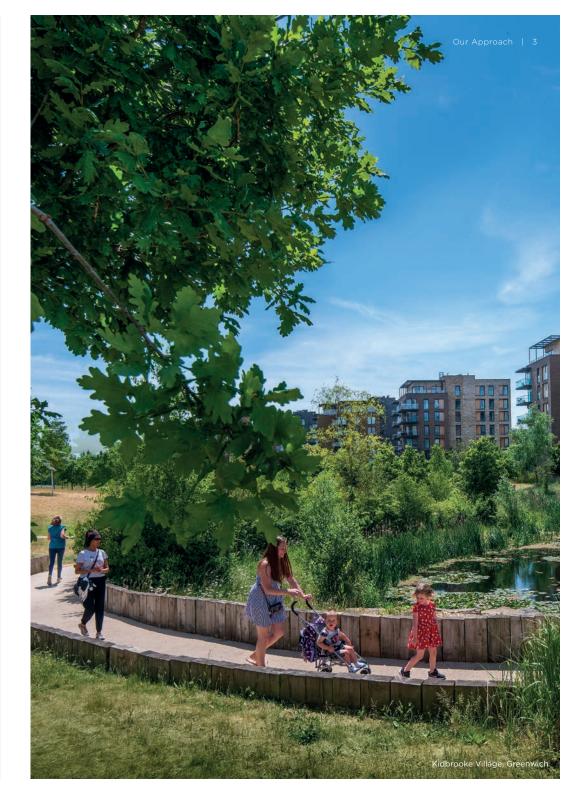
#### **Rob Perrins**

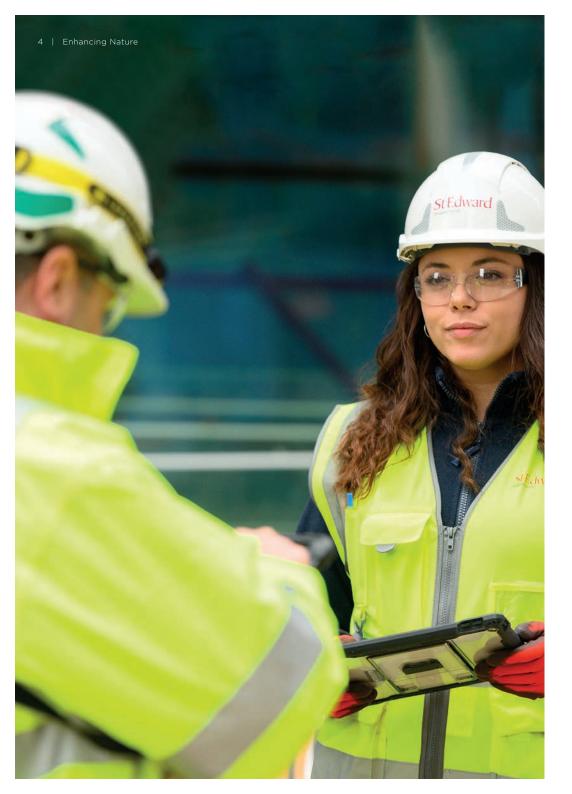
Chief Executive, Berkeley Group











## **OUR VISION 2030**

**OUR VISION** 

Enhancing nature is one of ten strategic priorities within Berkeley's long-term business strategy, called Our Vision 2030.

It sets out a balanced and holistic approach to leading our business over the next decade. It will help us to be a world-class business, trusted to transform the most challenging sites into exceptional places and to maximise our positive impact on society, the economy and the natural world.

Find out more at www.berkeleygroup.co.uk/ourvision



## **NATURE IN CRISIS**

## The natural environment has been severely damaged by human activity.

#### **Biodiversity**

Biological diversity is the variety of all life on earth, including all species of animals and plants, and the natural systems that support them.

- Global populations of mammals, birds. fish, amphibians and reptiles have seen an average drop of 68% since 19701
- In the UK the numbers of farmland birds are estimated to have fallen by 55% since 1970, and woodland birds by 29%<sup>2</sup>
- Numbers of UK butterflies are down by 17% since 1970, and moths down by 25%<sup>2</sup>
- 5% of species in the UK are threatened with extinction<sup>2</sup>

Agriculture is the greatest cause of UK biodiversity loss. But urbanisation, including homebuilding, has contributed to this decline and has an important role to play in restoring nature.

### Air Quality

- Air quality has improved significantly since the middle of the 20th century, but is still a major public health concern in some towns and cities
- In 2019 the equivalent of between 3,600 to 4,100 deaths were estimated to be attributable to air pollution across London<sup>3</sup>. Pollution in some areas breaches legal limits set for the protection of health4

The built environment sector has a duty to minimise air pollution from live construction operations and buildings

New development can also support zero or low emission transport, as well as limiting people's exposure to pollution through intelligent design.

#### Water Resources

- · London is forecast to have a water resource 'gap' of over 400m litres per day by 2040. This means that there won't be enough water to meet London's needs<sup>5</sup>
- · Years of pollution from road run-off, sewer infrastructure problems, and poorly managed river infrastructure have left London's rivers in a poor state<sup>5</sup>

New development can alleviate the pressure on water resources through the delivery of sustainable drainage infrastructure, rainwater harvesting systems and measures to reduce water use at source.

#### Flooding

- By 2050, summer temperatures in the UK could be up to 7.4°C hotter. with rainfall increasing up to 59%6
- The UK Climate Change Risk Assessment estimates that population living in areas of flood risk could have increased from 1.8 million to between 2.6 and 3.3 million by 20507

New development can help to reduce flood risks through delivering naturebased sustainable drainage networks and enhanced flood defences and infrastructure.

<sup>1</sup> WWF: Living Planet Report 2020

<sup>&</sup>lt;sup>2</sup> State of Nature Partnership: State of Nature Report 2019

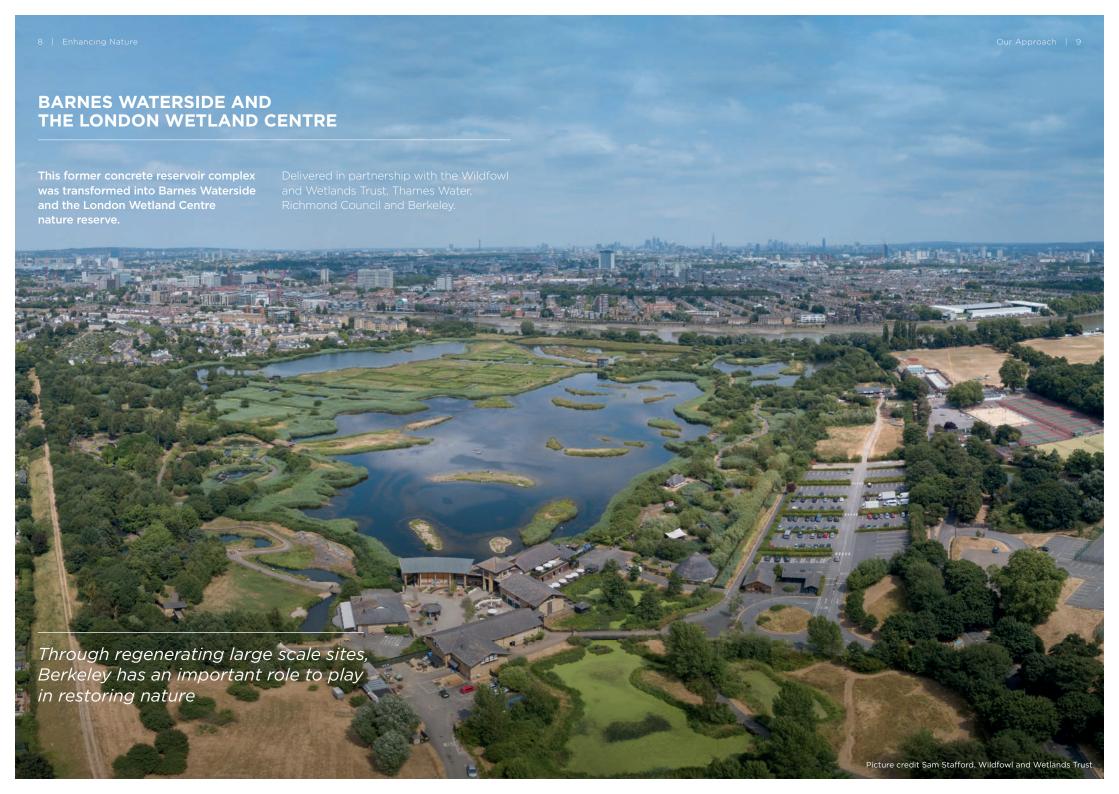
<sup>&</sup>lt;sup>3</sup> Imperial College London: London Health Burden of Current Air Pollution and Future Health Benefits of Mayoral Air Quality Policies

<sup>&</sup>lt;sup>4</sup> Mayor of London: London Environment Strategy 2018

<sup>&</sup>lt;sup>5</sup> Mayor of London: London Environment Strategy 2018

<sup>&</sup>lt;sup>6</sup> Environment Agency: https://environmentagency.blog.gov.uk/2020/09/25/the-flood-strategy-is-go/

<sup>&</sup>lt;sup>7</sup> The Climate Change Committee: https://www.theccc.org.uk/2020/05/04/



## **NET BIODIVERSITY GAIN**

Berkeley has made a commitment to deliver a minimum 10% net gain in biodiversity on every new project, regardless of the site's context or former use.

Our aim is always to maximise the site's natural value and beauty, and the majority of our sites far exceed our 10% minimum threshold.

We aim to deliver the biodiversity increase within the site boundary, rather than paying for off-site nature enhancements, so the local community experiences the full long-term benefit of an enriched natural environment.

## Collaborative approach

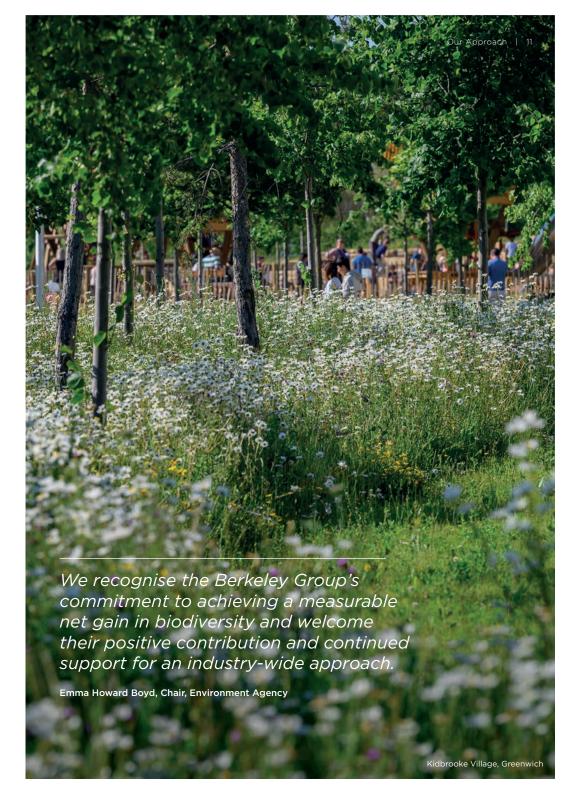
All of our project teams include ecology and landscape design experts who ensure that the preservation and enhancement of biodiversity is central to our approach from the earliest stage.

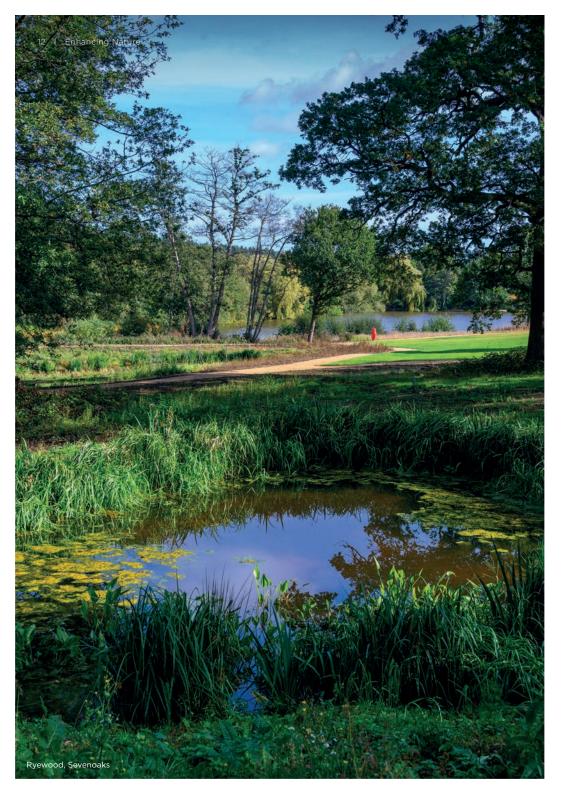
### Setting the baseline

At the start of each project our ecology advisors use our toolkit to measure the site's established biodiversity using a set of recognised metrics and values developed by DEFRA and the Environment Agency. This establishes the baseline for a biodiversity net gain.

## Maximising the benefits

Our net biodiversity gain toolkit enables our teams to forecast and compare the biological value of different landscape designs and habitat enhancements. This helps us to make informed choices leading to a stronger and more sustainable ecosystem over the long term.





## NINE CONCEPTS FOR ENHANCING BIODIVERSITY

We have worked with leading ecologists and landscape architects to create nine overarching design concepts which help us to create nature-rich masterplans that deliver a measurable net biodiversity gain.

The nine concepts are considered in the earliest stages of planning as part of cross-disciplinary design discussions.

## A unique approach for each site

It is not always necessary to apply all nine concepts to create a nature-rich, biodiverse place.

Every project is different and bespoke landscape and management strategies are created reflecting the characteristics of the site and its local context.

Find out more at www.berkeleygroup.co.uk/nature



## **CASE STUDIES**

## **Breakthrough Projects**

Our understanding of nature-led placemaking has evolved over time and has been strongly influenced by three pioneering partnership projects.



## **WOODBERRY DOWN, HACKNEY**



At Woodberry Down we are working in partnership with the Woodberry Down Community Organisation, Hackney Council and Notting Hill Genesis to regenerate one of London's most deprived social housing estates.

As the masterplan evolved, we saw the opportunity to work with the London Wildlife Trust and Thames Water to transform the neighbouring East Stoke Newington Reservoir into the incredible Woodberry Wetlands Nature Reserve, which is now open to the public in perpetuity and directly connected to the Woodberry Down estate via a new bridge and boardwalk.

#### Site

64-acre post war housing estate and neighbouring reservoir

#### Homes

5.700 mixedtenure homes

#### Landscape

15 acres of biodiverse parkland, playgrounds and wetland borders within the estate and the 26-acre Woodberry Wetlands immediately next door

## **EDENBROOK, FLEET**



Berkeley is working in partnership with Hart District Council and Natural England to transform 146 acres of private farmland into a beautifully landscaped Hampshire village.

More than half of the site has become the 82-acre Edenbrook Country Park, which includes a mix of biodiverse meadows, ponds, wetlands and woodlands, all connected by a network of footpaths, boardwalks and cycle paths.

The park's waterways serve as both a sustainable drainage network and a valuable habitat for a range of bird and invertebrate species.

"A country park has been created which can be held up as an exemplar of good practice and inspired design."

Natural England

## KIDBROOKE VILLAGE, GREENWICH





Kidbrooke Village is the demonstration site for our first net biodiversity gain strategy. Working in partnership with London Wildlife Trust, HTA Landscape Architecture and the Royal Borough of Greenwich, the project focused on rewilding the traditionally planted Cator Park.

We introduced a more valuable network of green infrastructure, creating wildflower meadows, grassland and wetland habitats.

Since the rewilding began the park has become a well-loved beauty spot and we partner with London Wildlife Trust to organise nature walks, school visits, family fun days and conservation volunteering.

The project is forecast to deliver a net biodiversity gain of more than 258% once it grows to full maturity.

"The site is the best example of a large-scale nature recovery network in a UK city."

Ministry of Housing, Communities and Local Government

#### Site

146 acres of private farmland

#### Homes

600 mixedtenure homes

#### Landscape

82-acre Country Park including wetland habitats, meadows and woodland. Electricity pylons replaced with underground cables to restore views

#### Site

270 acres, including the former Ferrier Estate

#### Homes

5.268 mixedtenure homes

## **Forecast Biodiversity** Gain 258% (Cator Park only)

### Landscape

85 acres of biodiverse parkland, wetland, wildflower meadows. trees, nature trails and playgrounds

# A NEW GENERATION OF NATURE-LED NEIGHBOURHOODS

Since launching our approach in 2017, Berkeley has designed 40 new neighbourhoods to deliver a measurable net biodiversity gain, the vast majority of which are being created from private brownfield sites. Once complete, these projects will have created approximately 480 acres of new or measurably improved natural habitats, an area far greater than Hyde Park. Examples include:

## **Grand Union, Brent**



## Former Use

22-acre former industrial estate

#### Homes

3,030 mixedtenure homes

## Landscape

Canal-side park, meadow, grassland, native planting waterways green and brown roofs

### Forecast Biodiversity Gain

220%

Partners Murdoch Wickham, AECOM and Turnstone Ecology

Landscape

Design

## White City Living Phase One, Hammersmith & Fulham



#### Former Use

11-acre former warehousing site

#### Homes

2,372 mixedtenure homes

### Landscape

5-acre public park, more than 400 new trees, linear habitats, native planting and waterways

## Forecast Biodiversity Gain

Gain 86% (phase one only)

## Landscape Design Partners London

London Wildlife Trust and Murdoch Wickham 20 | Enhancing Nature Our Approach | 21

## The Green Quarter, Ealing



## King's Road Park, Hammersmith & Fulham



Former Use
Redundant
88-acre former
gasworks

Homes 3,750 mixedtenure homes Landscape
42 acres of
public space
including
wetlands,
meadows and
2,500 new
trees

Forecast Biodiversity Gain 75%

Design Partners London Wildlife Trust

Landscape

Former Use
Redundant
16-acre former
gasworks

Homes 1,843 mixedtenure homes

Landscape

Exect Six acres

of public

open space

including

biodiverse

parkland

Forecast Biodiversity Gain 242% Landscape Design Partners Gillespies and Watermans

## **ENVIRONMENTAL NET GAIN**

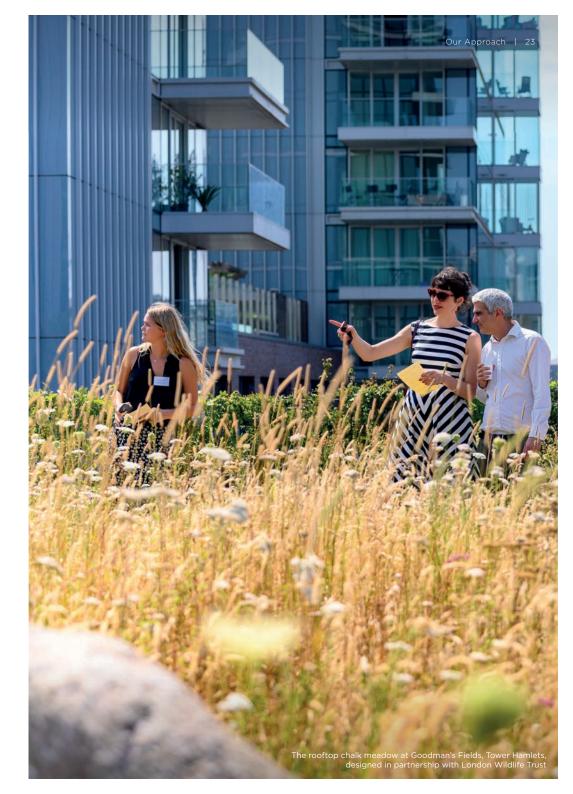
Berkeley is now expanding its approach to biodiversity net gain to include a more valuable and holistic environmental net gain on every site. Our aim is to achieve a measurable improvement in biodiversity, water security, flood protection and air quality.

The action plan on pages 24 and 25 outline the key steps in developing our approach.

Embedding the principle of environmental net gain within the development sector is central to the Government's 25-Year Environment Plan.

Having led the industry's adoption of biodiversity net gain, Berkeley is well placed to support and drive the adoption of this important environmental policy.





24 | Enhancing Nature Our Approach | 25

## **ACTION PLAN**

## **Achieving Biodiversity Net Gain**

We will continue our established approach to biodiversity net gain on every site, ensuring each new development submitted for planning to a minimum 10% improvement in biodiversity within the site boundary.

We will begin to measure the area of land where habitat enhancements are implemented and ensure through upskilling our managing agents and landscape architects that it is managed successfully in the long term.

## Broadening Our Approach To Environmental Net Gain

We will broaden our approach to cover wider aspects of the environment so that developments build on our strong approach to nature and begin to achieve environmental net gain, covering flood protection, recreation and improved air and water quality.

ENHANCING NATURE ACTION PLAN



Create a minimum net biodiversity gain of 10% on each of our new developments.



Upskill our managing agents and landscaping partners to ensure biodiversity gain is maintained for the long term.



By 2025 we will implement an environmental net gain on at least one development.



Develop an overall approach for environmental net gain (including water, flooding and air quality).



Partner with a water company to undertake a trial on water neutrality at a development scale.

## TRACK RECORD





















2000

2006

2013

2016

2018

2019

2020

2021

Barnes Waterside and the London Wetland Centre nature reserve is complete, delivered in partnership with Thames Water, Wildfowl and Wetlands Trust and Richmond Council

First planning consent granted for Edenbrook Country Park, Hart

The 82-acre Edenbook Country Park opens to the public, delivered in partnership with Hart District Council and Natural England

Berkeley becomes the first homebuilder to commit to delivering a net biodiversity gain on every new site

Woodberry Wetlands opens, a project led by London Wildlife Trust in partnership with Berkeley

Berkeley completes its first net biodiversity gain landscape at Cator Park, Kidbrooke Village

DFFRA consults on making net biodiversity gain mandatory for all developments, citing Berkeley's example

Government introduces Draft Environment Bill. including plans to make net biodiversity gain mandatory for all new developments

Cator Park. Kidbrooke Village wins the Sir David Attenborough Award for Enhancing Biodiversity at the Landscape Institute Awards

Berkelev has now designed 40 neighbourhoods to deliver a measurable net biodiversity gain

Berkeley starts to develop an approach to environmental net gain

## **AWARDS**



Sir David Attenborough Award for Enhancing Biodiversity, Kidbrooke Village, Landscape Institute



Sustainable Homebuilder of the Year, Housebuilder Awards 2020



Sustainable Homebuilder of the Year, Housebuilder Awards 2019



Best Garden/Landscaping Design, Fitzroy Gate, The Sunday Times British Homes Awards 2018

Best Placemaking, Kidbrooke Village, The Sunday Times British Homes Awards 2018

Outstanding Placemaking, Woodberry Down, The Sunday Times British Homes Awards 2017



Client Award for net biodiversity gain approach, CIRIA BIG Biodiversity Challenge Award 2018

Medium Scale Permanent Award. Fitzroy Gate, CIRIA BIG Biodiversity Challenge Award 2017

Pollinator Award, One Tower Bridge, CIRIA BIG Biodiversity Challenge Award 2016



Proud members of the Berkeley Group:











