BEDFORD BOROUGH COUNCIL **DECISION NO.** 1096

RECORD OF EXECUTIVE DECISION TAKEN BY AN EXECUTIVE MEMBER OR OFFICER

This form can be used for any decision but **MUST** be used to record:

- any decision taken by the Elected Mayor or an individual Councillor
- a key decision taken by a Council Officer

In these circumstances the form must be completed and passed to the Head of Members' Services no later than NOON on the second working day after the day on which the decision is taken. No action may be taken to implement the decision(s) recorded on this form until 7 days have passed and the Head of Members' Services has confirmed the decision has not been called in.

1. Description of decision

To approve the Bedford River Valley Park (BRVP) Masterplan for Bedford Borough Council Landholdings for the purposes of public consultation

2. Date of decision

14th February 2013

3. Reasons for decision

The BRVP Masterplan has been produced to enable the Council and its partners take forward the park vision as set out in the BRVP 2008 Framework Plan, as resources and opportunities allow. The 2008 Framework Plan consultation, which included mailings to over 48,000 homes, attracted 2100 responses, of which 85% were 'very supportive' of the concept. The Masterplan sets out a number of proposed leisure, recreation and conservation projects focused on the Council's landholdings within the Park area. The views of the public are needed to support and, where necessary, shape the Masterplan and its delivery.

4. Alternatives considered and rejected

In producing the Masterplan and its associated delivery projects, a long list of potential projects was identified and evaluated in terms of their compatibility with the principles of the 2008 Framework Plan, public/ stakeholder support and feasibility. This resulted in an initial project 'short list', which was subsequently refined to take account of the scale of investment required, value for money, deliverability, availability of supporting information and timescales for implementation. This process culminated in the final list of delivery projects included in the proposed Masterplan.

5. How decision is to be funded

The consultation on the Masterplan will be covered from within existing budgets.

6. Conflicts of interest

Name of all Executive members who were consulted AND declared a conflict of interest.	Nature of interest	Did Standards Committee give a dispensation for that conflict of interest? (if yes give details and date of dispensation)

The Mayor has been consulted on this decision

Signed ..... Date 14/2/13

Name of Decision Taker ...Portfolio Holder for Community & Regulatory Services

This is a public document. A copy of it must be given to the Head of Members'

Services as soon as it is completed.

Date decision published: 19th February 2013

Date decision can be implemented if not called in: 27th February 2013

For publication

Bedford Borough Council – Report to Community and Regulatory Services Portfolio Holder

Report by: Assistant Director, Environment and Communities

Date: January 2013

Subject: Bedford River Valley Park (BRVP) Masterplan for Bedford Borough Council Landholdings Consultation Draft

1. Executive Summary

Background

1.1 In January 2012, work started on the production of a masterplan for the Council's landholdings within Bedford River Valley Park (BRVP). The aim of the plan was to take forward the vision and associated development principles as set out in the 2008 BRVP Framework document.

1.2 The work was commissioned by the Marston Vale Trust, on behalf of the Council, with funding from the Government's Growth Area Fund. The appointed consultants have recently completed their work and produced a proposed Masterplan, which sets out, subject to suitable funding being identified, a number of leisure, recreation and conservation projects on Council owned land within the BRVP area.

1.3 The following report provides an outline of the proposed Masterplan and associated public consultation process, which the Council is proposing to undertake, to inform the plan's development.

2. Recommendation

That the Portfolio Holder considers and, if satisfied, approves the Bedford River Valley Park (BRVP) Masterplan for Bedford Borough Council's landholdings for the purposes of public consultation

3. Reasons For Recommendation

3.1 The BRVP Masterplan has been produced to enable the Council and its partners take forward the park vision as set out in the BRVP 2008 Framework Plan, as resources and opportunities allow. The 2008 Framework Plan consultation, which included mailings to over 48,000 homes, attracted 2100 responses, of which 85% were 'very supportive' of the concept. The Masterplan sets out a number

of proposed leisure, recreation and conservation projects focused on the Council's landholdings within the Park area. The views of the public are needed to support and, where necessary, shape the Masterplan and its delivery.

3.2 The proposed Masterplan for the Council's landholdings is required to provide the Council and its partners with a programme of shortlisted projects, which take forward the BRVP Framework Plan 2007 on land owned by the Council. The shortlisted projects range from projects to improve public access, promote education and recreation, facilitate water quality improvement and generate power, restore habitats and encourage people to participate in the management of the site.

3.3 The Council, as the principal landowner within the BRVP designated area, will use the plan to help develop and deliver the shortlisted projects as resources and opportunities allow; and to engage external project partners where necessary. Given the pressure on public finances, the Council will also use the plan to support external funding bids and secure external investment; and to develop viable and sustainable business plans to cover any project's ongoing revenue costs.

3.4 The proposed Masterplan also supports implementation of the saved Local Plan Policy NE23, which states that: 'When development opportunities arise, within the area defined on the Proposals Map, the Council will seek the creation of the Bedford River Valley Park. This policy will be replaced by Policy AD26 'Bedford River Valley Park' when the Allocations and Designations Plan is adopted.

4. Key Implications

4.1 The Council, as the principal landowner within the BRVP designated area and local planning authority, has the lead role in working with partners to ensure that its own landholdings, and that of others, contributes to the delivery of the 2008 Framework Plan and proposed Masterplan.

Legal Issues

4.2 Local planning authorities must prepare a local plan which sets planning policies in a local authority area.Local plans must be positively prepared, justified, effective and consistent with national policy in accordance with section 20 of the Planning and Compulsory Purchase Act 2004 (as amended) and the National Planning Policy Framework. . The former Local Plan saved policy NE23 and its replacement policy AD26, once adopted, sets out the Council's commitment to secure developer contributions towards the creation of BRVP. The proposed Masterplan identifies a programme of projects, including where adequate information is available, the costs and benefits of various projects to support and justify their implementation.

Policy Issues

4.4 A list of the key local policy documents of relevance to the Masterplan are included below:

- Bedford Borough Sustainable Community Strategy 2009-21
- Bedford Borough Council Corporate Plan 2012-16
- Bedford Development Framework 2001-21
- Borough of Bedford Greenspace Strategy 2012-21
- Bedford Borough Green Infrastructure Plan (2009)
- Bedfordshire and Luton Biodiversity Action Plan (2001)
- Healthy Bedford Strategy (2010)
- Forest of Marston Vale Forest Plan (2000)
- Bedford Waterspace Study (2011)

Resource Implications

4.5 The cost of delivering the proposed Masterplan will be met by opportunities arising from bids to external funding sources, such as section 106 agreements, landfill tax and lottery programmes and supported by existing Council operational budgets supplemented.

4.6 Where adequate information is available, the plan includes the associated capital costs and revenue needs of individual delivery projects. Given the pressure on Council finances, any required capital investment (and ongoing additional revenue needs which can't be met from within existing revenue budgets), will need to be met from external sources and would only proceed if such funds were identified.

4.7 To ensure that each project is financially viable and sustainable, it will **only** be embarked on if there is sufficient funding available for both its delivery and ongoing maintenance.

Risk Implications

4.8 Any failure to produce and adopt the proposed Masterplan will leave the LDF with a gap in its supporting delivery plans, in terms of identifying and defining the investment needs of specific projects to deliver BRVP. This would make it more difficult for the Council to secure the necessary developer contributions, in accordance with policy NE23. It would also weaken the Council's ability to plan for and use its estate within BRVP to take forward and deliver the park's 2008 Framework Plan.

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Environmental Implications

4.9 When implemented the proposed Masterplan will deliver the following environmental benefits:

- Increased visitor accessibility from adjoining communities by foot, cycle, canoe and horse, thereby reducing the need for car borne access;
- Environmentally sustainable use of floodplain forest and associated wetland features to improve water quality, through treating sewage works effluent and urban and agricultural run off;
- Low carbon energy production through development of short rotation coppice/ woodfuel and installation of micro-hydro turbines, wind turbines and photovoltaic installations;
- Conservation and enhancement of the site's nature conservation and landscape features.

Equalities Impact

4.10 An Equalities Assessment to Level 1 will be undertaken to ensure that the proposed Masterplan satisfies the legal obligations required of the Council. This Assessment will take into consideration both positive and negative impacts of the service delivery on the following 'protected characteristics' held with the Equality Act 2010.

- Age
- Disability
- Gender reassignment
- Pregnancy and maternity
- Race
- Religion or belief
- Sex (gender)
- Sexual orientation
- Marriage and civil partnership

5. Details

The following section summarises the key elements of the proposed Masterplan, including the constraints and opportunities associated with the BRVP land area, which, through the masterplanning process, were used to inform the identification of the proposed projects. It then goes on to outline the proposed projects and concludes with a summary of the proposed public consultation process.

5.1 Constraints and Opportunities

5.1.1 The proposed Masterplan identifies the following key constraints and opportunities associated with the BRVP land area:

- River Great Ouse and tributaries;

- Seasonal fluctuations in groundwater;
- Public rights of way and permissive access routes;
- Heritage and nature conservation sites;
- Utilities.

5.1.2 The analysis shows that much of the land area lies within the floodplain of the River Great Ouse, which places a constraint on some activities, and opportunities for others, including wetland habitat creation and water based recreational development. It also shows that the creation of National Cycle Network Route 51 and associated connecting path links on the Grange Estate and Priory Country Park has improved public access to/ from and within BRVP for walkers, cyclists and horseriders. Finally, it outlines the area's rich historic heritage and wildlife interest, including Schedule Ancient Monuments, Listed Buildings and County Wildlife Sites.

5.2 Projects

5.2.1 In March 2012, a key stakeholder workshop, involving local heritage and user groups, parish councils, businesses and government agencies, was held to gather views on issues and opportunities relating to BRVP and to seek suggestions for potential project activities/ facilities. The output from the workshop was used to produce a 'long list' of suggested projects.

5.2.2 Projects, within the long list, were evaluated in terms of their fit with the agreed principles of the 2008 Framework Plan; and with public/ stakeholder support, initial feasibility and the various site based constraints and opportunities as outlined in 5.1 above. Through this evaluation process, the following shortlist of projects was identified and included in the proposed Masterplan:

- Access improvements, including gateway features, interpretation trails and extensions to the path network
- New café and visitor centre in Priory Country Park
- River moorings and access improvements for canoeists
- Refurbishment of the kayak slalom course in Priory Country Park
- Inland beach
- Camping and caravanning site
- Natural play facilities
- Sewage effluent treatment
- Short rotation coppice
- Low carbon energy generation
- Habitat network improvements
- Volunteer service development

5.3 Delivery

5.3.1 The Council will use the proposed Masterplan to guide its own resource allocation and financial investment and to help identify opportunities to secure external funding to develop and deliver the proposed projects on its landholdings where sustainable.

5.3.2 The information contained in the plan will be used by the Council to guide future project planning, development and delivery work as opportunities and resources allow.

5.4 Public Consultation

5.4.1 Following Portfolio Holder approval of the proposed Masterplan, a two month period of public consultation will be undertaken to seek public and other stakeholder views. The method of consultation will include direct mailing to key stakeholders, such as BRVP landowners, heritage and user groups, Ward Councilors, parish councils, businesses and government agencies, Beds and Luton Green Infrastructure Consortium and Borough of Bedford Local Access Forum; public displays staged in Council libraries and other public outlets; news releases and use of internet and other electronic social media to share information and gather responses. Feedback and comments will be captured through the receipt of both online, electronic and hard copy responses.

5.4.2 All responses will be analysed and a Consultation Report produced, which sets out the Council's response to the representations received and any recommended amendments to the Masterplan. In June 2013, the Executive will be invited to consider the Consultation Report and adopt the plan, subject to any agreed recommendations.

6. Summary Of Consultations And Outcome

6.1 The following parties have been consulted in the production of the proposed Masterplan:

- Internal: Corporate Management Group, Executive Director of Environment and Sustainable Communities, Assistant Director Environment and Communities, Parks and Countryside Manager, Senior Countryside Officer, Senior Land and Property, Leisure Operations Manager, Team Leader (Planning Policy), Legal and Finance

- External: Marston Vale Trust

7. Ward Councillor Views

7.1 The proposed Masterplan sets out a programme of projects which collectively are located within the following Wards: Great Barford, Cardington, Cople, Cauldwell and Newnham. Ward Councillor's views

will be sought as part of the public consultation process, as outlined in 5.4.1 above.

Report Contact Officer:	Joel Carré, Head of Communities, tel: 01234 718322 (internal: 47322)
File Reference:	BRVPMasterplan2012/consultationdraft/130113
Minutes:	N/A
Background Papers:	Bedford River Valley Park Framework Plan 2008 Bedford River Valley Park Masterplan for Bedford Borough Council Landholdings: Issues and Opportunities (March 2012)
Appendices:	1. Bedford River Valley Park Masterplan 2012 for Bedford Borough Council Landholdings: Consultation Draft November 2012

A copy of the Background Papers is available on the Council's website www.bedford.gov.uk

March 2008

FRAMEWORK FOR THE

the Forest of Marston Vale

Bedford River Valley Park

This document has been prepared by EDAW plc on behalf of:

The Marston Vale Trust

The Forest Centre
Marston Vale Millennium Country Park
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Caroline Flint (Minister of State for Housing): *"The Department for Communities and Local Government is delighted to have been able to contribute Growth Area Funding towards the realisation of this major project for Bedford and the surrounding Growth Area. In its vision and ambitious scale the Bedford River Valley Park is just the sort of inspirational project that is so important in creating thriving, sustainable and vibrant communities."*

Cllr Bob King Community Services Portfolio Holder for Bedfordshire County Council and Trustee of the Marston Vale Trust: *"The creative use of worked-out clay and gravel pits presents a great opportunity for the environmental and economic regeneration of the Marston Vale. The Bedford River Valley Park adds to the great achievements in the rest of the Forest of Marston Vale, delivering enormous public benefit in line with the County's commitment to high quality sustainable growth and exemplary greenspace."*

Mayor of Bedford Frank Branston: *"It has been a vision to create the Bedford River Valley Park for many years and I am very pleased to see such an imaginative project take this major step towards realisation. The River Valley Park will transform the eastern approach to Bedford and provide an exceptional asset for the recreation and enjoyment of the people of Bedford, making it an even better place to live and work."*

Jessica Barton, Year 2, Willington Lower School: *"This is going to be brilliant – the Park will be massive with loads to do and lots of interesting places to explore – and I'll be able to cycle everywhere from the village and have picnics near the river and I can also feed the ducks – it'll be great for wild animals and all the baby rabbits"*

CONTENTS

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Executive Summary

The Bedford River Valley Park (BRVP) is a proposed 868 hectares (2145 acres) regional park to the east of Bedford, largely situated in the floodplain of the River Great Ouse. The initiative is supported by national, regional and local policies which promote the creation of green infrastructure and nature conservation. The concept of creating the BRVP has been around for over 10 years. It is endorsed by a broad coalition of organisations, including Bedfordshire County Council and Bedford Borough Council (which both own sections of the proposed park). The BRVP is being promoted through Local Plan Policy NE23 which is the cornerstone of this document.

The establishment of the park has recently been given a boost through the purchase of the private Grange Estate (121 hectares or 300 acres) at the eastern end of the park by the Marston Vale Trust using funds provided by the Department for Communities and Local Government. The planning of the BRVP is being spearheaded by the Marston Vale Trust, which has previously prepared, for the purposes of stimulating debate and for public consultation, a draft masterplan for the whole site. Over 48,000 households in and around Bedford were directly asked about their aspirations for the BRVP as a part of an extensive consultation exercise, which found that the vast majority (85%) of respondents were 'very supportive' of the concept. This Framework document now supersedes the draft masterplan and aims to build consensus, set objectives and steer the development of the park for the next decade and beyond.

This Framework document reviews the policy context, analyses the existing condition of the designated area, reports on the results of consultations and identifies key design constraints and opportunities. Informed by this, it makes broad prescriptions for what BRVP could and should be, and establishes 'key principles' to guide all future work.

The Framework provides a vision of how the Bedford River Valley Park will look as it is created over the next decade or so. Around 240 ha is proposed for conversion to 'floodplain forest' (a mosaic of woodlands, wetlands and grasslands), within which networks of access routes will provide for quiet recreation. The proposed 2.3 km Bedford Rowing Lake is identified as a major potential asset and the existing, well-used NCN Route 51 cycleway is identified as a key asset to which additional access routes within BRVP will connect. The BRVP will provide a major new area of multi-functional greenspace on the urban fringe of Bedford to serve the recreational needs of an expanding population.

The River Great Ouse near Willington

1

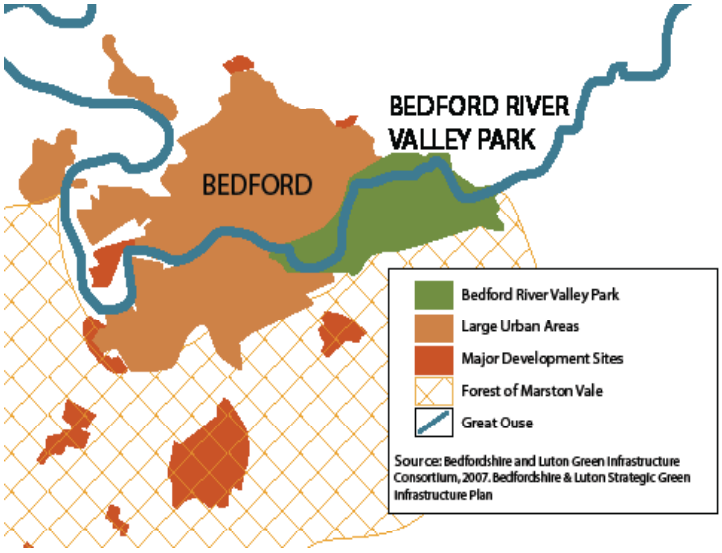
INTRODUCTION

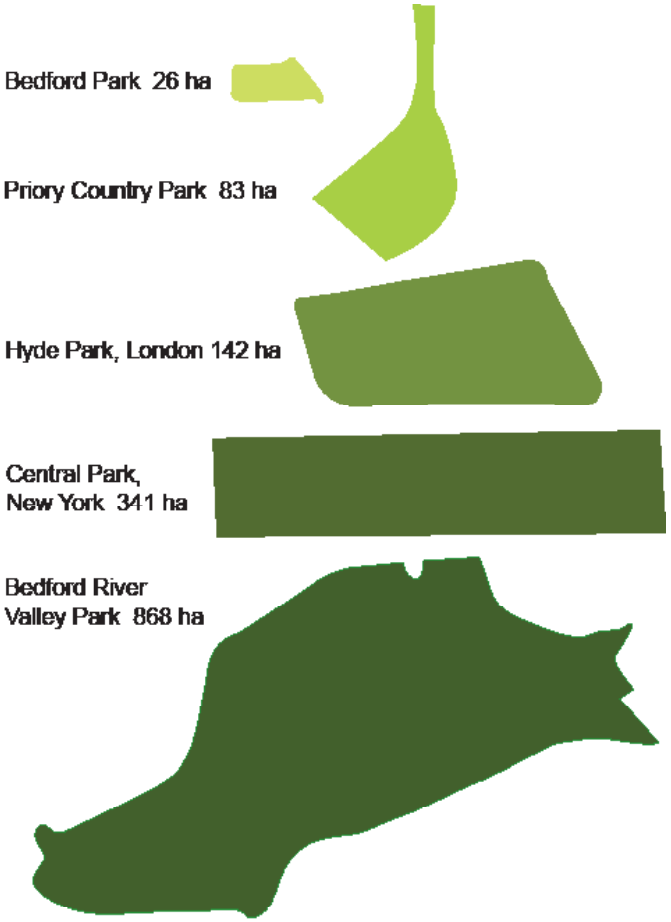
1.1 General Introduction

The Bedford River Valley Park (BRVP) is a major new green space being promoted by a coalition of landowners, businesses, local people and the statutory bodies that represent and serve them. The park will cover 868 hectares (2,145 acres) largely in the floodplain of the River Great Ouse to the east of Bedford, linking the existing Priory Country Park in the town to the wider countryside around the village of Willington. The area covered by the BRVP is substantial and of a scale normally associated with regional parks. The BRVP will provide new opportunities for recreation, improvements to biodiversity, flood alleviation, renewable energy production and employment. Funding from the Department for Communities and Local Government (CLG) has enabled the Marston Vale Trust to purchase part of the site (the Grange Estate) and to develop this Framework document. The Marston Vale Trust is the independent environmental charity creating the 61 square mile (158 square kilometre) Forest of Marston Vale [1], one of England's 12 Community Forests, within which the BRVP project falls.

There is a long-standing aspiration to create the BRVP as set out in Policy NE23 of the Bedford Borough Local Plan [2] which states:

'When development opportunities arise, within the area defined on the Proposals Map, the Borough Council will seek the creation of the Bedford River Valley Park as an area where opportunities exist for landscape enhancement, nature conservation, recreation and increased public access whilst protecting sites of acknowledged archaeological importance'.





1.2 Scope of the Document

The aim of this document is to develop a shared vision for the Bedford River Valley Park which will become the basis for a coherent framework for the delivery of its various components over the next decade or so. The intention is that this Framework document will guide the detailed planning and design of the Park by the many individuals and organisations that will be involved in its delivery. This Framework is not intended to be overly prescriptive, and all maps and descriptions are provided as guidance only. The Framework is based on a thorough analysis of existing conditions, constraints and opportunities as well as the results of an extensive public and stakeholder consultation process. The scope and scale of the Park is so great that there will be many opportunities that have not been anticipated by this brief document.

Given the rapid pace of change in the Bedford area and the size and complexity of the project, the Framework should continue to evolve and occasional review may be required. The BRVP already includes many thriving and important businesses, homes and facilities and several new initiatives are already underway. The aim of this document is to help coordinate these activities and to shape future projects so that they may complement one another and take account of policy, existing constraints and emerging opportunities.

This document provides the agreed framework for creating the Bedford River Valley Park, with an endorsed set of principles and concepts to guide all future work.

1.3 Objectives

Communities require the grey infrastructure that provides essential services like transportation, sewerage, water and power. They also require green infrastructure - a network of multifunctional greenspace - to provide the many social, environmental and economic benefits expected of modern sustainable communities.

Bedford is growing: The Milton Keynes and South Midlands (MKSM) Sub Regional Strategy [3] has allocated an additional 19,500 dwellings to the Bedford/ Kempston and the northern Marston Vale area for the period up to 2021. The Bedfordshire and Luton Green Infrastructure Plan observes that 'taking into account the needs of communities in growth areas within the wider MKSM Sub-Region, there is a strong case for the provision of accessible greenspace of sub-regional significance within Bedfordshire and Luton.' Planned at national, regional and local level, multi-functional greenspace (such as the BRVP) needs to be located close to where people will be living and working and will help to:

- Restore ecosystems and the healthy soil, water, air and food that they provide which are essential for life
- Safeguard and enhance biodiversity
- Promote social cohesion, health, well-being and contact with nature
- Improve local image and distinctiveness
- Promote sustainable economic growth and investment
- Create places where people want to live and stay
- Support education and training
- Safeguard and enhance historic assets
- Address existing deficiencies and ensure a net gain in greenspace provision to accommodate urban growth

2

BACKGROUND

2.1 Policy Framework

East of England Plan

The East of England Plan (Regional Spatial Strategy) will guide planning and development across the region to the year 2021. It encompasses economic development, housing, the environment, transport, renewable energy, waste management, sport, culture and recreation. It is the first Regional Spatial Strategy to be developed under the Planning and Compulsory Purchase Act 2004 [4].

Local planning authorities must have regard to the policies contained in the East of England Plan when drawing up Local Development Frameworks as the Plan forms part of the Development Plan, particularly:

Policy ENV1: Green Infrastructure

This policy identifies the Forest of Marston Vale as being one of 15 areas of regional significance set for the retention, provision and enhancement of green infrastructure. It is specifically grouped in the category containing sites of landscape, ecological and recreational importance.

"Areas and networks of green infrastructure will be identified, protected, created, extended, enhanced, managed and maintained throughout the region to ensure that an improved and healthy environment is available for the benefit of present and future communities. This will be particularly important in those areas identified to accommodate the largest amounts of growth in the region, whether or not officially recognised as such in the Sustainable Communities Plan. Local development documents will:

- define a multiple hierarchy of green infrastructure, in terms of location, function, size and levels of use, at every spatial scale and across all areas of the region based on analysis of existing natural, historic, cultural and landscape assets, including the identification of new assets required to deliver green infrastructure;
- identify and require the retention and provision of substantial connected networks of green space, in urban, urban fringe and adjacent countryside areas to serve the new communities in the sub-region by 2021; and
- ensure that policies have regard to the economic and social as well as environmental benefits of green infrastructure assets."

Other relevant policies

- Policy ENV4 states that where soil and land have been degraded, opportunities for restoration to beneficial after-uses, including ....woodland, amenity and habitat creation schemes, should be maximised.
- Policy ENV5 urges local planning authorities, through their plans, policies, programmes and proposals to increase woodland cover through protection and better management of existing woodland and promoting new planting where appropriate.
- Policy ENV5 also identifies that new woodland creation should be targeted at, amongst other things, Community Forests where the aim is to increase woodland cover to 30% by 2031 and schemes to create new wet woodland (which is a priority in this region).

Milton Keynes & South Midlands Sub-Regional Strategy

The Milton Keynes & South Midlands Sub-regional Strategy (SRS) is the first of its kind and covers the growth area of Milton Keynes, Northamptonshire, and parts of Bedfordshire and Buckinghamshire [3].

The strategy sets out the scale of development until 2021 – highlighting the need for planned, sustainable communities with adequate infrastructure for vital services such as transportation, health and education.

The strategy promotes the creation of sustainable communities - well-designed places where people want to live, with jobs, facilities, services, and strong communities - and acknowledges the role of green infrastructure in helping to achieve this.

Bedford Local Plan

The Bedford Borough Local Plan [5] contains policies which relate specifically to the BRVP, including Policy NE23 (reproduced in full in the General Introduction on page 9) and Policy NE21 which states: 'The Borough Council will provide continuing support to the Forest of Marston Vale. When considering development proposals (within the area defined on the proposals map) it will expect proposals to incorporate the aims of the project and in appropriate circumstances seek contributions towards its implementation'.

Policy LR4 supports the creation of a rowing course on land west of Willington. A number of other policies in the Bedford Borough Local Plan indirectly support the BRVP. These include Policy NE3 (protection of wildlife sites), Policy NE4 (tree planting and protection), Policy NE6 (woodland protection and planting), Policy NE7 (wildlife corridors), Policy NE9 (conservation management agreements), Policy NE10 (development to promote nature conservation), Policy NE12 (adequate and appropriate landscaping), Policy NE13 (protection of retained landscape), Policy NE16 (flood risk), Policy NE20 (developer contributions to landscape and environmental improvements), and Policy NE24 (protection of water resources).

The protection, enhancement and preservation of ancient monuments and archaeology are covered by policies BE23, BE24 and BE25 in the Local Plan.

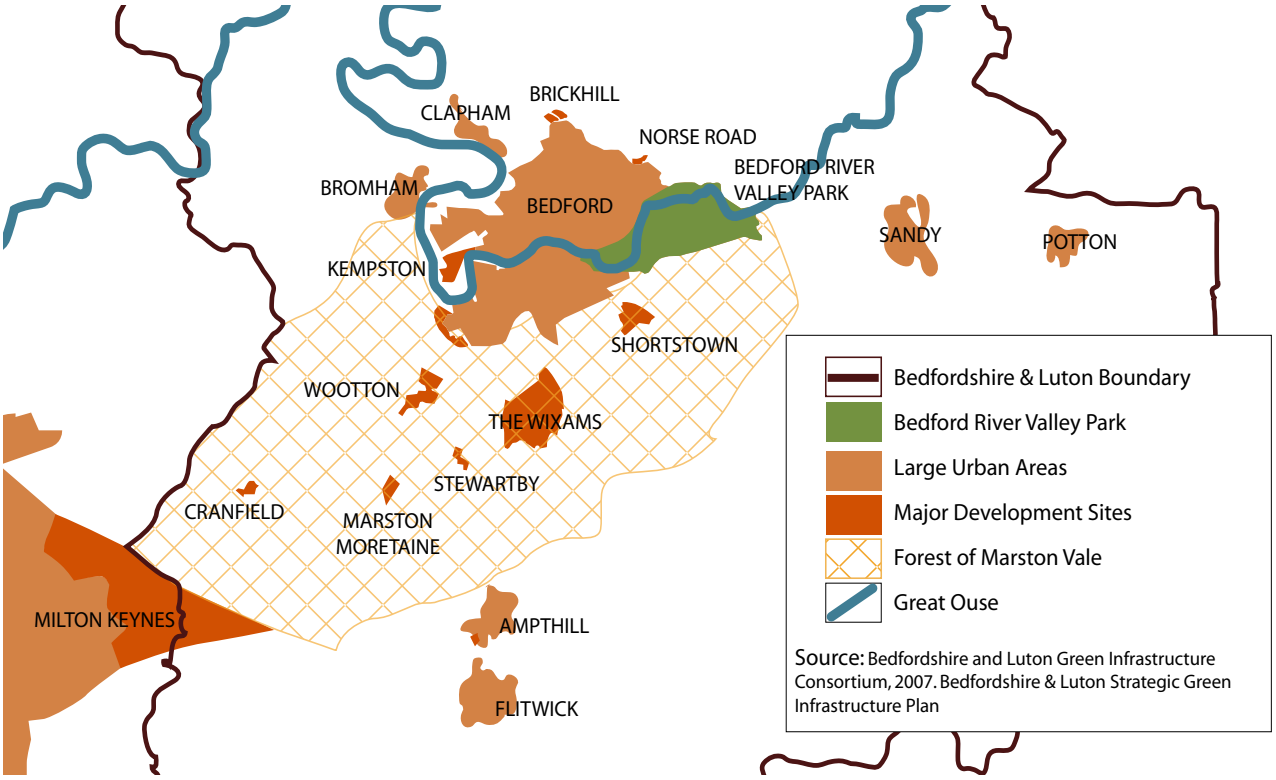
Greenspace Strategy for Bedford Borough

This document (available as a consultation draft at the time of writing) promotes the BRVP and recognises the importance of the Bedford Green Wheel, which will link the BRVP with other green infrastructure in the Bedford area.

Regional Woodland Strategy for the East of England

The East of England Regional Assembly has recognised the benefits brought to the Region by trees and woodland through the adoption of the Regional Woodland Strategy (as prepared by the Forestry Commission in 2003). The BRVP will deliver on many of the initiatives described in the Regional Woodland Strategy, including improved access, environmental enhancement, community engagement, sustainable development and the protection of natural resources and biodiversity.

2.2 Growth Agenda



The East of England Plan

The East of England Regional Assembly (EERA) has prepared a new Regional Spatial Strategy (RSS) for the East of England called the East of England Plan. It will update the existing RSS (RPG 6 - East Anglia and RPG 9 - South East) where these cover the East of England in guiding planning and transport policy up to 2021. A draft East of England Plan was produced in 2004 [4], and the final version awaits adoption (expected by mid 2008) following the Panel Report of June 2006 [6]. Policy SS13 of the draft plan indicates that an additional 478,000 dwellings for 648,000 people are to be provided in the East of England region by 2021. The Panel Report indicated that the overall housing figures were insufficient and should be revised upwards to a recommended higher figure of 505,500. Housing targets for Bedford Borough are set to increase from 830 to 1,300 per annum. In 2003 EERA adopted a Regional Environmental Strategy [7] which articulates the importance of conserving and enhancing the environment. This becomes of increasing significance in light of the projected growth in population. Many of the actions set out in the Regional Environmental Strategy are addressed through the policies of the East of England Plan, most notably in Policies ENV1 (Environmental Infrastructure), ENV3 (Biodiversity and Earth Heritage) and ENV5 (Woodlands). Policy ENV5 is particularly relevant to the BRVP and the key elements are set out over the page:

'In their plans, policies, programmes and proposals local planning authorities and other agencies should seek to achieve an increase in woodland cover both by protecting and achieving better management of existing woodland and promoting new planting... Woodlands of acknowledged national or regional importance should be identified in local development documents with a strong presumption against development that would result in their loss or deterioration....The nature conservation value of all woodlands is recognised and conversion of any woodland to other land uses should be resisted unless there are overriding public and ecological benefits. Woodland unavoidably lost to development should be replaced with new woodland of at least equivalent area and composition, preferably in the same landscape unit. New woodland creation should be targeted specifically at:

- schemes for the restoration of derelict or contaminated land and sites formerly used for mineral-extraction or industry;
- green infrastructure projects associated with areas planned for significant growth;
- the Forest of Marston Vale Community Forest, with the aim of increasing woodland cover to 30% by 2031;
- planting schemes along transport corridors; and
- schemes to expand and link areas of native woodland and create new wet woodland (which is a priority in this region), to meet regional and local BAP targets.'

The concept of the BRVP is also supported by a number of policies in the East of England Plan that deal with cultural facilities, sites and activities. Most relevant are Policies C5 and ENV6 that encourage the improvement of opportunities for recreational activities which rely on natural resources. Local development documents are instructed to include policies which seek to maximise the development of regional and country parks, woodlands and community forests, trails, bridleways, cycleways and waterways that may attract visitors and meet local needs.

Polcy ENV6 requires planning authorities and other agencies to identify, protect, conserve and (where appropriate) enhance the historic environment, including 'the wide variety of archaeological monuments, sites and buried deposits which include many scheduled ancient monuments and other nationally important archaeological assets'.

Milton Keynes & South Midlands Sub Regional Strategy

The Milton Keynes & South Midlands Sub Regional Strategy (MKSM SRS) [3] published in March 2005 contained proposals that signalled a period of rapid growth in housing and employment-related development, and associated infrastructure for Bedfordshire & Luton. It sets the agenda for growth in the BRVP area. The Sub-Regional Strategy recognises the need to ensure that development contributes to an improved environment, by protecting and enhancing environmental assets and providing related green infrastructure to meet the needs of existing and expanding communities. Bedford/ Kempston and the northern Marston Vale form one of six key locations for growth in the sub-region. The MKSM SRS allocates 19,500 dwellings to the area for the period up to 2021, and makes a provisional assumption for growth to 2031 for a further 10,000 dwellings. A key priority for the area is environmental regeneration in the Marston Vale and the creation of green infrastructure, notably through the Forest of

Marston Vale. The figure at the beginning of this section (2.2) shows the County of Bedfordshire, Forest of Marston Vale and the BRVP in the context of major development sites.

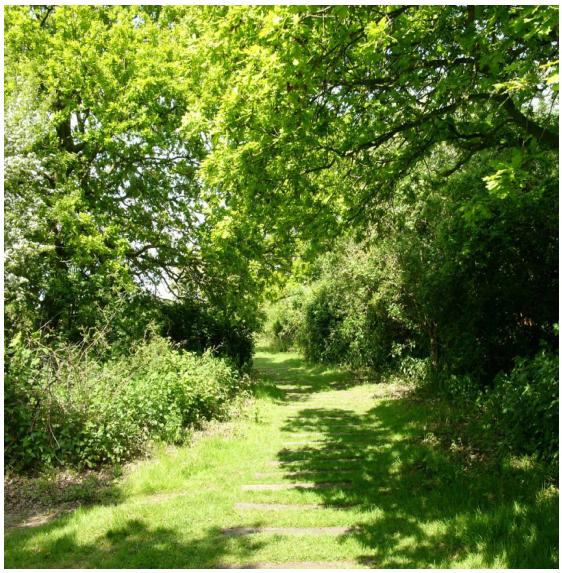
'Green Infrastructure and the Bedfordshire and Luton Strategic Green Infrastructure Plan

Green infrastructure (GI) [8] has been defined as: 'A network of multifunctional greenspaces and inter-connecting links which is designed, developed and managed to meet the environmental, social and recreational needs of existing and new communities'. It has statutory support through the MKSM SRS and the evolving East of England Plan, and is one of the key elements in the preparation of Development Plan Documents for the new growth area.

The Bedfordshire and Luton Green Infrastructure Consortium has produced a GI Plan with the aim of identifying the existing green infrastructure network and opportunities for adding to and improving it [9]. In Bedfordshire this reflects the guidance given in 'A Green Infrastructure Guide for Milton Keynes & the South Midlands' which was released in 2005 [10].

The GI Plan responds to the Sub-Regional Strategy by setting out proposals, backed up by supporting baseline data and analysis, for establishing a strategic green infrastructure framework for Bedfordshire & Luton for the period to 2021. It is based on the principle of ensuring a net gain in green infrastructure provision to meet growth needs and address existing strategic deficiencies. The Consortium sees the production of this Strategic Green Infrastructure Plan for Bedfordshire & Luton as an important first step in the process of proactively planning the future development and delivery of green infrastructure, necessary to build sustainable communities throughout the county.

The BRVP area has been highlighted by the GI plan appearing as a 'green wedge' linking Bedford to the wider countryside and is a significant addition to the network. The GI plan notes BRVP as being able to provide the only area of green infrastructure of sub-regional importance in Bedfordshire.



2.3 Initiatives

Recent Developments

In 2006 the Marston Vale Trust secured a grant from the Department for Communities and Local Government to purchase the 121 hectare (300 acres) Grange Estate [12] at the heart of the BRVP.

Part of the Grange Estate

Planning permission for a 108 metre wide and 2,300 metre long rowing lake within the BRVP was granted to the Rowing Lake Company Limited in July 2006. The idea of having a rowing lake to the east of Bedford has been around for many years and stems from Bedford having a strong tradition of rowing activity and concerns regarding congestion from increasing use of the River Great Ouse. The granting of planning permission has moved this long-standing aspiration significantly closer to becoming a reality. Its implementation will almost certainly require a combination of public and private finance which is currently being sought by the Rowing Lake Company and its partners.

Sustainable Development and Response to Climate Change

Current thinking considers parks as multifunctional 'green infrastructure' [8] which provide essential 'ecosystem services' [14], where people work with the grain of nature to maintain soils and vegetation, clean water and air, wildlife habitats and space to relax and play. The provision of accessible natural open space for people is an indispensable component of any strategy for sustainable development. This philosophy has come to the fore since the World Summit on Sustainable Development in Johannesburg in 2002. The UK Government's response to this was published in 2005 [15] and this was followed shortly afterwards by regional guidance (Securing the Regions' Futures) [16]. The Government has identified climate change and energy security as priority areas for immediate action [17]. The 2006 Stern Review [18] has reinforced this view. Climatologists are predicting that global temperatures could increase by up to 5.8 degrees Centigrade over the next century [19]. For the UK this could lead to wetter winters and summer drought and the number of flood events affecting the Great Ouse catchment may increase. People will seek relief from the summer heat in waterside parks and woods. Land will be required for the storage of floodwaters and production of green energy from renewable sources such as short rotation coppice.

Forest of Marston Vale

The BRVP area forms part of the Forest of Marston Vale, an area of Bedfordshire identified by Government as a national priority for environmental regeneration. The challenge is to use trees and woodlands to transform 158

square kilometres (61 square miles) between Bedford and Milton Keynes, repairing a landscape scarred by decades of clay extraction, brickmaking and landfill by working with local communities, government and businesses to increase woodland cover from 3% to 30% by 2031. The Marston Vale Trust is the independent charitable trust dedicated to creating the Forest of Marston Vale. Delivery of the Forest is guided by the 'Forest Plan', [20] a non-statutory strategic framework prepared through extensive consultation and endorsed by a wide range of stakeholders, including local communities, Government agencies, Bedfordshire County Council and Bedford Borough Council and Mid Beds District Council. The 'Forest Plan' highlights the BRVP area as an important transition zone between urban Bedford and the wider countryside and a key 'gateway' into the Forest of Marston Vale requiring significant woodland planting. The BRVP area has long been identified in the 'Forest Plan' as having huge potential both as a recreational area and for creating a valuable landscape mosaic of water, wetlands, grassland and woodlands.

Outdoor Access Improvement Plan

The Bedfordshire County Council Outdoor Access Improvement Plan (2006 -2011) identifies rivers and waterside sites in general as being particularly attractive for a wide range of public access and activity. The area of the BRVP is identified as a priority area for access improvements and the BRVP has the potential to deliver against all seven Programme Themes identified in the Plan.

Bedford to Milton Keynes Waterway

Both the Planning Committee of Milton Keynes Partnership and the Development Control Committee of Milton Keynes Council have given Outline Planning Permission for the first stage of the Bedford to Milton Keynes Waterway [13]. The waterway will stretch from the Grand Union Canal at Campbell Park and run for over 6 kilometres to the M1 near the Bedfordshire boundary. Eventually the waterway will link with the River Great Ouse at Bedford making a navigable route from the Grand Union Canal at Milton Keynes to the Wash.

Great Ouse Vision

The Great Ouse Vision is a catchment-wide joint initiative of the Environment Agency and Natural England. It aims to restore and enhance river and floodplain habitat to benefit biodiversity. To date the project has focussed on the lower reaches of the River Great Ouse in the Fens, however the BRVP presents an opportunity to extend the project to include wetland restoration that lies within easy reach of the citizens of Bedford. In the future it is intended that the BRVP could become a model for the progressive restoration of mineral sites and agricultural land elsewhere in the upper catchment.

Fisheries Strategy

In February 2006 the Environment Agency launched its Fisheries Strategy [21]. The strategy aims to achieve three main objectives by 2011, namely:

(i) improved fish stocks and a better environment for wildlife and people;

(ii) more chances for more people to fish and fisheries performing better; and

(iii) sustainable fisheries boosting the local economy.

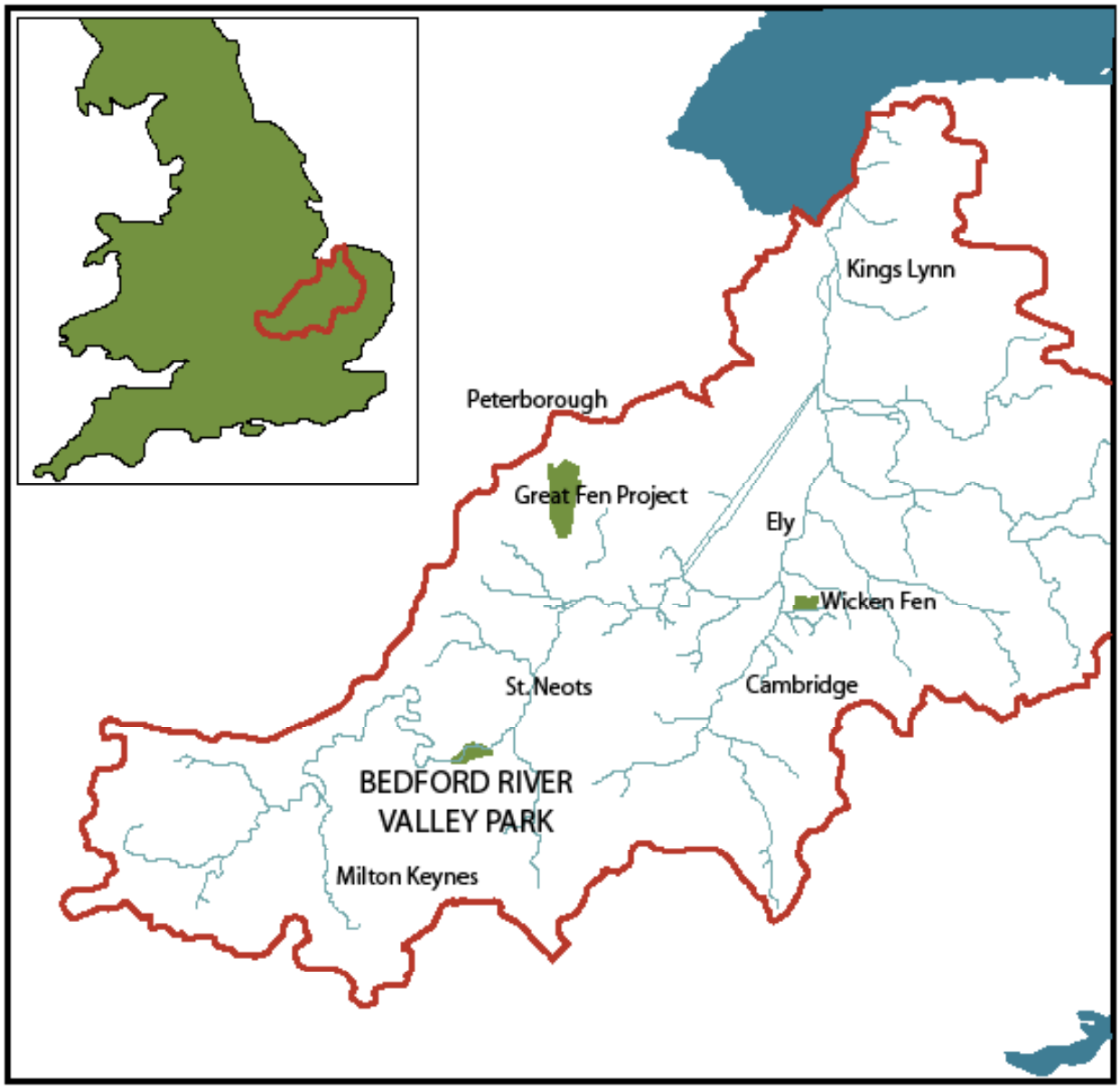
The BRVP offers a significant opportunity to meet the Environment Agency Fisheries Strategy and wider biodiversity objectives in the context of the developing Natural England and Environment Agency Great Ouse Vision.

Restoring Biodiversity

The 1992 Convention on Biological Diversity (CBD) in Rio de Janeiro defined biodiversity as: 'the variability among living organisms from all sources, including, amongst others, terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems'. The term is now most often used in the context of rapid and global biodiversity loss as a result of human activity. In the UK we have lost over 100 species during the last century, and many more species and habitats are in danger of disappearing, especially at the local level. The BRVP can address the problem of biodiversity loss at the local level by exploiting the opportunities that exist for wetland and terrestrial habitat restoration in the quarried landscape. The aim is to maximize the ecological functioning of the BRVP area, the river corridor and catchment beyond, in line with the expectations of the Great Ouse Vision.

Quality

Through CABE Space [22], the Commission for Architecture and the Built Environment promotes high quality open space, including initiatives like the Green Flag Award [23] which is a national annual award run by the Civic Trust as a means of recognising and rewarding the best green spaces in the country. CABE Space has advised the Marston Vale Trust in the preparation of the BRVP Framework.



Bedford River Valley Park in the context of the River Great Ouse Catchment

3

ANALYSIS

3.1 Existing Condition

Topography

The BRVP site occupies a level floodplain and undulating adjacent terrace with gentle and moderate slopes to a maximum of 7°. The site does not contain any steep gradients. The Anglian Water sewage treatment works are located on slightly higher ground, between the A421 and Priory Country Park, which makes that facility more visible from some areas. Levels vary between 17m and 23.5m above sea level

Geology

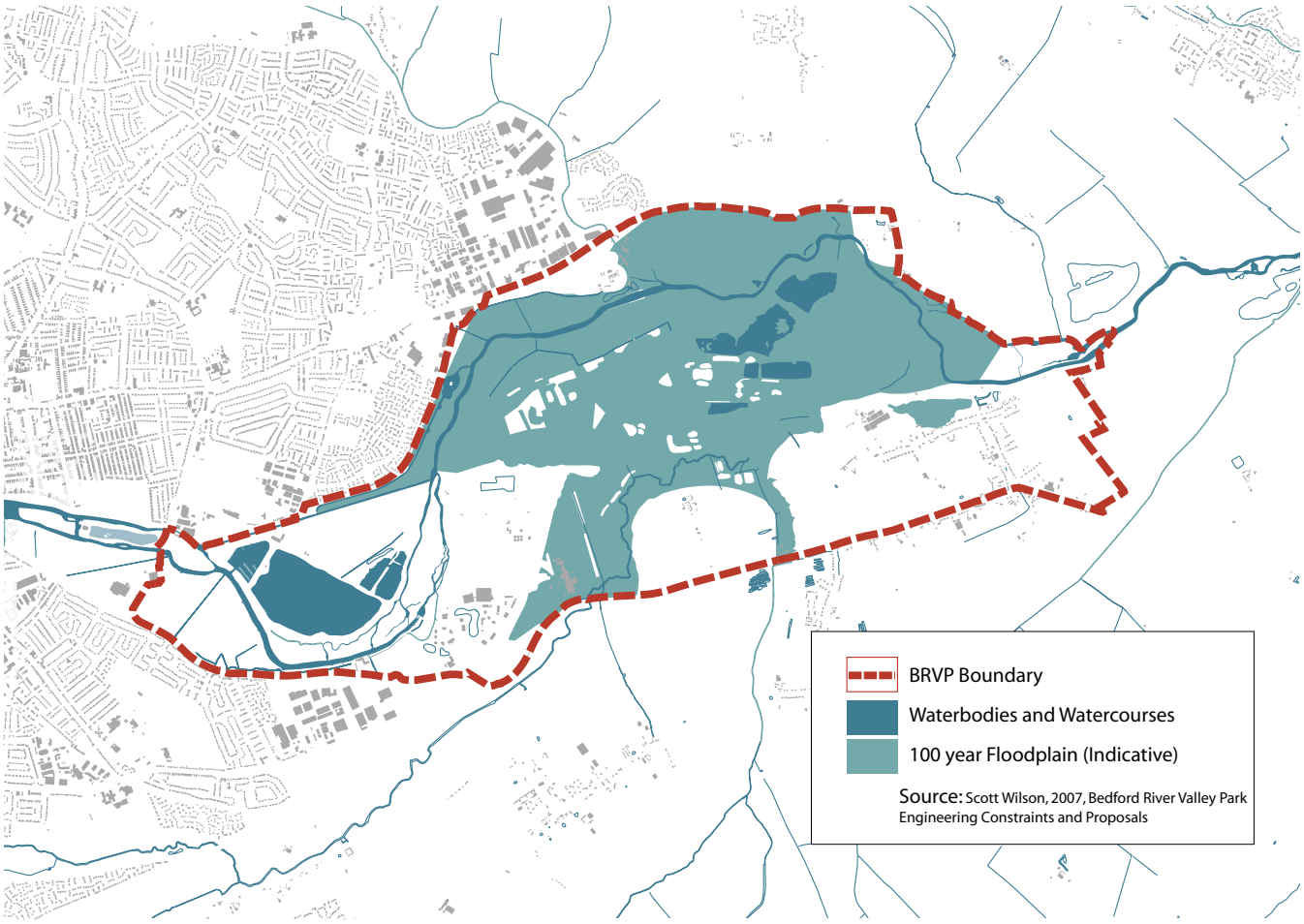
The BRVP area is underlain by drift deposits of alluvium and valley gravel associated with the River Great Ouse (British Geological Survey, Sheet 203, Bedford – 1:63,360). The superficial deposits are underlain by the Oxford Clay of Jurassic Age. The depth of the alluvial deposits, which overlay the Oxford Clay, varies throughout the site. It is these alluvial deposits within the BRVP and the wider Great Ouse Valley that have led to the local development of the minerals extraction and processing industry.

Climate

Bedford has a temperate climate with warm summers and mild winters. According to the Meteorological Office, which receives data from a station in Bedford, the average maximum summer temperatures are 21.5 degrees Centigrade in July and August. Moderate rainfall occurs year round (average annual precipitation based on monthly averages between 1971 and 2000 was 584.4mm). Snow is uncommon and rarely settles. Temperatures tend not to fall below freezing for extended periods. The prevailing south-westerly winds are year round and tend to be stronger in the winter months.

Climate Change

For the UK, it is predicted that climate change will mean warmer temperatures, wetter winters and drier summers, less snow, and higher sea levels, leading to flooding of coastal areas. The frequency of extreme weather episodes may increase. There may also be a greater threat of flooding following rainstorms and the number of flood events affecting the BRVP may increase. Vegetation may become increasingly stressed and the fauna of the area will change, with an increase in the numbers of species normally associated with warmer, more southerly climes.



Floodplain and Surface Waters

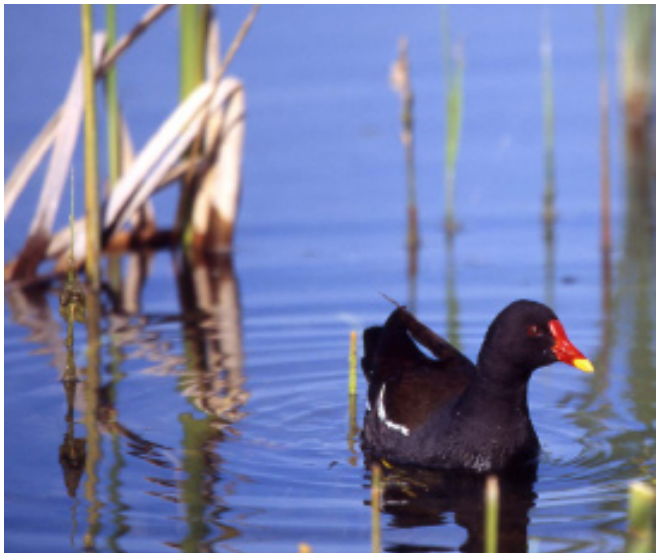


Photo courtesy of Barrie Mason

Hydrology

The River Great Ouse and its tributaries dominate the hydrology of the BRVP site. The Great Ouse enters the BRVP at the western boundary and curves around the south of the Priory Country Park before heading north and east, leaving the BRVP to the north east of the village of Willington. The Elstow Brook flows in a north-easterly direction through the site. It enters the Park at the southern boundary near to Cardington Cross and joins the Great Ouse to the north of Willington. A southern tributary of the Great Ouse, the Wilstead Brook, joins the Elstow Brook close to Willington. To the north, the Renhold Brook flows through approximately 500m of the BRVP area before joining the Great Ouse to the south east of Castle Dairy Farm. The Gadsey Brook is an approximately 1km northern diversion of the Great Ouse running along the north eastern boundary of the site.

Sand and gravel extraction has been undertaken in the area for 20 years and this has resulted in a number of lakes to the north of the area, and at the Priory Country Park to the west. Lakes are supplied by surface flows, groundwater emerging from springs and seepages or, where excavations are sufficiently deep they may indicate the depth of the local water table. Drying out appears to occur due to seasonal fluctuations or groundwater extraction. Historical information provided by the minerals companies indicates that the radius of influence of dewatering is limited (negligible within 200m and only about 1m within a 30m radius). The mineral operator has also undertaken long term monitoring of groundwater levels. Groundwater levels have ranged between approximately 18.5m and 23m above sea level over two decades. None of the monitoring boreholes have ever been recorded as being dry, despite the fact that some are located in the vicinity of past or current temporary dewatering areas.

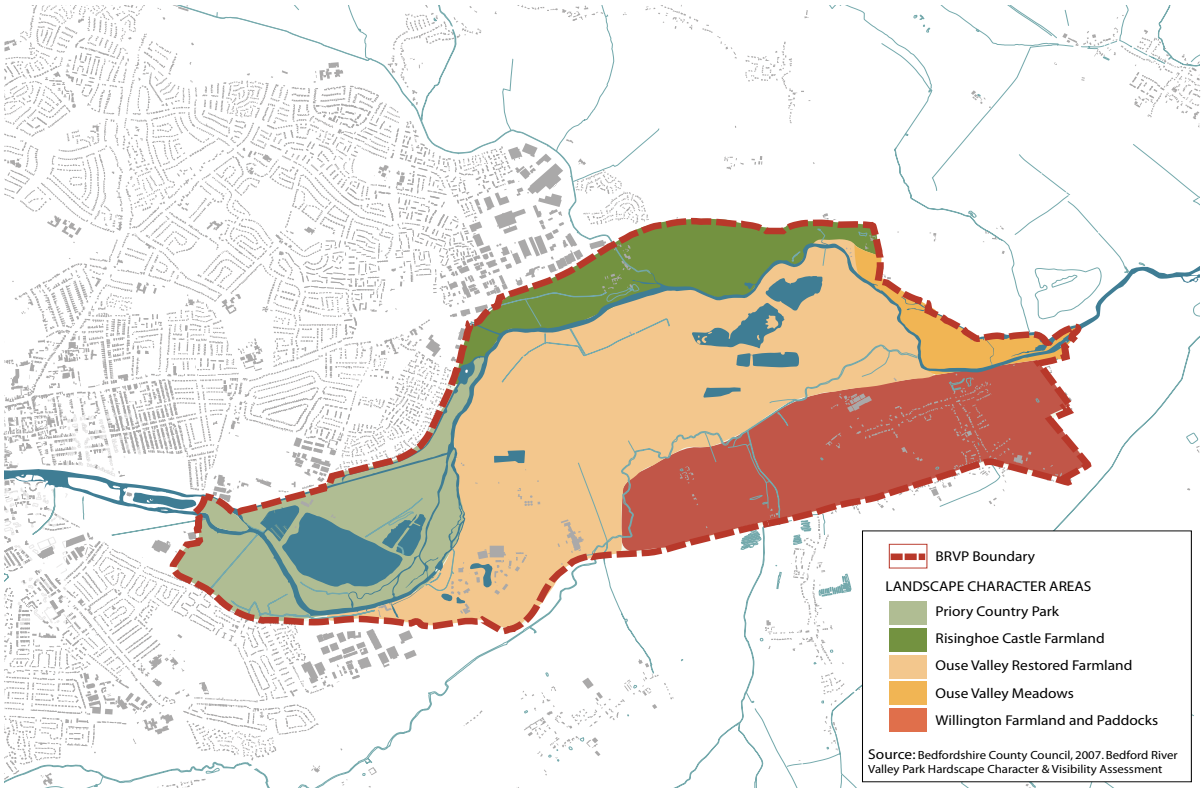
The River Great Ouse floodplain is at the highest risk of flooding in winter following extended periods of rainfall in the upper catchment. However flooding can also occur due to short high intensity local storms (which may occur in summer). This is particularly a problem in areas underlain by clay soils or in urban areas where the local drainage system is overwhelmed. The proposed BRVP has the potential to increase the capacity of the floodplain and provide additional storage for floodwater, thereby reducing flood risk downstream. Water resources information on the site is available from the Upper Ouse and Bedford Ouse Catchment Abstraction Management Strategy [24]. The area falls within the Environment Agency's Water Resource Management Unit 4 - Bedford Ouse (WRMU 4). Oxford Clay is the dominant underlying formation in WRMU 4, and as clays are impermeable, high amounts of precipitation runoff are created. Within WRMU 4 runoff provides a substantial percentage of the flow received by the River Great Ouse. Abstraction in WRMU 4 is mainly by public water suppliers, using the gravel aquifers in the Ouse Valley or direct from the river to refill reservoir storage. There is also some abstraction for industrial and commercial activities (e.g. mineral operations) as well as power generation. There are 18 active water abstraction licences within the vicinity of the BRVP. The preferred Environment Agency option for future management of WRMU 4 is to maintain the current resource availability status of 'No Water Available'. The Environment Agency has indicated that proposals for non consumptive abstractions with a net environmental benefit

will be considered on a case-by-case basis.

It is important that the data for organic loadings, nutrient levels, suspended solids and other contaminants such as heavy metals contained within the water source are reviewed as these can act as a constraint to wetland restoration. The presence of chemical pollutants and pathogens might pose a threat to people and animals using the BRVP, particularly where an activity requires close contact with water. Such water quality issues are of particular importance when considering that in dry weather a significant proportion of the base flow of the River Great Ouse is provided by the consented discharge of treated wastewater from Anglian Water's Bedford Sewage Treatment Works, which lies within the BRVP. However the outlook is positive: The River Great Ouse and the Elstow Brook have been given water quality ratings of B (good) and A (very good) respectively by the Environment Agency.

Landscape

The site is located on the eastern fringe of Bedford occupying a flat, shallow valley, largely within the River Great Ouse floodplain. The landscape character of the area has been assessed in a recent Bedfordshire County Council study [25] which has identified five landscape character units. The first, to the west, is 'Priory Country Park'. The second at the centre of the site associated with the river valley is the Ouse Valley Restored Farmland, which includes restored gravel pits, plantations and pasture. To the south around the village of Willington is an area named as the 'Willington Farmland and Paddocks'. To the north of the Great Ouse are meadows which have been named as the 'Risinghoe Castle farmland with Parkland'. Finally at the extreme east of the site are the Ouse Valley Meadows, pastures that have yet to be exploited for gravel extraction. The study notes that the BRVP site marks the transition between the urban fringe and open countryside and is comprised of a mix of



agricultural land, mineral workings and restored mineral workings. A range of habitats including arable fields, grassland, riverside, open water and woodland habitats also occur. However the site does have some scenery which is industrial and urban including gravel extraction works, an abattoir, sewage works and the A421 Bedford Bypass which bisects the site running south west to north east. Existing vegetation on the site is largely shaped by the presence of linear or boundary features such as the two principal watercourses, the River Great Ouse and Elstow Brook, as well as tracks. There are a number of plantations associated with mineral workings or restoration schemes. The River Great Ouse flows west to east and its well-vegetated and wooded banks create a strong visual barrier. The Elstow Brook flows through the open arable fields and pasture of the southeastern part of the site. It is characterised by bankside vegetation and sections of meanders typical of its lowland valley setting. The National Cycle Network Route 51 follows the alignment of the former Bedford to Sandy railway from west to east across most of the site. The route is most noticeable to the east of the Lafarge mineral processing site where it is well vegetated with a mix of mature woodland edge planting including linear belts of poplar, and younger plantation associated with the restoration of former mineral working areas.

With the exception of existing features of value identified by the Bedfordshire County Council study, much of the BRVP landscape is of low to moderate condition and sensitivity and suitable for the large scale enhancements being proposed.

Landscape Designations

The site does not lie within any designated areas of landscape quality but is largely within the boundary of the Forest of Marston Vale [1] and therefore subject to the existing Government target of increasing woodland cover to 30% by 2031. The area is also on land allocated within the Bedford Borough Local Plan [5] for the Bedford River Valley Park.

Zone of Visual Influence

The flat topography of the area means that the BRVP is visually discrete. Limited views across the site are possible from the most elevated section of the A421 Bedford bypass and the bridge for NCN Route 51. In a few locations there are key long-range views to the Cardington airship sheds and the Greensand Ridge [25].

Ecology

The County Biodiversity Action Plan identifies the BRVP as an area that presents good opportunities to create floodplain habitats. The site supports a range of arable, grassland, riparian, open water and woodland habitats. The various wetland habitats are considered to have the highest ecological value, including marshy grassland, ponds and the River Great Ouse and its tributaries with their associated bankside vegetation. The Elstow Brook and floodplain grassland are considered to be of 'county value' - although the Elstow Brook has not been designated as County Wildlife Site (CWS). The Elstow Brook is visited by otter (a European protected species), kingfisher (a Schedule 1 listed bird) and contains a number of mature trees along its banks, which have the potential to support roosting bats (protected under European legislation). Water vole, a declining UK Biodiversity Action Plan (BAP) priority species, is expected to occur along the Elstow Brook. Fenlake Meadows Local Nature Reserve (LNR) to the west of the BRVP, is a County Wildlife Site, which contains grazed floodplain grassland and marshy grassland. An area of floodplain grassland in the southern part of the BRVP forms part of the Cople Pits CWS, and an area of marshy grassland also occurs to the east of the site within the Willington Moat CWS. Floodplain grazing marsh is a UK BAP priority habitat and this is reflected in the designation of the LNR and these three County Wildlife Sites. Areas of marshy grassland

within the Park area contain ponds, which have been reported to contain great crested newt (a European protected species). Badgers regularly cross the site with an active main sett, outlier setts and latrines in the locality. The River Great Ouse is designated as a CWS.

Two fish, the spined loach *Cobitis taeina* and bullhead *Cottus gobio* occur in the Great Ouse. They are both bottom-dwelling species, are threatened in Europe and are listed under Annex II of the EC Habitats Directive (Conservation [Natural Habitats, &c.] Regulations 1994). The spined loach is also protected under Schedule 5 of the UK Wildlife and Countryside Act 1981 (as amended), and is a Local Biodiversity Action Plan (BAP) species in Bedfordshire and Luton.

Contamination

Part of the Grange Estate to the east of the BRVP has been filled with construction waste following mineral extraction. Analyses [26] of seven inert landfill samples led to the discovery of a notable level of 2860mg/kg of Total Petroleum Hydrocarbons (TPH) in one sample and a range of arsenic values of 15.8 – 26.5mg/kg in all samples. There is increasing concern over building waste which, although once considered inert, can include products (e.g. tanalised timber) which have been reclassified as hazardous. There are other similar areas within the BRVP which require similar investigation. Contamination on the Grange and elsewhere in the BRVP may need to be addressed as detailed project plans are drawn up.

Bullhead

Land Uses

Land use categories within the BRVP include:

- Urban/Industrial. Includes the village of Willington, the Lafarge Quarry, the sewage works and the Priory Business Park. Built up areas cover approximately 15% of the existing BRVP area.
- Woodland. Includes areas along the Bedford to Willington section of the cyclepath; an area surrounding the gravel pits to the north east; both sides of the Elstow Brook and the plantation at the Priory Country Park. Woodland covers approximately 6% of the existing BRVP area.
- Open Water. Restored ponds and lagoons form areas of distinctive open character within the site. Many of the ponds are associated with young plantation woodland and establishing marginal and emergent aquatic vegetation. The mature flooded gravel pits at Priory Country Park dominate the site towards the western boundary, covering around 100ha. Water covers approximately 7% of the existing BRVP area.
- Unmanaged/Out of use. Includes those parts of the former Willington Quarry not in agricultural production and land to the north of Elstow Brook not in agricultural production or comprising grassland with regenerating scrub.

- Arable/Pasture. Restored mineral sites have

been returned to grassland. There are active arable farms within the BRVP area. Open areas, including arable land, pasture and unmanaged land covers approximately 71% of the existing BRVP area.

Archaeology and Built Heritage

Despite the loss of some areas of possible archaeological and historical significance through past activities, a number of protected sites still occur including Scheduled Ancient Monuments (SAMs). There are also listed buildings (over 20 in Willington Village including a 16th Century stables and stone dovecote owned by the National Trust) and a protected hedge. The archaeological significance of the BRVP area was considered in a recent Bedfordshire County Council report [27]. The site can be seen as a microcosm of the historic environment of Bedfordshire, with remains and excavated sites dating from all major periods. The river valley has been inhabited since at least the Neolithic/Bronze Age, as demonstrated by funerary and ritual features. Other assets include ring ditches, a cursus monument, linear enclosures, pit alignments, isolated burials and recently discovered round barrows. The group of Neolithic and Bronze Age monuments is one of the most important in the region. Archaeological remains of the later prehistoric and Roman periods indicate that the ritual landscape of the previous Neolithic and Bronze Age periods was gradually replaced by a settled, agricultural landscape.

Archaeological investigations have revealed that the area close to the River Great Ouse was once largely covered by water or marshland, with higher islands or peninsulas of gravel between watercourses being used for settlement. A rising water table during the onset of the Roman period could account for the abandonment of low lying settlements and a gradual shift to the higher gravel terraces in the south. A Roman villa set within a rectangular field system was investigated ahead of gravel extraction in the 1950s. The settlement had its origins in the early Roman period and developed into a substantial stone built villa with bathhouse.

The site also contains traces of the Iron Age/ Romano-British agricultural landscape including settlement enclosures, field boundaries and trackways. Known medieval remains in the area are less extensive, but it is likely that the area was part of the common field system during this period. Occasional remains of ridge and furrow are present in the area, although modern deep ploughing has largely destroyed these features. The principal post-medieval features in the vicinity of the proposal area relate to historical mineral extraction and sites associated with the Bedford brick industry. Other significant features include the former track bed of the Bedford to Sandy railway line, constructed in 1862, which crosses the site, and a number of grade II listed farm buildings.

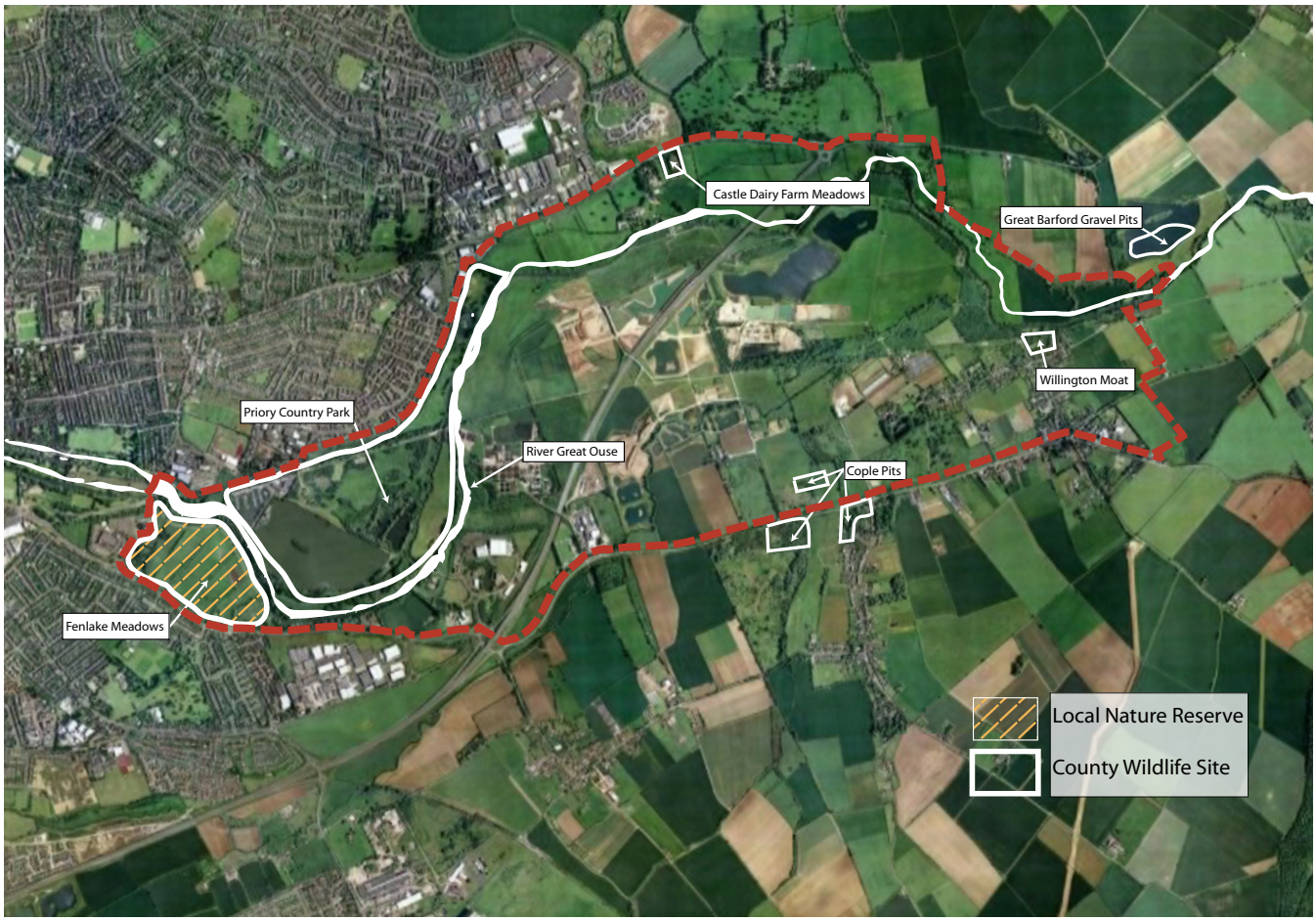
The river was made navigable in the 17th Century which would have led to an increase in trade and traffic on the watercourse. It fell into disuse after the coming of the railway but was restored for use by pleasure craft in the 1970s.

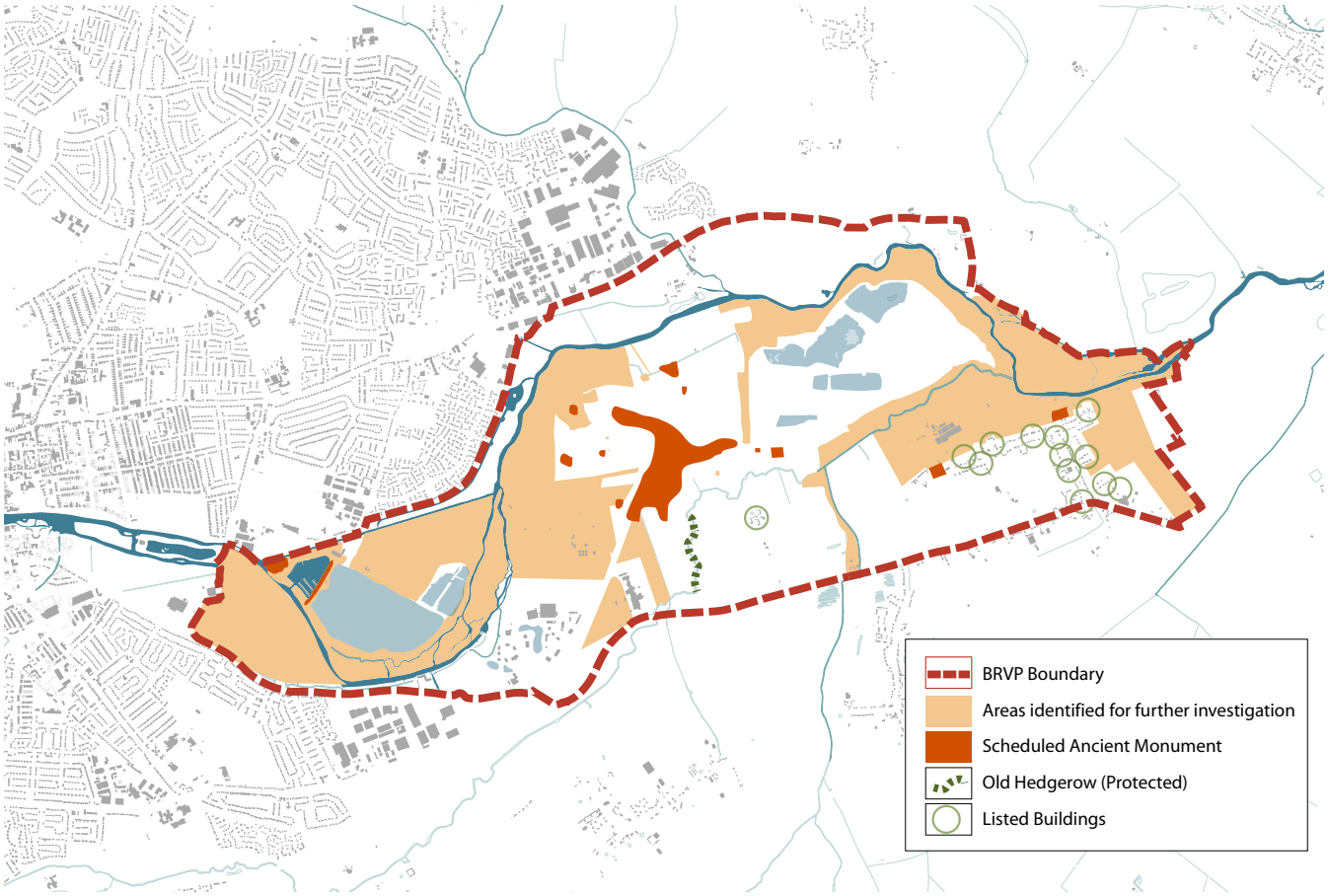
Historic Land Use

The earliest accurate maps of Bedford date back to the 17th Century but do not show the BRVP area in sufficient detail for the purposes of discerning detailed land use. Historic land use has been assessed using a series of 18th and 19th Century maps of the four parishes that comprise the site. Combined, these maps suggest a probable pattern of land use of the area around that time. The historic maps referred to were:

- Cardington and Eastcotts 1794

Nature conservation sites in the BRVP





Archaeology and Heritage

- Cople and Willington 1779
- Goldington 1843
- Renhold 1781

In the Cople and Willington map it is possible to identify arable land, pasture (probably wet grassland) and osier beds within the Great Ouse River Channel. During the period for which maps are available, arable farming was the dominant land use throughout the area, with areas of pasture generally restricted to the north of the River Great Ouse and around the farms and homesteads at Willington Village. Land adjacent to Elstow Brook was generally unclassified on historic maps, suggesting that it was likely to be unmanaged marshy grassland experiencing frequent innundation. The historic course of the River Great Ouse was extremely similar to its current position. A slight diversion has occurred to the south of Castle Dairy Farm to the north of the site, and a few of the islands within the channel are no longer apparent.

Willington and Elstow Brook 1794 (Courtesy of Bedfordshire County Council) - mainly arable with some pasture

Access, Recreation & Sport

Existing Access

The site is crossed or bounded by a number of public rights of way, including river, roads, bridleways and footpaths. These include:

- The River Great Ouse (Bedford to St Neots and beyond) which is a Strategic Waterway in Bedfordshire [9].
- A421 Bedford Bypass (Bedford to the A1 and St Neots) diagonally bisects the BRVP and forms an intrusive barrier to east-west movement
- A603 (Bedford to Sandy) forms the southern boundary;
- The private haul road serving the Lafarge Quarry and providing emergency access to the Castle Mill Weir for the Environment Agency;
- The Country Way forming part of National Cycle Route 51: Oxford to Cambridge which is a Strategic Cycleway in Bedfordshire [9] ;
- Cople Bridleway No. 6
- Willington Bridleway No.1;
- Cople Footpath No. 16 (currently unusable).

Current Use

The BRVP area already has two existing hubs of activity:

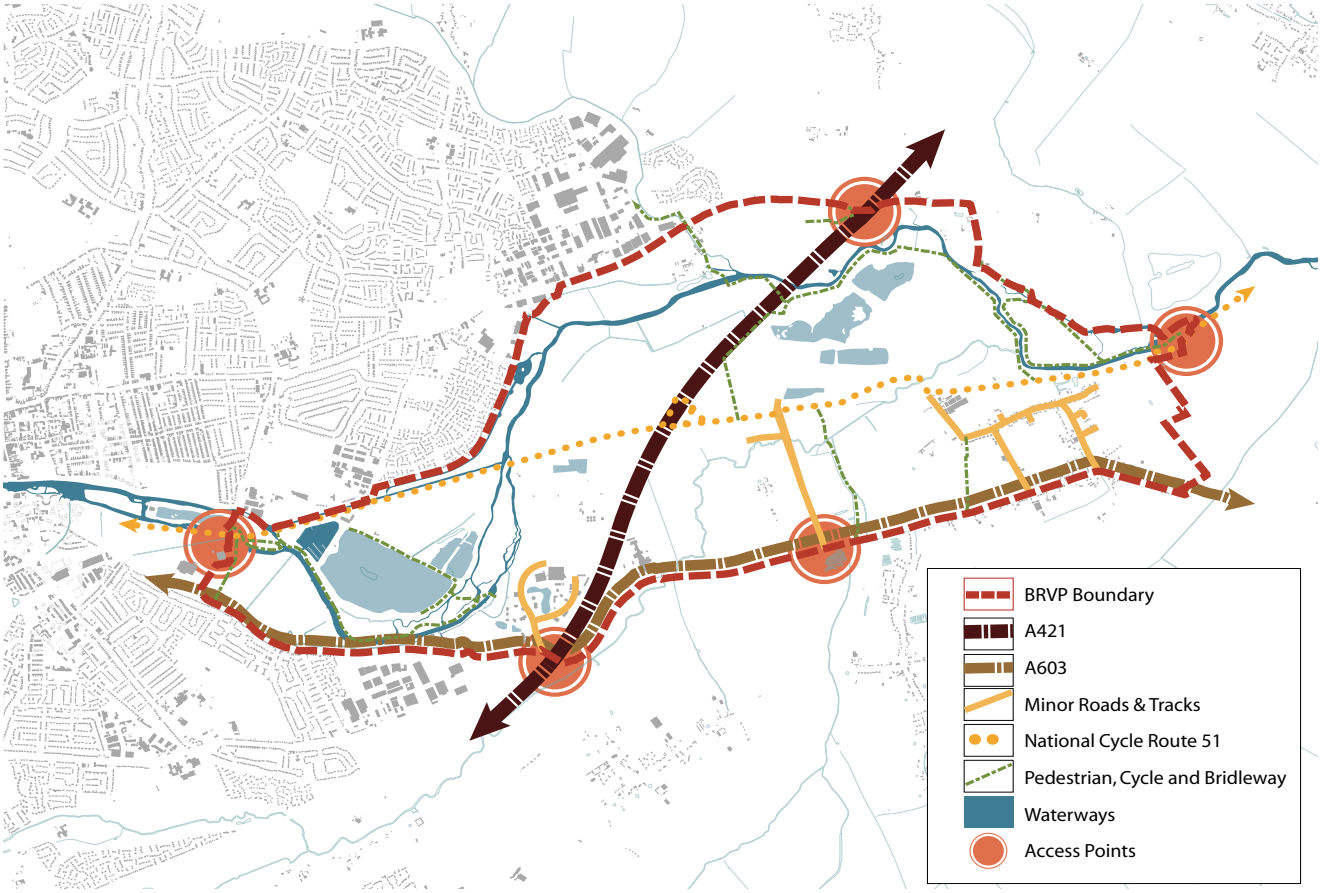
1) To the west is Bedford Borough Council's 83ha Priory Country Park, an established ' Green Flag' award winning site with a host of attractions and activities on offer. These include walks through open country and by lake and river, angling, cycle hire, wildlife observation and a small visitor centre with educational facilities. Additionally, there is a marina with 200 moorings, a sailing lake, hotel and restaurant, with ample car parking;

2) To the east is the privately owned log-cabin Danish Camp Visitor Centre which is set by a Scheduled Ancient Monument by the River Great Ouse at Willington. This has good car parking and is adjacent to the cyclepath (NCR 51). Activities and events include; supper evenings, Viking re-enactments, live music, BBQs and boat rides. Cycles are also available for hire.

Since its creation in 2003, National Cycle Network Route 51 has become a key sustainable route linking greenspace throughout the Marston Vale to Bedford. This popular route has become widely used for both recreation and commuting.

Other parts of the BRVP area are currently used for recreation and sport. For example large stretches of the River Great Ouse and lakes are used for angling. The bridleway which chiefly follows the river also receives some use. Other activities include cycling, jogging, dog walking and bird watching, with most activity associated with and adjacent to the National Cycle Route 51 and Priory Country Park.

Existing Access



3.2 Results of Consultations

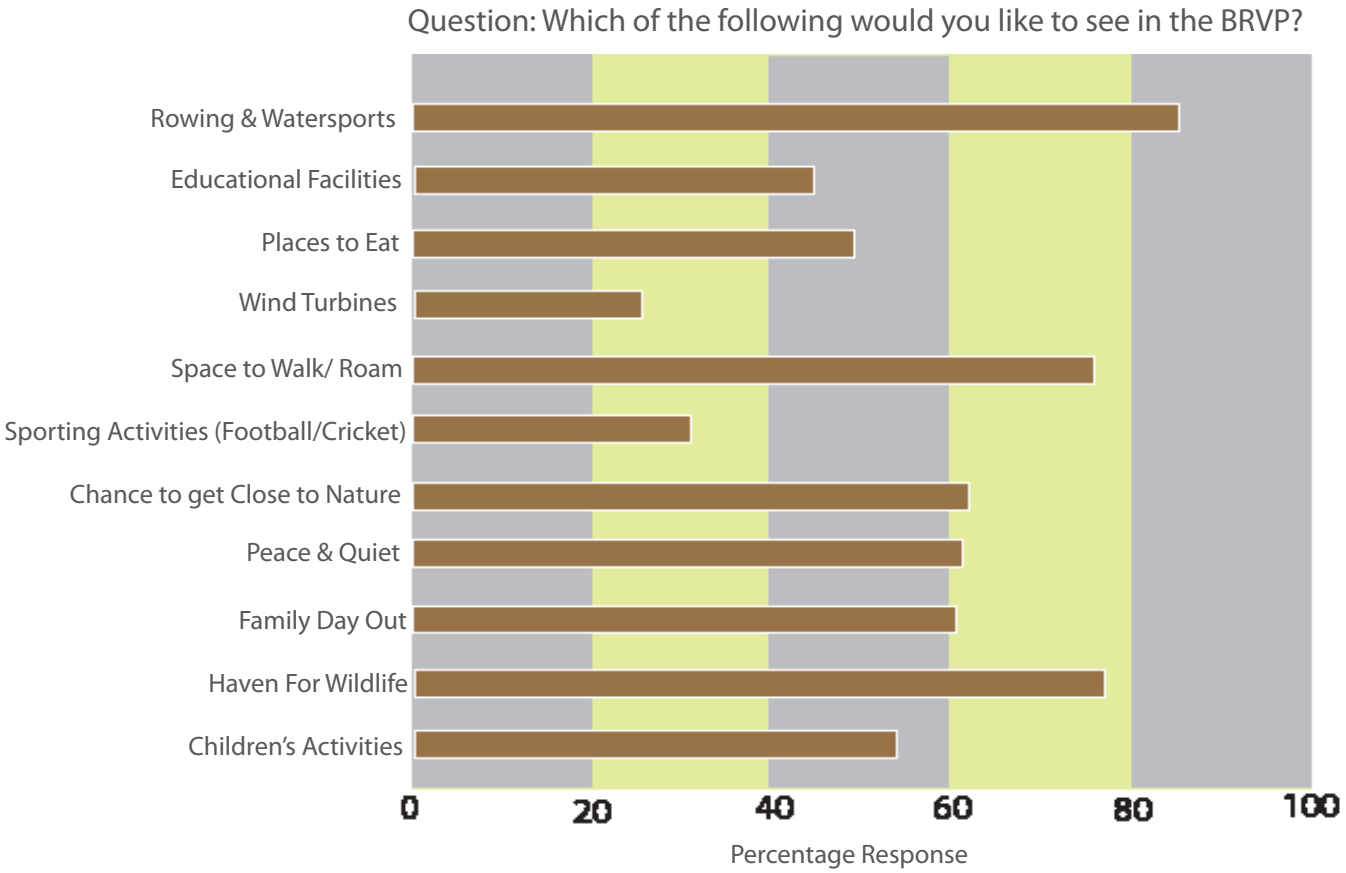
Consultation Process

During the course of summer 2006 and spring 2007, the Marston Vale Trust canvassed many people and organisations about the Bedford River Valley Park and the draft masterplan which had been prepared for that purpose. The consultation process was extensive, including the use of printed materials, a dedicated website, a local media campaign and personal contact through attending a series of public events. In June 2006, over 48,000 homes in the area between Bedford and Sandy were sent information explaining the idea of the BRVP and seeking their views and opinions via a freepost questionnaire. Exhibition materials were displayed at 14 different public events during 2006 where additional feedback and comments were recorded from members of local communities and the wider public. This initial feedback was used to inform the production of a draft masterplan in early 2007 which was used to seek more structured and detailed comments from both the public and a wide range of organisations and interest groups.

Feedback from the Public

In all over 2,100 comments were received and encouragingly, the vast majority (85%) were 'very supportive' of the BRVP concept - with nobody saying they were 'strongly opposed'. Further details of the consultation events are available at the Marston Vale Trust website [11].

As expected of a consultation on such a large and complex project, there was a wide spectrum of opinion. There was great interest in walking, riding, watching wildlife and finding somewhere to enjoy peace and tranquillity. Combined (see graphic), these activities formed the single most popular desire that people told us about.



Consultees used chalk boards to tell us what they would like

Another very important theme was water sports and other water-based activities, particularly rowing and canoeing. Some people expressed concerns which were broad-ranging but centred around noise and disturbance (including motor sport), security, and over-development.

Access and rights of way were also addressed by several respondents, with concerns expressed over vehicular access, car parking and 'access for all'. Some observers noted that more attention should have been given to the rowing lake, as its inclusion or exclusion was central to the design and character of the park. At the start of the consultation process, the rowing lake did not yet have planning permission. The rowing lake now has permission, and with the consultation indicating that a large majority of respondents are in favour, its future creation will now be assumed for site planning purposes.

Feedback from Organisations

Many comments referred to the illustrative masterplan for the park which some felt implied a level of detail of design that required further explanation. Many made the point expressed by Bedfordshire County Council that '..much additional work is needed to complete a deliverable and phased master plan', which while entirely correct, shows that the document had not been sufficiently clear about the aims and limitations of the plans used in the consultation.

This new document has been labelled as a 'framework' in order to make it clear that detailed design work is yet to be undertaken. Feedback from specific organisations may be summarised as follows:

The Environment Agency (EA) have stated that the project brings considerable opportunities but that all constraints need to be considered, especially the condition of the land. They have indicated that an assessment of landfills will be required, and that zoning of uses to match landfill conditions may limit the cost of engineering works. The EA have acknowledged that the site could help with flood management but that these benefits would need to be quantified. The BRVP will require a flood risk assessment and hydraulic modelling. The Agency has also asked for clarification on funding, maintenance and operating schemes. The EA points out that Bedford Sewage Treatment Works discharges into the river, and may cause issues with water contact sports.

Overall, Natural England were of the opinion that the BRVP is an exciting proposal which will benefit both people and wildlife. They advised that continuing consultation with the County Ecologist and Wildlife Trust will be required, especially to ensure the protection of County Wildlife Sites. Natural England also welcomed the use of Short Rotation Coppice (SRC) as a renewable local fuel source, but query whether it could be considered to be a 'valuable wildlife habitat'.

The Bedfordshire Rural Communities Charity (BRCC) questioned the value of a rowing lake for wintering wildfowl and expressed concerns that a rowing lake could prevent badgers from accessing a feeding area. They stated that it was, 'Overall, a good plan but lacking in detail.' BRCC also questioned the value of SRC and the potential market for coppiced material. In terms of detailed design, they would like to see more ponds, river braiding, and extensive reedbeds. They would also like to know how the manage-

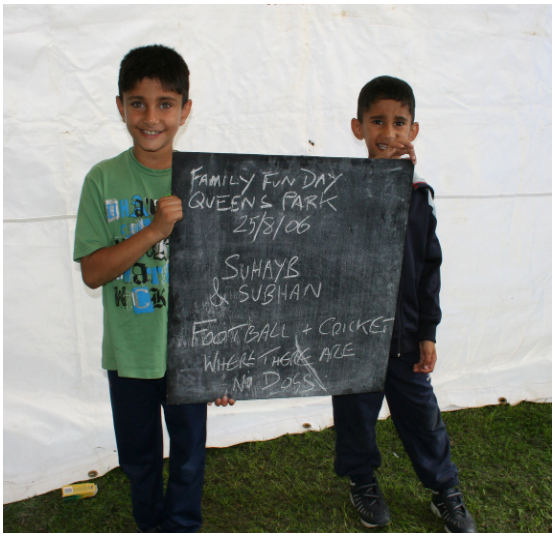
ment of Priory Country Park, and existing restoration plans, will be incorporated into the BRVP.

Bedford Borough Council (BBC) are supportive of the concept and principle of the BRVP. They would have preferred the public consultation to have canvassed opinions on the park both with and without a rowing lake. BBC would like to see more details for the BRVP, particularly access arrangements for people with limited mobility and details of possible developments within the park. They have pointed out the possibility of conflicts with current planning strategy for the area. They have also questioned the viability of SRC on the grounds of economies of scale, its value in comparison to potential wildlife habitat and its value as a public amenity.

Bedfordshire County Council made several submissions from the departments of Heritage and Environment and Minerals and Waste as well as from the County Archaeologist and the County Ecologist. They gave broad support for the project but were concerned about the lack of detail. It was noted that there could be conflicts with existing approved mineral restoration plans. They advised that more information will be required on existing wildlife, soils, topography, hydrology, historic environment, conflicts of usage, access, green infrastructure, employment creation, minerals, and activities. They also questioned how the conflicts would be reconciled and whether the rowing lake should be shown.

The Royal Society for the Protection of Birds acknowledged the potential for delivering high quality green infrastructure and supported the board aims of improving flood management, enhancing biodiversity and creating new wildlife habitats, however they pointed out that the area is already of local importance for wildlife and should not be treated as a 'blank canvas'. They also advised on the need for further ecological baseline studies.

The Framework now takes account of the comments received together with further comments from the Borough and County Councils received during the re-drafting of the document.



3.3 Constraints and Opportunities

The section that follows considers constraints and opportunities with respect to the four considerations listed in Policy NE23 of the Bedford Borough Local Plan, namely: Landscape Enhancement, Nature Conservation, Recreation & Access and Archaeology.

Landscape Enhancement

Constraints

The Bedfordshire County Council report on Landscape Character & Visibility Assessment [25] has highlighted the importance of avoiding mass planting that would screen existing views of the Greensand Ridge and Cardington airship sheds.

The report also emphasises the importance of conserving existing historic pastures and field boundaries, for example at the Risinghoe Castle farmlands to the north of the Great Ouse.

The NCN Route 51 follows the historic route of the East West rail link which cuts across the alignment of the proposed rowing lake. If the full 2.3km of the rowing lake is built, NCN Route 51 will be diverted to the North of the lake. There is local and regional Government support for the concept of a new rail link from Bedford to Cambridge, although there are currently no firm plans for its construction. Consultants for the East West Rail Consortium are investigating a route that avoids cutting across the proposed rowing lake by running on a new alignment between the A421 and the proposed lake.

Opportunities

Despite past restoration the site remains less than ideal in nature and the creation of the BRVP provides an opportunity for wide scale landscape enhancement and ecological restoration. The creation of habitats in a coordinated way across the whole site represents a major opportunity to create a more naturalistic interconnected landscape than that which currently occurs. This could result in many new atttractive views within the site and the screening of some of the less attractive remaining features, like the A421.

A key landscape opportunity is that a significant part of the BRVP falls within the area designated as the Forest of Marston Vale. This has been identified as a national priority area for environmentally-led regeneration with a Government target of increasing tree cover to 30% by 2031. This vision for major landscape enhancement using trees and woodlands has been politically and publicly endorsed.

Nature Conservation

Constraints

There are existing habitats of value, including watercourses, wetlands, grasslands and tree groups, some within County Wildlife Sites, that need to be protected throughout the process of park establishment. Consideration must also be given to species of conservation concern, including those that enjoy legal protection like otter, great crested newt and nesting birds . Measures will need to be adopted to ensure that harm to protected species is avoided during works and detailed designs for the park should take account of the needs of senstive sites and particular species, with the possibility of creating quiet zones and buffer areas.

Opportunities

Detailed multi-functional environmental design of the BRVP should be informed by ecology, with an emphasis on the characteristics and potential of the river and its floodplain. The BRVP landscape has been subjected to gravel extraction, which requires restoration, which can be directed to maximise the ecological benefits. The long history of alteration of the landscape means that habitats may be created that have been completely removed or, possibly, may have not previously existed. However restoration should be informed by what is known about the past, what opportunities there are to anticipate and improve the future and what is locally appropriate. During the development of the BRVP the focus will be on floodplain restoration. The provision of facilities like the rowing lake is fully complementary to and compatible with floodplain restoration.

The focus on floodplain enhancement at the BRVP can be hugely beneficial for fish populations. Fish species require a range of habitats during the various stages of their lifecycle. In particular they often require quiet, shallow backwaters as a refuge for spawning and maturation of fry. Research undertaken on the River Great Ouse has highlighted the important role of bays and off-channel water bodies on the recruitment of fishes through increased habitat diversity [28]. Adjacent disused gravel pits have also been shown to serve as surrogates for the natural floodplain features from which the regulated River Great Ouse is virtually isolated [29]. The creation of fish spawning backwaters will help spined loach and bullhead. These habitats will also be beneficial to a range of other fish species as well as other fauna including waterbirds, dragonflies, otter and water vole.

Another exciting possibility raised by the creation of the BRVP is the reintroduction of the burbot *Lota lota*. The burbot is a freshwater species of the cod family, and was driven to extinction in the mid twentieth century. It remains the only fish known to have gone extinct in Great Britain in recent centuries. It is a UK Biodiversity Action Plan species, and research is currently underway on possible reintroduction of fisheries.

The construction of the rowing lake would require that the Elstow Brook be re-aligned and broadened. This would create a replacement brook approximately 1.65km in length. The brook channel would be designed to mimic a natural stream, incorporating meanders, pools and riffles. The creation of occasional steep banks will provide nesting opportunities for kingfisher and sand martin, while gentler sections may harbour water voles. As new bankside planting of trees and aquatic vegetation matures, the new brook will become a valuable wildlife corridor. The retention of 900 metres of ox-bow lakes would provide habitat for a range of fauna, and

would have the potential to support European protected species such as great crested newt.

Floodplain forest is an overarching term used to describe wet woodlands and associated habitats (e.g. reedbeds, marsh, wet grassland) in the river floodplain, which are subject to frequent or even occasional inundation. In Britain they are often dominated by alder *Alnus glutinosa* and willow species *Salix spp.*. The EU Habitats Directive refers to this habitat type as residual alluvial forest (including National Vegetation Classification types W5, W6 and W7). In recent years there has been a renewed interest in the establishment and restoration of floodplain forests for their ecological value and possible use in flood control. The proposed BRVP presents a nationally important opportunity to restore floodplain forest over a considerable area of floodplain that is being worked for sand and gravel.

The English Nature Research Report on wet woodland [30] provides extensive background information and guidance on the restoration of floodplain forest. Floodplain forests grow in a range of situations from islands in river channels to low-lying wetlands alongside the channels. In the UK they typically occur in areas of low relief on base-rich, eutrophic soils that are subject to periodic inundation and/or permanently or seasonally high water table levels.

Clearance of riverine woodland has eliminated most true floodplain forests in the United Kingdom and many surviving areas are fragmentary and often of recent origin. Wet woodland is now a Priority Habitat under the UK Biodiversity Action Plan. Floodplain forest of the NVC type W6 is the most suitable habitat for the floodplain of the Great Ouse. W6 woodland is characterised by alder and nettle and typically comprises fast-growing pioneer species in the canopy including willows and hairy birch in addition to alder.

The BRVP will offer an unprecedented local ecological educational resource at all levels. It should be an exemplar of sustainable design and could host varying displays and events dealing with environmental issues such as climate change, floodplain restoration and biodiversity. As potentially the largest floodplain forest restoration scheme in the UK, the BRVP project would benefit from rigorous monitoring and data analysis. Involvement from the scientific community, such as a local university, would allow more complex monitoring to be undertaken.

The geology of the area has given rise to its value for minerals and is a key factor in determining the character of the landscape. The BRVP is an opportunity to educate the public on prehistoric environments, climate change and the importance of geological diversity (geodiversity) by providing information and displays and opportunities for indoor and outdoor activities, particularly where people gather or where the underlying geology is exposed.

Access

Constraints

The site has a number of major barriers to movement, both internally and externally. The most notable barriers are the watercourses, the A421, and (in the future) the rowing lake.

A key future access point to the BRVP is expected to be via the existing quarry haul road and priority junction with the A603 Cambridge Road about 1.5km east of the interchange with the A421. This access operates well, however if the rowing lake is built the road would have to be diverted (overhead structures are not acceptable under Olympic rowing standards). Similarly National Cycle Route 51 would also need to be diverted before the rowing lake is built.

Cople Bridleway No. 6 and Willington Bridleway No.1 cross the proposed alignment of the rowing lake and diversions of these routes will be required. In addition there are a number of informal routes for pedestrians, cyclists and equestrians which will also need to be replaced or re-routed.

Cople Footpath No.16 crosses the proposed alignment of the rowing lake, however this route is currently unusable and is likely to be replaced by alternatives in the future.

The Environment Agency requires emergency access to the Castle Mill Weir via the existing quarry haul road and this must be maintained. Similar access arrangements will need to be maintained for utility companies.

Opportunities

There are opportunities to improve both internal access and links with adjacent communities. For example, there is an existing bridge which carries the NCR 51 over the A421. However, in order to better connect the eastern and western parts of the BRVP, both for people and wildlife, it would be desirable to provide a much wider and. potentially, vegetated crossing.

In January 2007 Bedfordshire County Council produced an Access Statement for the BRVP site [31]. The document emphasises that not only will people experience a range of environments within the park itself, but that the BRVP should also act as a green gateway to the Ouse Valley corridor, the Greensand Ridge, villages and communities outside Bedford.

National Cycle Route 51 passes through the BRVP

Priority should continue to be given to the enhancement of National Cycle Route 51 (Bedford to Sandy) – which the Bedfordshire and Luton Strategic Green Infrastructure Plan [9] additionally classifies as a strategic cycleway. Another priority access routes is the cycleway north towards Renhold, which together with a section of NCR 51, will form part of the 'Bedford Green Wheel' a strategic green infrastructure project being promoted by Bedford Borough Council. Once completed, the Bedford Green Wheel will facilitate non-motorised access to BRVP from all of Bedford.

Within the Grange Estate (to the north-east of the BRVP) the creation of a new 3 kilometre riverside multi-user route along the south bank of the River Great Ouse will involve constructing a new bridge over the Elstow Brook just north

of Willington (work on this by the Marston Vale Trust has started and the route will open in April 2008).

Recreation and Sport

Constraints

During the public consultation, concerns were raised regarding the potential negative affects of creating facilities for noisy activities (e.g. motor sports) close to residential areas.

Facilities for sport require the necessary infrastructure, including adequate access, parking, power and drainage, which can have an impact on a wide area. The siting of such facilities requires careful consideration.

Issues of water quality and availability will require careful investigation, as both are potentially significant factors in determining the feasibility of a range of water-based recreation and sporting activities that might be accommodated within the BRVP.

Opportunities

The large size of the BRVP means that it may be possible to accommodate noisy activities without causing disturbance to people in nearby residential areas. Hard wearing open spaces, close to access points, car parks and facilities could be available for sports, picnicking, barbeques, adventure play and large-scale festivals and events. There are existing areas of disturbance, for example along the A421 corridor which bisects the BRVP, which might be suitable locations for noisy activities.

Extensive areas of woodland and wetland areas could be created where people can enjoy quiet contemplation, walking or wildlife watching. There is ample space for intermediate zones where angling and cycling can be encouraged.

The BRVP could become a state of the art fishing venue to improve access and opportunity for local people in the urban area of Bedford and its environs. An angling centre could be developed to provide facilities for coaching and local angling clubs.

Inland beaches are very popular in continental Europe. The Keynes Country Park, part of the Cotswold's Water Park near Swindon, features a children's beach which in 2004 became the first UK inland beach to achieve an international Blue Flag award. An inland beach (or beaches) would act to relieve pressure on the more sensitive wetland habitats, while offering a host of recreational benefits associated with swimming and beach sports like volleyball and football or simply building sandcastles.

The main purpose of the rowing lake will be to provide a training facility of international standard to attract athletes from the local vicinity, elsewhere in the UK and abroad to what is intended be the most user friendly water in the UK due to its topography, orientation and shallow depth. As well as providing a first class facility for rowing, it could also be used for other activities such as dragon boat racing, canoeing and angling.

There are existing canoe slalom facilities associated with Priory Country Park within the BRVP area and very active local canoeing

clubs. There is potential for BRVP to host a 'Centre of Excellence' for canoeing by building on these existing assets and further enhancing opportunities for canoeing. For example, the rowing lake could be interconnected to other water bodies, creating the possibility of an interesting route for canoeists to follow - a 'canoe trail'

Infrastructure created to service the rowing lake could also support ancillary facilities including fields for cricket, football, rugby and all weather pitches for 5-a-side football and tennis. Trails could be established through woodland for mountain bikes.

Greens and multi-use playing fields are popular outdoor venues for a huge range of events. Well managed festivals and other events can have a very positive effect on a locale, boosting image and creating employment. There are opportunities to create a multi-use field close to access points into the Park. The two existing main activity hubs (i.e. Priory Country Park and Danish Camp) could be supplemented by a third hub located centrally and associated with Octagon Farm and the proposed rowing lake, should this be built.

The Bedford Rowing Lake

At the time that the draft Master Plan for the BRVP was published for consultation (early 2007), designs for the River Valley Park were put forward with and without a rowing lake. The Rowing Lake was granted planning permission in 2006 and the public consultation that followed the publication of the Draft Master Plan showed strong support for the proposed rowing lake as a venue for a range of water sports. As a result of this support, this document shows the rowing lake in the River Valley Park. Projects proposed for the Park will be designed to be compatible with the ultimate delivery of a 2.3km rowing lake for training athletes to Olympic standard.

Delivery of the Rowing Lake is unique amongst the projects proposed for the Park by virtue of its sheer size, its likely cost and the need for a number of land owners to support its construction. An option that is being investigated by the land owners concerned, with the assistance of Renaissance Bedford, is whether appropriate development on land identified as Octagon Farm Fields could help to fund construction of the lake and return a profit to land owners. The land owners are proposing to put a scheme forward for consideration by Bedford Borough Council through the Allocations and Designations Development Plan Document, as a site for possible enabling development for the Rowing Lake. This matter is clearly outside the scope of this Framework document and is outlined here for the sake of completeness only.

Archaeology and Built Heritage

Constraints

Despite past disturbance for minerals extraction, a number of important features including Scheduled Ancient Monuments, other nationally important remains and listed buildings remain and care must be taken to ensure that these, and where appropriate their settings, are protected from damage from ground modelling or inappropriate landscaping works. Tree roots can damage archaeological remains so tree planting will be avoided on sensitive and important sites. As the BRVP has already been subject to extensive archaeological investigations ahead of development, there will be little requirement for further investigation or opportunities for new discoveries in the future.

Willington Dovecote

Opportunities

Archaeological remains could provide a focus for interpreting the historic environment of the Great Ouse Valley around Bedford. Information boards and other interpretation material could be provided with additional space made available for reconstruction of ancient dwellings or ritual features which could be used to attract a wider range of visitors. The phased development of the BRVP will allow new discoveries to be recorded and in some cases preserved as key features. The establishment of the BRVP represents an opportunity to increase our knowledge of buried archaeological features of the area, and to develop public interest in the history of the Ouse Valley landscape and its past inhabitants.

3.4 Minerals Activities

The naturally occurring sand and gravel deposits in the area and the resulting extraction of these minerals have been instrumental in providing the opportunity to create the BRVP. Minerals activities will continue to have a key role in the area and the establishment and development of the BRVP will be closely associated with the mineral restoration process, as directed by the minerals planning authority. This restoration work, which has already been completed in some areas, is expected to continue until at least 2016. Aggregates have already been extracted from an area to the north of Octagon Farm and Elstow Brook and restoration has been substantially completed with the creation of a number of small lakes.

Lafarge, the mineral operator within the BRVP, has prepared a restoration plan for an area to the west of the A421 Bedford bypass, (bounded by the Great Ouse to the north and the Anglian Water sewage treatment works to the south). The implementation of this scheme, which will include lakes and reedbeds is expected in 2008.

An area to the west of Octagon Farm will be worked and restored during the period 2008-2010. It is expected that some of the excavations will contribute towards the creation of the Bedford Rowing Lake.

Restoration works in the vicinity of the Lafarge works compound on the Grange Estate, which includes a number of settling lagoons, some plant and stockpiled materials are not expected to be underway until December 2016. This area will be used to service a new quarry at Dairy Farm, to the east of the Great Ouse, which will be worked until December 2014, after which time it too will be restored.

The Grange Estate has already been restored to grassland, woodland and lakes, however the new owner the Marston Vale Trust, is considering the possibility of further enhancements in line with the aspirations outlined in this document. Some of these enhancments may be associated with the creation of the Bedford Rowing Lake.

Given the further availability of sand and gravel deposits along the Great Ouse Valley, both within the BRVP area and outside it, it is possible that there may be further minerals extraction in the future. The Bedfordshire Mineral Development Framework identifies potential sand and gravel reserves which may be extracted and which could also be processed through the existing plant site in the BRVP.

This Framework for creating the BRVP will inform the restoration requirements for any such future activities, not only within the currently designated boundary of the BRVP but also for surrounding areas along the Great Ouse Valley.

4

THE PROPOSAL

4.1 Key Principles

The future development of the BRVP will respond to the constraints and opportunities identified in Chapter 3 and will be guided by the following key principles:

Place Making

The BRVP will be the largest contiguous area of publicly accessible greenspace in Bedfordshire and will link right into the heart of Bedford. This ambitious and imaginative project will play a key role in transforming the image and profile of the area, reflecting the history of the area, to create an attractive, high quality natural setting and location that supports wider regeneration objectives. Individual landmark projects within BRVP, such as the proposed 2.3 km Bedford Rowing Lake, will deliver regionally important facilities and transform the image and setting of Bedford.

Creating Floodplain Forest

The BRVP will be one of England's largest interconnected complexes of woodland, marsh, pools and channels, reconnecting the River Great Ouse with its floodplain and linking together existing habitats. As it matures, this floodplain forest will become a woodland and wetland wildlife habitat of national importance, providing a wonderful, diverse, ever-changing, well-wooded setting for people to enjoy and learn about nature.

Multi-functionality

The BRVP will be truly multi-functional and must meet all the aspirations of the original local planning policy (NE23) namely, landscape enhancements, recreational opportunities, nature conservation improvements and improved access whilst respecting archaeology and the built heritage, so becoming an exemplary green infrastructure asset.

Accessibility

BRVP will be for people of all abilities and backgrounds to enjoy. Physical access into and across the park will be developed to a high standard. Building on the existing excellent east-west National Cycle Route 51 spine, further links and routes for cyclists, pedestrians and horse riders will be created. Special efforts will be made to link with communities to the north and south, with BRVP being part of an upgraded access loop around Bedford for cyclists and pedestrians (the Bedford Green Wheel). People of all ages will be encouraged to walk and cycle to the park. So called 'intellectual access' will be improved through a wide range of educational materials, information and opportunities.

Photo courtesy of Natural England

Promoting Sport & Recreation

The BRVP will provide opportunities for people to pursue a wide range of sporting and recreational activities, and could become host to a Centre of Excellence for sport. The construction of an Olympic-length Rowing Lake would provide a major facility for Bedford (a traditional rowing town), and allow for the development of other

strong local sports such as canoeing, kayaking and triathlon. The relatively large size and careful zoning of the proposed park will allow the solitary and quiet to coexist with the sometimes noisy and gregarious.

Environmental Sustainability

Exemplary standards of environmental sustainability will be achieved throughout the BRVP. Projects will be undertaken to reduce the production of atmospheric carbon through renewable energy schemes, for example growing energy crops (e.g. densely planted, high-yielding varieties of willow or poplar supplying wood chip boilers or a local electricity plant) or harnessing the power of flowing water and wind. Woodland and wetland habitats could be used to improve the quality of treated effluent from the local sewage works, cleaning it far beyond the current required standards. The floodplain forest will absorb atmospheric carbon as it grows and as sediments are trapped. Materials used within BRVP will be high quality, sustainable and from appropriate local sources wherever possible.

Financial Sustainability

BRVP will be delivered by a wide range of partners, from local authorities and delivery organisations such as the Marston Vale Trust, to sport and recreation clubs, local people and special interest groups. To ensure that projects are financially sustainable, they will only be embarked on if there is funding identified for both the delivery and the ongoing maintenance costs. Capital and revenue costs of individual projects will be provided by a mixture of public and private sources which could include direct and indirect contributions from occupants and beneficiaries of the BRVP.

Enhancing Existing Value

The BRVP will seek to conserve and, where possible, enhance existing features of landscape, archaeological, heritage and ecological value. These include Priory Country Park and the adjacent Fenlake Meadows, the River Great Ouse and the meadows to the north, the village of Willington with its important buildings (including the Church and Dovecote), and some of the more recently created water bodies on the Grange Estate, which are already valuable habitats for birds and other wildlife.

A Functional Floodplain

The floodplain forest of the BRVP will be used to help improve water quality in the River Great Ouse by filtering and absorbing discharges, surface and groundwater and river flows. The park will be designed to store and channel floodwaters to help reduce flood risk locally and downstream, part of bringing the floodplain back into more active use for water management.

Involving People & Partnerships

People are central to the success of BRVP. The active engagement of people in designing, creating and enjoying the park will be key to its sustained success. The creation of the BRVP will be achieved through working in partnership, bringing together a whole range of people, businesses, government and non-government organisations. Effective partnerships will achieve more for the BRVP than the constituent organisations acting alone.

4.2 Description of Bedford River Valley Park

The future development of the BRVP will include a wide range of different components in different locations across the 868ha area that has been designated. The following descriptions relate to the proposals shown in the Framework Plan [see pages 54 and 55] and provide fuller details on the role, function and nature of the key components shown. For ease of reference, they are described from west to east, moving out from Bedford, and grouped together where appropriate.

Priory Country Park & Fenlake Meadows

Priory Country Park marks the western end of the BRVP and is within walking distance of the centre of Bedford. The existing country park will serve as the main gateway from Bedford into the BRVP and represents one of the main future 'activity hubs' within BRVP. There is car parking, a small visitor centre, toilets, a café, an adjacent marina and facilities for angling, sailing, windsurfing and paddle sports, including an artificial kayak slalom course. School visits are hosted by the Wildlife Trust - Priory Country Park could become the base for environmental education across the BRVP. This part of the BRVP also has quieter areas where people can follow nature trails or enjoy angling. Priory Country Park has been awarded Green Flag Status by the Civic Trust recognising the excellent work of Bedford Borough Council in making the park a clean and well-maintained place that welcomes visitors and involves the local community. The creation of the BRVP provides Priory Country Park with the opportunity to significantly develop and update its existing facilities in response to its new key role as the gateway into the much larger BRVP area. It will continue to be an important asset within BRVP, providing a range of largely informal recreation opportunities for large numbers of local people and visitors.

Fenlake Meadows, across the river from Priory Country Park, is an area of wet grassland and marsh. It was declared a Local Nature Reserve in 1992 and will continue to be managed for nature conservation and for quiet enjoyment.

Priory Business Park & Bedford Sewage Treatment Works

To the east of Priory Country Park, across the river, is Priory Business Park, a modern development with high quality office, workshop and storage space, including the Bedford i-LAB, opened in 2005 to attract high-tech businesses. The facility is well connected to the highway network and has an adjacent hotel. It is expected that cooperation between the business park and BRVP will develop in the years to come to the benefit of both. The creation of the BRVP will provide an enhanced setting for Priory Business Park, helping to support its continued success as a site providing local employment.

To the north of Priory Business Park is the main Bedford Sewage Treatment Works operated by Anglian Water, which serves the growing population of Bedford and the Marston Vale. It is expected that the creation of BRVP will provide new wetland habitats that can be supported by steady discharges of effluent (i.e. treated waste water) from the works. This will have the beneficial effect of further improving water quality as well as sustaining and nourishing these new habitats. The supply of treated waste water from the works could also be used to boost the growth of short-rotation coppice or other energy crops that could be used as renewable fuel in a regional bio-fuel power plant or for space heating. Other beneficial interactions between the sewage treatment works and the BRVP will be sought.

Floodplain Forest

At the heart of the new BRVP an extensive and nationally significant area of floodplain forest will be created, covering around 240 hectares (or 2.4 square kilometres). This will stretch across the park from an area to the north of the sewage

treatment works in the west to existing farmland at Dairy Farm north of Willington. The continuing process of mineral extraction and restoration will be used to create a low-lying landscape of interconnected forested wetlands with lakes, pools, marsh, reeds and naturalised channels, crossed by paths and boardwalks. The floodplain forest will be well-wooded, comprised of up to 50% trees and scrub, and will provide the 'ecological heartland' of the BRVP. Careful design of the floodplain forest will allow for increased storage of flood waters to help reduce and manage flood risk along the River Great Ouse. The focus within most of this area will be on passive, quiet recreation, providing places for people to have contact with nature and relax in a natural and relatively 'wild' setting. As well as routes for walkers, cyclists and riders there will be opportunities within the floodplain forest for providing routes for other users, such as a 'canoe trail'. The National Cycle Route 51 will serve as the main access corridor for walkers and cyclists through the floodplain forest, with new main routes created along sections of the river and linking north into Bedford. These will form key parts of a planned cycleway loop around the town. Some areas of the floodplain forest will be made inaccessible to the general public, so as to provide undisturbed areas exclusively for the benefit of wildlife. Every minerals restoration project within the park will deliver part of the whole, with attention given to maximising connectivity with past and future projects within the floodplain forest zone.

There is the possibility (subject to the planning process) of creating further recreational facilities within the area of floodplain forest proposed to the north of the rowing lake and west of Octagon Farm. Parts of this area are adjacent to the A421 Bedford by-pass and well away from residential areas which may make them suitable locations for noisy activities. Also in this area, further away from the A421 on the southern fringes of the main floodplain forest zone, there is the possibility of establishing an inland beach and swimming lake together with opportunities to explore providing camping facilities within the BRVP.

Meadows

To the north of the BRVP centred on Castle Mill Lock and Weir, largely between the Goldington Road and the River Great Ouse, are existing meadows, crossed by the Renhold Brook. The A421 Bedford by-pass crosses these meadows on a viaduct and causeway. On part of this area, to the south of the lock, is an area of meadow used as a small private airfield, which is due to remain. It is expected that the open, rural and relatively tranquil character of this area will remain largely unchanged in the future, apart from the restoration of species-rich grassland, the replanting of hedges and boundary trees and improvements to the ecological value of small watercourses. The focus will be on conserving and enhancing the existing landscape and ecological value of these meadows. Improvements in access will allow more people to easily enter the BRVP on foot, bicycle or horse from the north, crossing the river to join the National Cycle Route 51 and other routes to the south.

Bedford Rowing Lake

The proposed Bedford Rowing Lake, which was granted planning permission in 2006, marks the southern boundary of the floodplain forest. It will form an important and major component of the BRVP. The proposed rowing lake will be about 2.3km long and more than 100m wide (with a total area of between 25 and 30 hectares) to allow the

necessary space and meet requirements for training to Olympic standards but could be delivered in phases. It will be of a natural design, having varied edges with substantial marginal vegetation and backwater connections with the floodplain forest to the north, maximising its ecological value and softening its impact on the landscape. The construction of the Bedford Rowing Lake will necessitate the diversion of the Elstow Brook. This will provide an opportunity to increase the brook's capacity and length, restore natural features and link these with the floodplain forest and the River Great Ouse. The Bedford Rowing Lake and associated essential development is supported by policy LR4 and, when built, will constitute a new activity hub within the BRVP, providing a focus for sport and more active recreation.

Willington Fields & Woods

The thriving village of Willington at the East end of the BRVP, will make a substantial contribution to the character of BRVP. The village includes important listed buildings as well as a pub, a shop and the Danish Camp visitor centre which is the hub and access point to the Park from the East.

Willington Village is surrounded by its own green belt of existing fields and will remain largely unchanged. The sizeable areas of predominantly rough grassland with scattered trees/scrub and farmland that lie to the west and east of Willington (labelled 'Willington Fields' on the Framework Plan) help define the extent of this rural village and provide local landscape and wildlife interest. The focus here will be on conserving and enhancing the value of these areas. Some of these areas to the west of Willington are potentially contaminated, having been previously worked for mineral and back-filled many years ago, and will require further investigation to inform any future work. There is an existing modest activity hub at the Danish Camp Visitor Centre on the banks of the River Great Ouse, which will continue to provide an appropriate, contrasting alternative to larger facilities elsewhere. Existing woodland adjacent to the National Cycle Route 51 to the south of the proposed Bedford Rowing Lake (labelled 'Willington Woods' on the Framework Plan) will create a distinct woodland block at the north of the village. This woodland will accommodate part of a new 3km route along the river, linking in to the well-used existing cycleway (National Cycle Route 51).

Octagon Farm Fields

The land between Octagon Farm and the A603 includes the current haul road serving the Lafarge minerals processing plant at the heart of BRVP. This access road and the surrounding fields provide the access for the proposed rowing lake and the setting for the associated facilities, and this area forms an important and highly visible part of BRVP. Much of this area is in arable cultivation, some having been worked for mineral and restored to agriculture, which distinguishes it from surrounding fields nearer Willington. The Octagon Farm Fields area lies predominantly outside of the floodplain according to Environment Agency data, and includes an area of land being promoted by land owners for consideration by Bedford Borough Council for development that could help to fund construction of the Rowing Lake. The Octagon Farm House itself, with its octagonal design, is a listed building and should be acknowledged as a feature to be conserved within BRVP.

The focus across Octagon Farm Fields will be on enhancing the landscape of this highly visible part of BRVP, with plentiful opportunities for targeted tree planting. The construction of the Rowing Lake and associated facilities in accordance with the existing planning permission would create an additional activity hub within this area to complement the others within BRVP and provide a focus for more formal sporting and recreational activities within the Park.

4.3 The Way Forward

The BRVP will transform Bedford. It will cost millions of pounds, take decades to complete and will bring together a range of people, businesses, government and non-government organisations working in partnership. The launch of the BRVP Framework marks the beginning of a long, but fruitful process that will bring lasting benefits to Bedford and its hinterland. The Framework will be updated as required and detailed design work will be undertaken as specific projects are brought forward by various partners or consortia. Projects will be taken through the formal planning process, where required, allowing for full consideration of impacts and further public consultation.

Key components of the park, including Priory Country Park, Willington Village and the River Great Ouse are already in place. Gravel extraction continues, with ever more sophisticated restoration plans being agreed. The recent granting of planning permission for the Bedford Rowing Lake and the purchase of the Grange Estate by the Marston Vale Trust have given new impetus to this grand and exciting project

So what happens next? The challenge is for the partners to find ways to deliver an accessible regional park where Bedford people and visitors of all ages, abilities, backgrounds and origins are welcomed into a safe and enjoyable environment. The Park will be a place where natural resources are valued and restored, where wildlife and culture can flourish, where our heritage is respected and where people can exercise, compete, play, relax, learn, work, be inspired and reflect in a rich variety of settings.

The BRVP already has exciting and valuable areas and work on delivering more of this vision is in hand:

Restoration plans for mineral extraction already favour habitat creation. With County and Borough gravel extraction sites coming forward, restoration can also provide landscapes suitable for subsequent development of recreational and sports facilities. Current and future restoration plans will be reviewed in the light of this Framework

The Marston Vale Trust is exploring opportunities for involving private sector partners in the creation of the BRVP.

The Environment Agency is prioritising the BRVP in its efforts to fund ecological restoration and flood management works within the Great Ouse floodplain.

£600,000 worth of access improvements are already underway with the construction of a new bridge over the Elstow Brook - improvements that will enable walkers, horse riders and cyclists to access a new riverside track from early in 2008.

The Marston Vale Trust is investigating the possibility of planting short rotation coppice on its own land, to provide a sustainable energy crop.

Projects involving waste water cleaning and renewable energy may be undertaken on a commercial basis and could involve partners working closely with utility companies such as Anglian Water.

The opportunities for the BRVP are limited only by our imaginations and a range of new and inspiring projects are already exciting discussion – these include the proposed rowing lake, watersport facilities, an inland bathing beach, mountain bike trails, a canoe trail, fish backwaters, top class fishing facilities, festivals, outdoor classrooms, heritage preservation and interpretation, motor cross facilities and the largest floodplain forest in the region.

The BRVP will be promoted as a designation in the Bedford Borough Allocations and Designations DPD through submission of this Framework in the LDF process. Designation will further strengthen the informal partnership that has already started to make this shared framework a reality.

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Bedfordshire
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RENAISSANCE
BEDFORD


ENVIRONMENT
AGENCY


NATURAL
ENGLAND


Forestry Commission


LAFARGE
AGGREGATES


open for access


Bedfordshire and Luton
Joint Local Access Forum


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the Forest of
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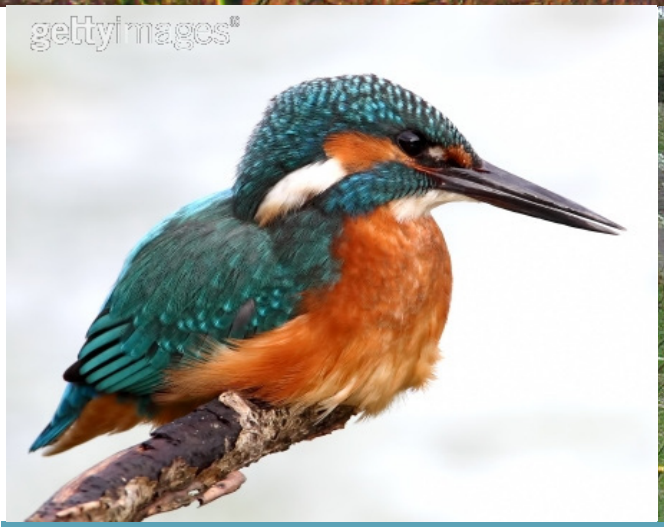

Bedford River Valley Park

Masterplan for Bedford Borough Council Landholdings
Consultation Draft November 2012

BEDFORD
BOROUGH COUNCIL

the Forest of
Marston Vale

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Contents

Executive Summary

This document reports on coordinated plans for a number of proposals for initiatives and projects within the Bedford River Valley Park (BRVP) with special attention paid to land owned by Bedford Borough Council (BBC). BRVP is a 868 hectares (2145 acres) multi-functional regional park being created to the east of Bedford. This work has been commissioned by the Marston Vale Trust (MVT), on behalf of Bedford Borough Council, with funding from the Government's Growth Areas Fund.

The purpose of this document is to provide a greater level of detail than that provided in the BRVP Framework document (which was issued in 2008 and is supported by the Local Plan), with, where adequate information is available, the costs and benefits of the various projects. The intention is to provide evidence to support and justify implementation. The selection and evaluation of projects has been guided by BBC officers and MVT staff, with due regard to the Key Principles in the BRVP Framework, the public consultations that took place when the Framework was prepared and a workshop organised as part of this work, held in March 2012 and attended by a wide range of stakeholders.

Analysis of issues and opportunities associated with BRVP has shown that much of the area lies within the floodplain of the River Great Ouse, which places a constraint on some activities, and opportunities for others, including wetland and woodland habitat creation. Public access has been improved by the National Cycle Network (NCN) 51 cycle route and there are a number of connecting paths including a network within Priory Country Park and a riverside loop in the Grange Estate.

BRVP has a fascinating archaeological and historical record, including many scheduled monuments and listed buildings, standing remains, earthwork sites and the evidence from numerous archaeological investigations. The river valley within BRVP has been inhabited for millennia, as demonstrated by the survival of a prehistoric funerary and ritual archaeological landscape including bowl barrows, mortuary enclosures and a cursus. These Neolithic and Bronze Age monuments were replaced during the Iron Age and Roman periods by agriculture and settlement including farmsteads and a villa. Many of the villages within BRVP are thought to have originated in the Saxon period. In the medieval period, the landscape was dominated by earthwork castles, moats, expansion of the villages and Newnham Priory. The latter, which gives Priory Country Park its name, was founded in the 12th century and demolished during the Reformation by Henry VIII. There are many listed buildings of post-medieval date in the area and recent history is demonstrated by the 17th century Great Ouse navigation, and the trackbed and bridges of the 19th century Bedford to Sandy railway.

The landscape of the area has been heavily modified by gravel extraction and restoration which has created attractive lakes and tree belts. The lakes are important for wintering wildfowl and the Great Ouse and Elstow Brook attract wetland wildlife including Bedfordshire & Luton Biodversity Action Plan species like the otter, spined loach and bullhead. The area is crossed by many utilities including water mains, sewers, overhead electricity lines, gas mains and a fuel pipeline. The Bedford Sewage Treatment Works are within the BRVP. Much of the land is owned by Bedford Borough Council, with the Grange Estate to the east owned by the Marston Vale Trust, so there is excellent scope for cooperation and coordination of management.

Following a key stakeholder workshop in March 2012, a 'long list' of all project options suggested was subsequently refined to create the shortlist described here. The shortlisted projects include:

- Access improvements including gateway features, interpretation trails and extensions to the path network
- A new café and visitor centre in Priory Country Park
- New river moorings and access improvements for canoeists
- Refurbishment of the Kayak Slalom Course in Priory Country Park
- An inland beach
- A camping & caravanning site

There may also be an opportunity to polish treated effluent from the sewage treatment plant by using reedbeds or wet woodlands and this possibility will be explored with Anglian Water. Energy production could be increased by short-rotation coppice. Other low carbon energy generation options include photo-voltaic panels, wind turbines and small scale hydro-electric turbines installed by locks and weirs. Habitat will be restored and created to provide a network that will make the area more permeable to wildlife. A site-wide corps of volunteers can build on the excellent work that volunteers continue to do. Consultation has shown that the most popular activity sought within BRVP is quiet enjoyment of the landscape and its wildlife and further efforts will be required to improve the area for this purpose.

To ensure that each project is financially viable and sustainable, it will only be embarked on if there is sufficient funding available for both its delivery and maintenance. Given the pressures on the public finances, any required capital investment will need to come from external sources and the various proposed projects will need to cover their ongoing revenue costs. BBC and MVT will continue to work together with other partners to help develop and deliver the shortlist of proposed projects in this document as resources and opportunities allow.

1 Introduction & Scope

The following document considers coordinated plans for a number of of proposed projects and initiatives within the Bedford River Valley Park (BRVP) with special attention paid to opportunities on land owned by Bedford Borough Council (BBC). BRVP is a 868 hectares (2145 acres) multi-functional regional park being created to the east of Bedford. This work has been commissioned by the Marston Vale Trust (MVT) on behalf of Bedford Borough Council, with support from the Government's Growth Areas Fund.

The consultant team was comprised of Gary Grant (ecologist and environmental planner) and Lani Leuthvilay (landscape architect), Olaf Bierfreund, Tony Batten and others at URS (engineers and economists) and Colin Ashwood at Currie & Brown (cost consultants).

The purpose of this document is to provide a greater level of detail than that provided in the BRVP Framework document (which was issued in 2008), with, and where available and appropriate, information on the costs and benefits of the various proposed projects. The intention is to provide justification and supporting information to facilitate implementation. The selection and evaluation of projects has been guided by the Key Principles in the BRVP Framework and the public consultations that took place at that time, as well as a workshop organised as part of this work, held in March 2012, which was attended by a wide range of stakeholders and the advice of BBC officers and MVT staff (see Appendix 1).

2 Background

2.1 Planning Policy

National Planning Policy Framework (NPPF)

The government has recently (March 2012) issued new guidance, which

Volunteers planting trees in Bedford River Valley Park

has been prepared with the intention of reforming the planning system to make it less complicated and more accessible. The NPPF includes a presumption in favour of sustainable development and includes a number of themes which are especially relevant to BRVP including:

- Promoting sustainable transport
- Promoting healthy communities
- Meeting the challenge of climate change and flooding
- Conserving and enhancing the natural environment
- Conserving and enhancing the historic environment
- Facilitating the sustainable use of minerals

In addition the NPPF includes a number of specific recommendations which support the BRVP, including:

- Moving from a net loss of biodiversity to achieving net gains for nature (para. 9)
- Meeting the challenge of climate change and flooding (paras. 94, 96)
- Recognising the wider benefits of ecosystem services (para. 109)
- Strategic approaches that plan positively for the creation, pro tection, enhancement and management of networks of biodiversity and green infrastructure (para.114)
- Considering the role of undesignated nature conservation sites as components of local ecological networks such as wildlife cor ridors and stepping stones (para. 117)
- Climate change mitigation and adaptation, conservation and enhancement of the natural and historic environment, including landscape (para. 156)

The NPPF replaces a number of policy documents including Planning Policy Guidance and Planning Policy Statements. The full text of the NPPF can be viewed at http://www.communities.gov.uk/publications/planningandbuilding/nppf

East of England Plan and Milton Keynes & South Midlands Sub-Regional Strategy

The government has announced its intention to revoke both the East of England Plan and the Milton Keynes & South Midlands Sub-Regional Strategy, however these documents have served a useful purpose in recognising and describing in some depth the importance of providing strategic green infrastructure as part of well-designed sustainable communities where people want to live, with jobs, facilities, services, and strong community spirit.

Bedford Development Framework

The Bedford Development Framework (BDF) is currently in preparation. The Core Strategy and Rural Issues Plan and the Town Centre Area Action Plan were adopted in 2008 and an Allocations and Designations Plan was submitted to the Secretary of State for examination in May 2012. Adoption is anticipated in spring 2013. The BDF will replace the Bedford Borough Local Plan (2002), however a number of policies, which were adopted as part of the Local Plan have been saved and several of these relate to the BRVP, notably Policy NE23, which states:

'*When development opportunities arise, within the area defined on the Proposals, the Borough Council will seek the creation of the Bedford River Valley Park as an area where opportunities exist for landscape enhancement, nature conservation, recreation and increased public access whilst protecting sites of acknowledged archaeological importance*'.

This Policy will be replaced by Policy AD26 'Bedford River Valley Park' when the Allocations and Designations Plan is adopted.

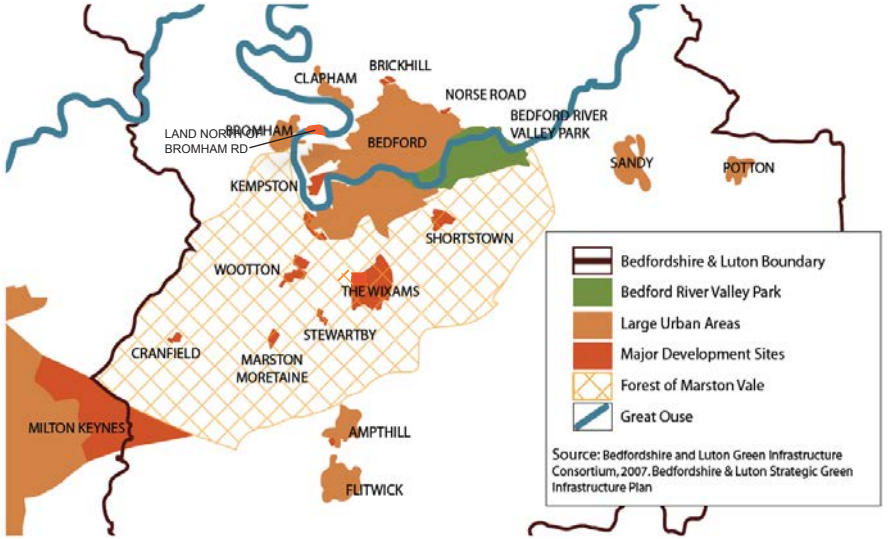
A number of other saved Local Plan 2002 policies directly or indirectly support the BRVP. These include:

LR4 - Rowing course on land west of Willington
NE3 - Sites of Local Importance
NE4 - Trees and Hedges
NE6 - Woodland
NE7 - Wildlife Corridors
NE9 - Conservation Management
NE10 - Contributions to nature conservation
NE12 - Landscaping in association with development
NE13 - Landscape management and protection
NE16 - Flooding
NE20 - Landscape and environmental improvements
NE21 - Forest of Marston Vale
NE24 - Protection and enhancement of water resources
BE16-22 - Listed Buildings
BE23, BE24 & BE25 - Archaeology

Technical studies cited by the Council as evidence that will inform the BDF, which are particularly relevant to the planning of the BRVP include:

- Bedford River Valley Park Framework
- Strategic Flood Risk Assessment (Level 1 and Level 2)
- Bedford Open Space, Sport and Recreation Study
- Landscape Character Assessment
- Bedfordfordshire and Luton Green Infrastructure Plan
- Borough of Bedford Green Wheel Master Plan (draft)
- Greenspace Strategy for Bedford Borough (draft)

Documents which relate to the BDF can be seen at http://www.bedford.gov.uk/environment_and_planning/planning_town_and_country/what_is_planning_policy/documents_of_the_bdf.aspx



BRVP and existing and proposed development

2.2 Population Growth

The population of the Bedford area is predicted to grow. An additional 19,500 dwellings are expected to be constructed in various locations in the Bedford/ Kempston and the northern Marston Vale Growth Area to 2021 (see figure above). The Bedfordshire and Luton Green Infrastructure Plan has observed that there is a strong case for the provision of accessible greenspace within the county and that this needs to be located close to where people will be living and working.

2.3 Initiatives & Developments

Watersports Lake and Enabling Development

In 2006, planning permission (Reference BC/CM/2003/33 and 30/2006) was granted, subject to various conditions, for the excavation of a watersports lake in the BRVP near Willington (see plan on page 10 overleaf). In February 2011, Bedford Borough Council extended the permission for a further 2 years (Reference 10/02907/EXT). The pre-commencement conditions were discharged in 2012 and some works are expected to commence before the permission expires. The approval is for a lake 2.3 km in length and approximately 100m wide, which will be on a southwest-northeast alignment from existing gravel pits close to Meadow Lane to a point just north of the confluence of the River Great Ouse and Elstow Brook. The construction of the lake will also require a re-alignment of the Elstow Brook, with a new section established to the south of the present course.

A consortium of landowners is looking at the technical and financial feasibility of undertaking a development to the south of the proposed watersports lake and north of the A603 Cambridge Road as part of the emerging Allocations and Designations Plan, with adoption anticipated in spring 2013. The intention is for the development to fund the construction and initial maintenance of the watersports lake, with the operation of the lake eventually generating the required income to pay for continuing upkeep. Elements of the scheme which are currently being considered include a residential care village, a science & technology park, university campus facilities, a sports hall, hotel and conference centre and boat house for the lake. The enabling development is being pursued by others and further consideration of its form is outside of the scope of this document, however this study acknowledges that an enabling development will have implications for the BRVP and has the potential to improve access to the central section of BRVP, especially the area which will be to the north of the watersports lake.

Minerals

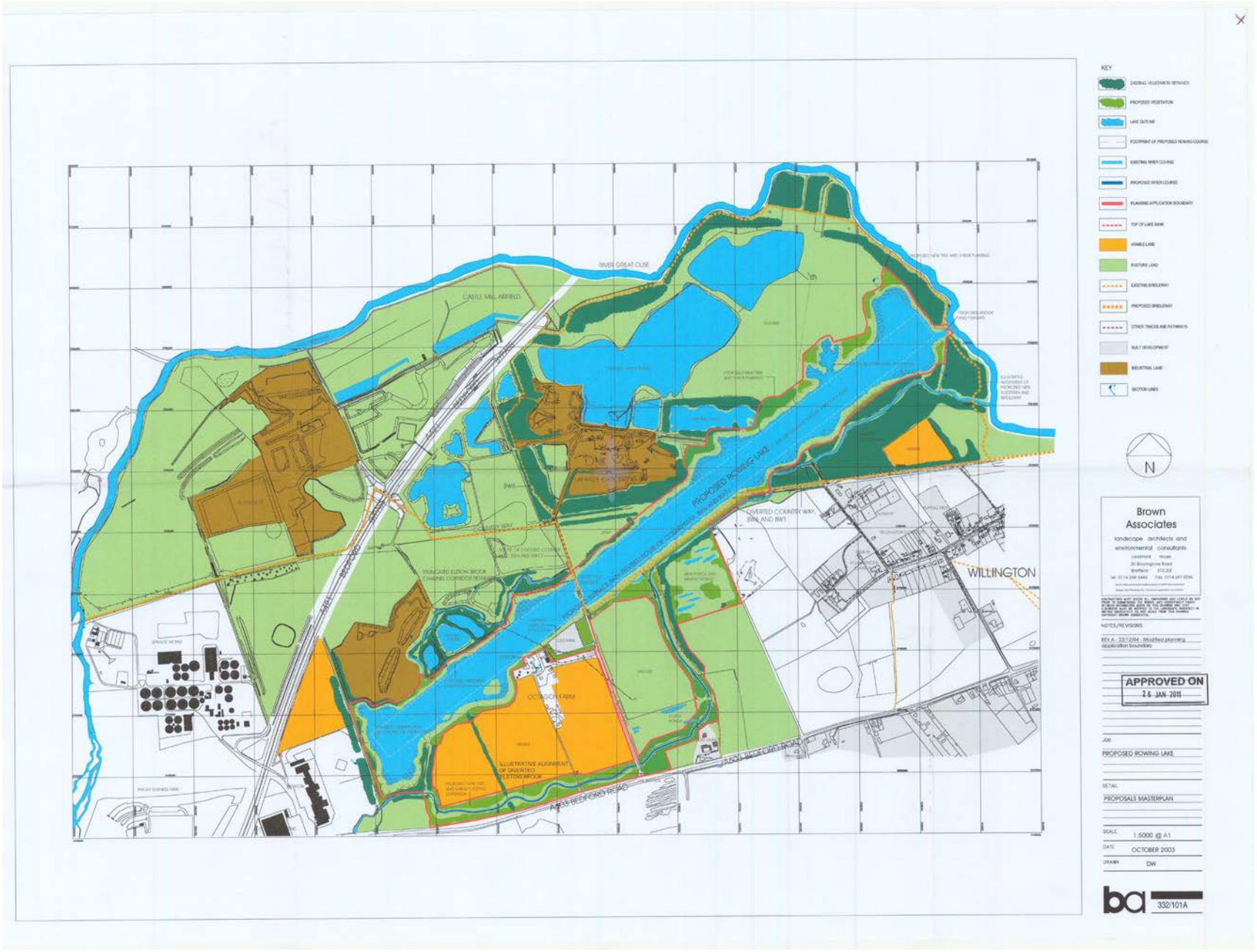
Quarrying for sands and gravels within the BRVP area has been continuing for decades, beginning with the area that is now Priory Country Park and continuing towards the east. Restoration of arable land and wildlife habitat in former quarries is nearing completion. With the exception of a few remaining pockets of unexploited land, the focus for quarrying has now moved to Dairy Farm, downstream and largely to the east of BRVP. The Lafarge processing plant will continue to operate within the Grange Estate for some years to come and is connected to new quarries to the east by a haul road and Bailey bridge which crosses the River Great Ouse.

2.4 Grange Estate

The Marston Vale Trust has a continuing programme of access improvements and habitat creation and restoration projects on the Grange Estate. Projects already completed include a new multi-user path following the river, a new bridge over the Elstow Brook, backwaters for spawning fish and other wildlife, tree planting and a scrape for wetland birds.

2.5 BRVP Framework

In 2008 a broad coalition of organisations, led by Bedford Borough Council (which is the planning authority and the owner of substantial parts of the park), endorsed the production of a BRVP Framework document and plan, which was prepared by the Marston Vale Trust (which owns and manages the 121 hectares (300 acres) Grange Estate at the eastern section of the BRVP). The Framework provides a vision of how the Bedford River Valley Park will develop. It indicates that around 240 hectares will be converted to 'floodplain forest' (a mosaic of woodlands,



Approved watersports lake scheme

New bridge taking multi-user path over Elstow Brook on the Grange Estate

wetlands and grasslands), within which networks of access routes will provide for quiet recreation. The proposed watersports lake is identified as a major potential asset and the existing, well-used NCN Route 51 cycle way is identified as a key feature to which additional access routes within BRVP will connect.

The Framework reviewed the policy context, analysed the existing condition of the park, reported on the results of consultations and identified key design constraints and opportunities. Informed by this, it made broad prescriptions for what BRVP could and should be, and established 'key principles' to guide all future work. The Framework established the following key principles, which are summarised here for easy reference:

Place Making
The BRVP forms the largest contiguous area of publicly accessible greenspace in Bedfordshire and links the heart of the town with the wider countryside. The project plays a key role in creating an attractive, high quality regionally important, natural facility that will support wider regeneration objectives and transform the image and setting of Bedford.

Creating Floodplain Forest
The intention is for the BRVP to be one of lowland England's largest interconnected complexes of woodland, marsh, pools and channels, reconnecting the River Great Ouse with its floodplain and linking together existing habitats. The floodplain forest will become a woodland and wetland habitat of national importance for people to enjoy, and provide the enhanced landscape setting for other elements of the BRVP.

Multi-functionality
The BRVP will be multi-functional and must meet all the aspirations of the original local planning policy (NE23) namely, landscape enhancements, recreational opportunities, nature conservation improvements and improved access whilst respecting archaeology and the built heritage - an exemplary green infrastructure asset.

Accessibility
BRVP will be for people of all abilities and backgrounds. Physical access will be developed to a high standard. Building on the existing excellent east-west National Cycle Route 51, further links and routes for cyclists, pedestrians and horse riders will be created. Special efforts will be made to link with communities to the north and south, with BRVP being part of an upgraded access loop around Bedford for cyclists and pedestrians (the Bedford Green Wheel). People of all ages will be encouraged to walk and cycle to the park. Intellectual access will be improved through educational materials, information and opportunities.

Promoting Sport & Recreation
The BRVP will provide opportunities for people to pursue sporting and

recreational activities, and could become a 'Centre of Excellence' for sport. The construction of a purpose-built lake will provide a major facility for Bedford (a traditional rowing town), and allow for the development of other popular local sports such as canoeing, kayaking and triathlon. The relatively large size and careful zoning will allow solitary and quiet activities to coexist with those that can be noisy and gregarious.

Environmental Sustainability
Exemplary standards of environmental sustainability are being sought. Projects will be undertaken to reduce the production of atmospheric carbon through renewable energy schemes, for example growing energy crops (e.g. densely planted, high-yielding varieties of willow or poplar) or harnessing the power of flowing water and wind. Woodland and wetland habitats could be used to improve the quality of treated effluent from the local sewage works, cleaning it far beyond the current required standards. The floodplain forest will absorb atmospheric carbon as it grows and as sediments are trapped. Materials used within BRVP will be high quality, sustainable and from appropriate local sources wherever possible.

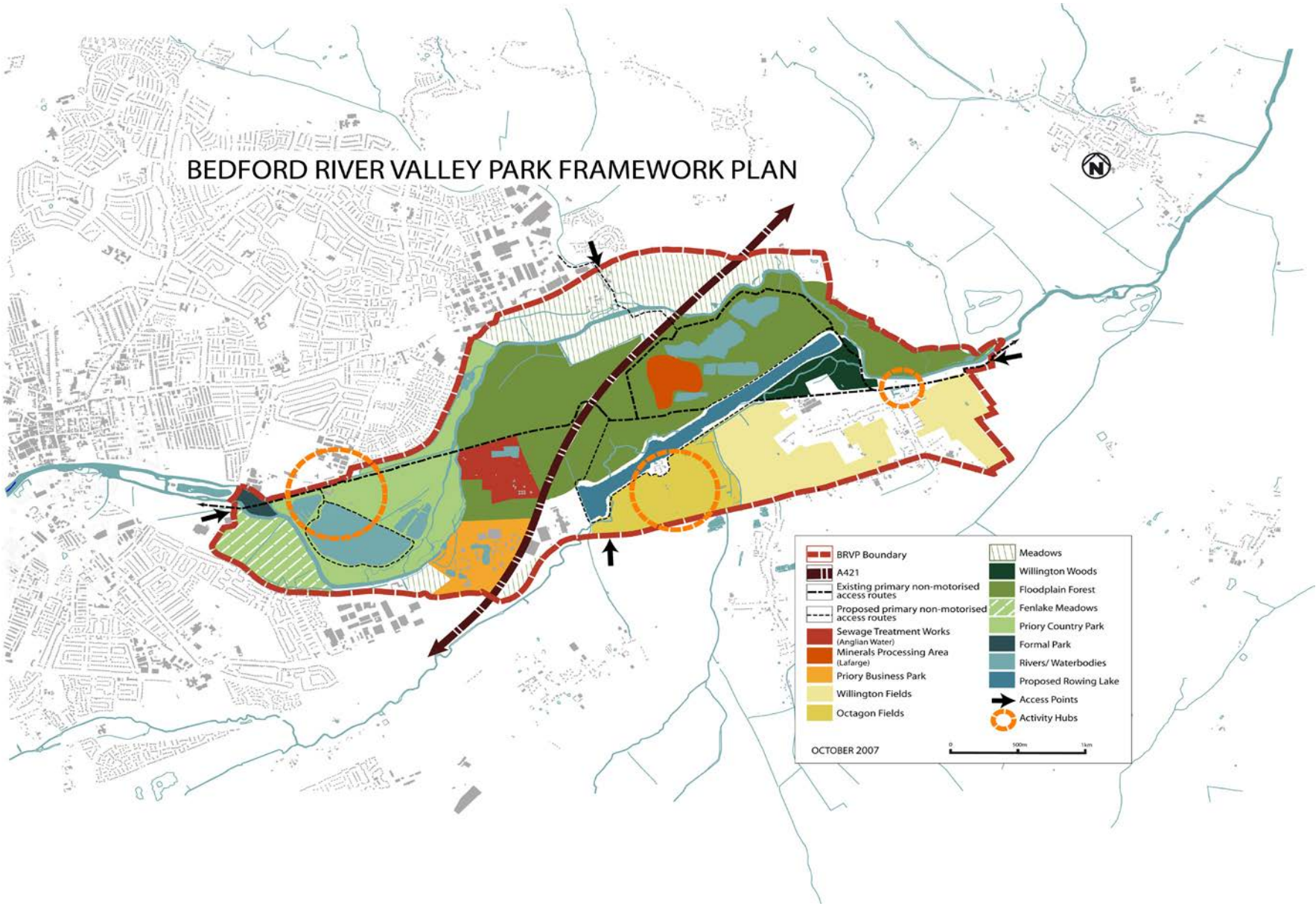
Financial Sustainability
To ensure that each project is financially viable and sustainable, it will only be embarked on if there is sufficient funding available for both its delivery and maintenance. Given the pressures on the public finances, any required capital investment will need to come from external sources and the various proposed projects will need to cover their ongoing revenue costs.

Enhancing Existing Value
BRVP will seek to conserve and, where possible, enhance existing features of landscape, archaeological, heritage and ecological value. These include Priory Country Park and the adjacent Fenlake Meadows, the River Great Ouse and the meadows to the north, the village of Willington with its important buildings (including the Church and Dovecote), scheduled archaeological sites and some of the more recently created water bodies on the Grange Estate, which are already valuable habitats for birds and other wildlife.

A Functional Floodplain
The floodplain within BRVP will be used to help improve water quality in the River Great Ouse by filtering and absorbing discharges, surface and groundwater and river flows. The park will be designed to store and channel floodwaters to help reduce flood risk locally and downstream, part of bringing the floodplain back into more active use for water management.

Involving People & Partnerships
Effective partnerships will be central to the success of BRVP. A whole range of people, businesses, government and non-government organisations will be actively engaged in designing, creating, operating and enjoying the park.

The full version of the BRVP Framework can be viewed at http://www.marstonvale.org/brvp/index.html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BRVP Boundary
A421
Existing primary non-motorised access routes
Proposed primary non-motorised access routes
Sewage Treatment Works
(Anglian Water)
Minerals Processing Area
(Lafarge)
Priory Business Park
Willington Fields
Octagon Fields
Meadows
Willington Woods
Floodplain Forest
Fenlake Meadows
Priory Country Park
Formal Park
Rivers/ Waterbodies
Proposed Rowing Lake
Access Points
Activity Hubs
OCTOBER 2007
0
500m
1km

3 Site Constraints & Opportunities

3.1 Water & Flood

The River Great Ouse enters the BRVP at its western boundary and curves around the south of the Priory Country Park before heading north and east, leaving the area to the north east of the village of Willington, by Danish Camp. The Elstow Brook and the Wilstead Brook enter the BRVP from the south, join together and then join the Great Ouse to the north of Willington. The Renhold Brook joins the Great Ouse to the south east of Castle Dairy Farm. The Gadsey Brook is a northern diversion of the Great Ouse, running along the north-eastern boundary of the site.

The many gravel pits are largely supplied by groundwater, which is subject to seasonal fluctuations. In general, groundwater is encountered between 2 or 3 metres below ground level. None of the monitoring boreholes on site have ever been recorded as being dry. The River Great Ouse floodplain is usually at the highest risk of flooding in winter following extended periods of rainfall in the upper catchment, however flooding can also occur due to short high intensity local storms, which may occur in summer. Clay is the dominant underlying formation in the catchment, and surface runoff provides a substantial part of the flow received by the river. The figures over the page show the extent of flood during various conditions.

There are 18 active water abstraction licences within the vicinity of the BRVP and the preferred Environment Agency option for future management of the sub-catchment is to maintain the current resource availability status of 'No water available'.

In dry weather a significant proportion of the base flow of the Great Ouse is provided by the consented discharge of treated wastewater from Anglian Water's Bedford sewage treatment works, which lies within the BRVP, however the EA has rated water quality in the Great Ouse and the Elstow Brook as B (good) and A (very good) respectively.

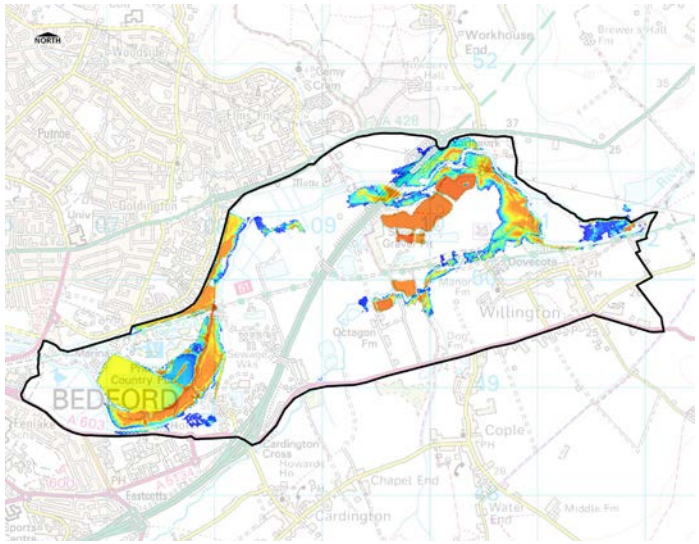
For the UK, it is predicted that climate change will mean warmer temperatures, wetter winters and drier summers. The frequency of extreme weather episodes may increase. There may be a greater threat of flooding following rainstorms and the number of flood events affecting the BRVP may increase. The role of the BRVP in conserving water and helping to manage flood risk is likely to become more important. Vegetation and soils may become increasingly stressed and the flora and fauna of the area will change, with an increase in the numbers of species normally associated with warmer, more southerly climes.

River Great Ouse in the BRVP near Willington

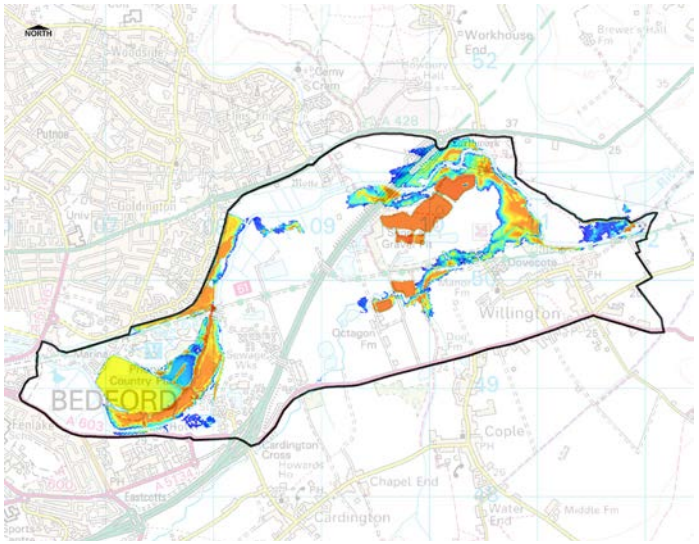
BRVP Floodplain

Water Depth (metres)

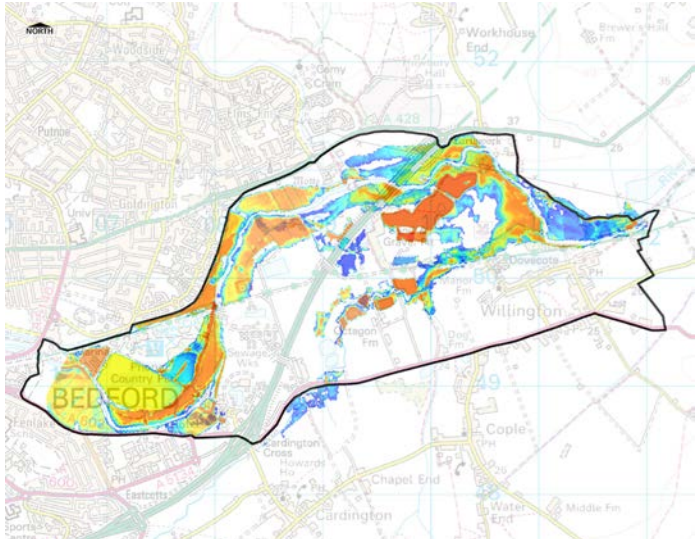
- 0.00 - 0.25
- 0.25 - 0.50
- 0.50 - 0.75
- 0.75 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 1.75
- 1.75 - 2.00
- 2.00 - 2.25
- 2.25 - 2.50



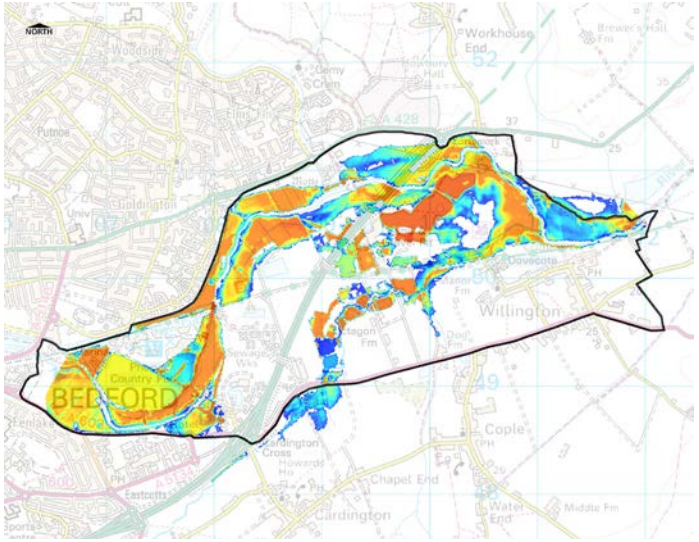
2-Year Storm Event



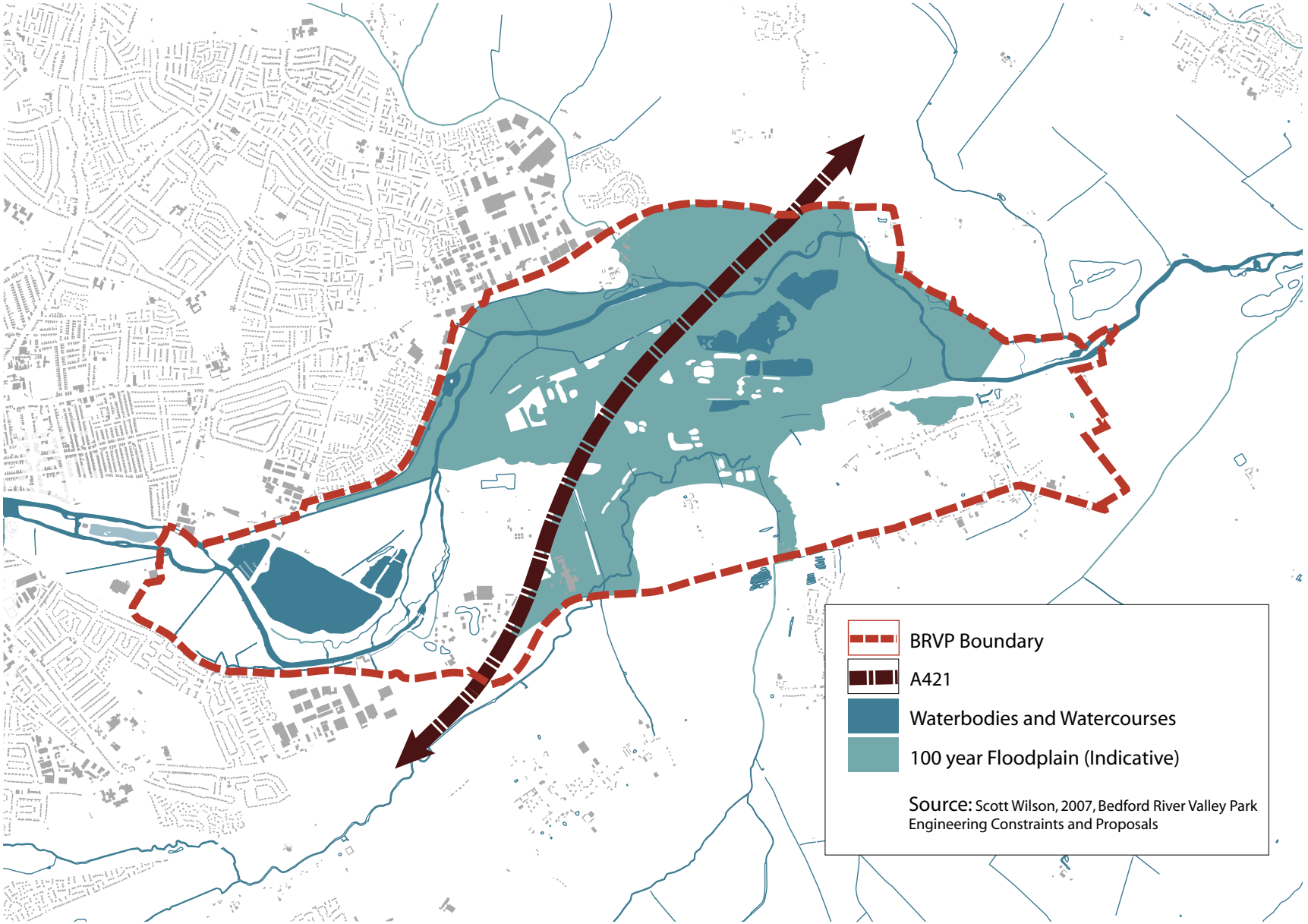
5-Year Storm Event



10-Year Storm Event



25-Year Storm Event



FLOODPLAIN AND SURFACE WATER

3.2 Access

The site is crossed or bounded by a number of public rights of way, including river, roads, bridleways and footpaths. These include:

- The Great Ouse (Bedford to St Neots and beyond) which is a strategic waterway
- A421 Bedford Bypass (links Bedford to the A1) – crosses the site
- A603 (Bedford to Sandy) forms the southern boundary
- Private haul road serving the Lafarge Quarry and providing emergency access to the Castle Mill Weir for the EA
- Country Way forming part of National Cycle Route 51: Oxford to Cambridge
- Cople Bridleway No. 6
- Willington Bridleway No.1
- Cople Footpath No. 16 (currently unusable).

The BRVP area already has two existing hubs of activity, namely:

Priory Country Park, (a 'Green Flag' award winning site) with walks, angling, cycle hire, wildlife observation and a small visitor centre with educational facilities. There is an adjacent marina with 200 moorings, a sailing lake, hotel and restaurant and car parking.

Danish Camp (a licenced café and function venue) by the River Great Ouse at Willington. Car parking is adjacent to the cycle path and cycles and boats are available for hire.

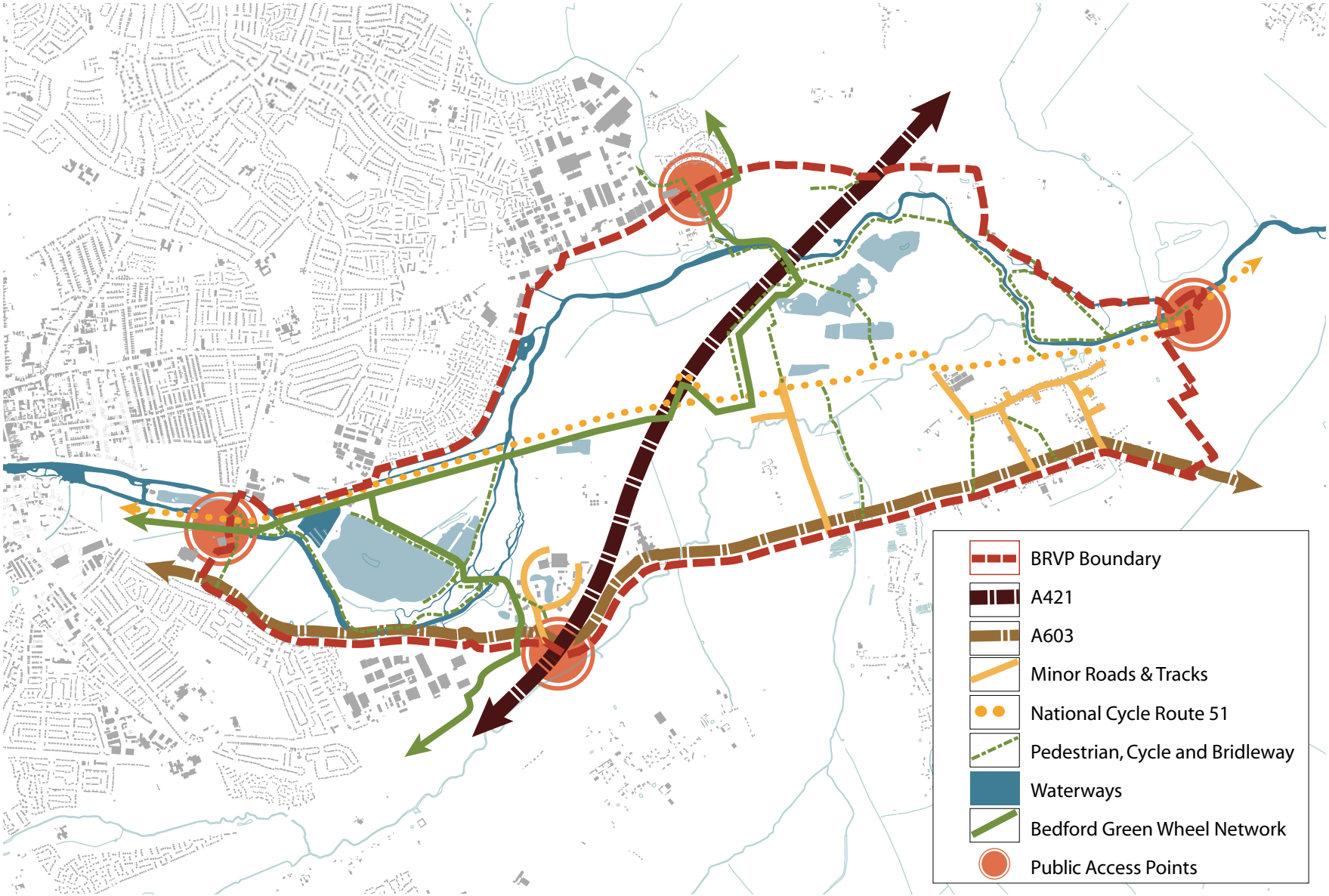
Since its creation in 2003, National Cycle Network Route 51 has become a popular route linking Sandy, via Willington to Bedford. The new surfaced path which follows the river and circles the Grange Estate is also popular with walkers and cyclists. The Bedford Bypass and the River Great Ouse both act as major barriers.

3.3 Heritage

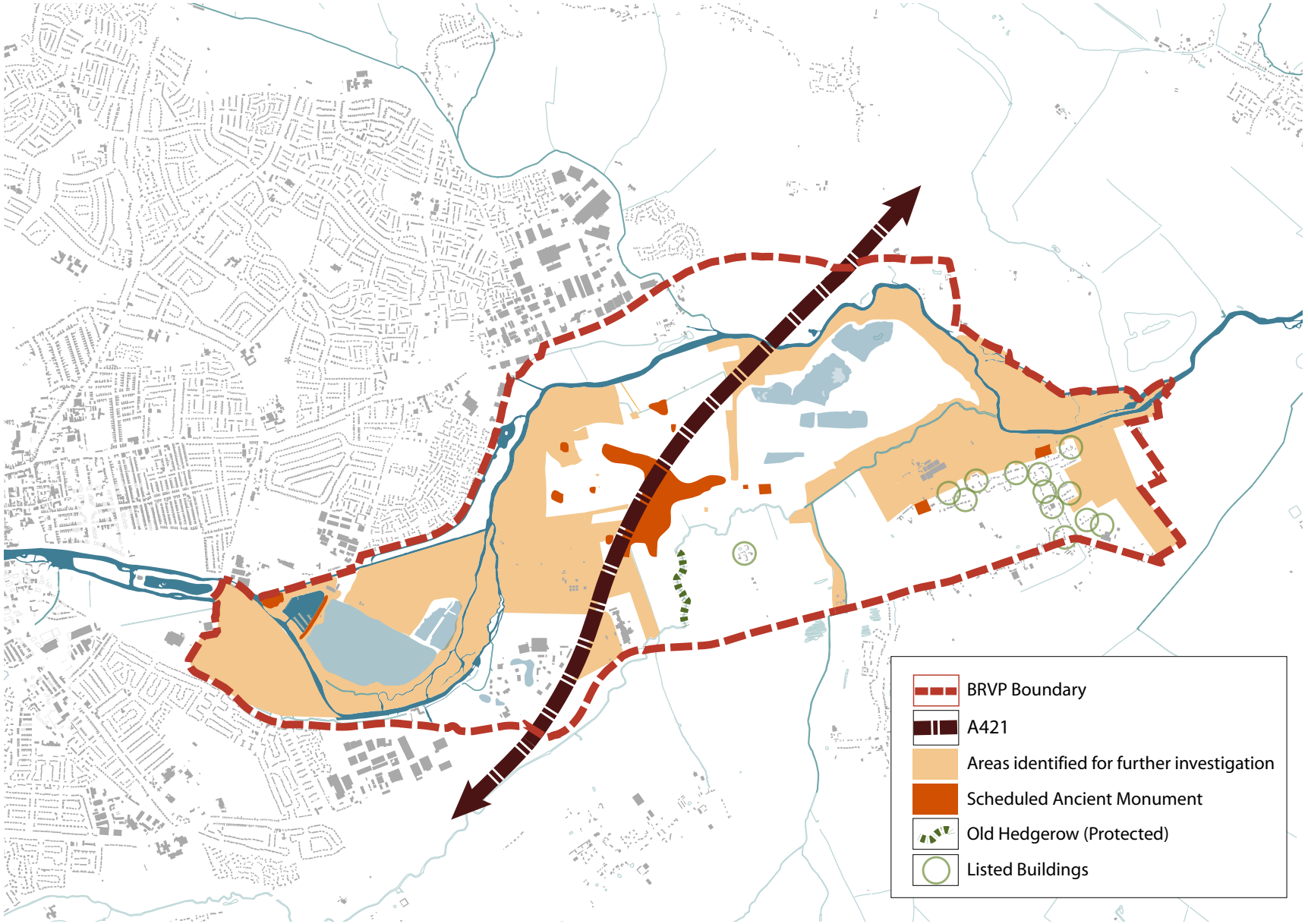
BRVP has a fascinating archaeological and historical record, including many scheduled monuments and listed buildings, standing remains, earthwork sites and the evidence from numerous archaeological investigations.

The river valley within BRVP has been inhabited for millennia, as demonstrated by the survival of a prehistoric funerary and ritual archaeological landscape including bowl barrows, mortuary enclosures and a cursus. These Neolithic and Bronze Age monuments are one of the most important groups in the region, recognised by their legal protection as scheduled monuments and have strong comparative links with internationally important sites such as Stonehenge. Excavation has shown that these Neolithic and Bronze Age monuments and the surrounding marshy landscape were gradually replaced during the Iron Age and Roman periods by agriculture and settlement, including farmsteads and a villa.

Many of the villages within BRVP are thought to have originated in the Saxon period. The transition from Saxon to Norman England is represented by the earthwork castle sites of Risinghoe Castle and Howbury Ringwork, a scheduled monument, which still overlook the park from the north bank of the River Great Ouse. These would have dominated the landscape in the medieval period, alongside a number of moated manorial sites, expanding villages and the religious site of Newnham Priory. The latter, which gives Priory Country Park its name, was founded in the 12th century and demolished during the Reformation by Henry VIII, to be replaced by a Tudor Mansion. Archaeological investigation at Aspects Leisure Centre, where the priory and later mansion remains are located, has identified the church, cloister and cemetery and two outer courtyards containing workshops and agricultural buildings. Parts of the surrounding monastic precinct wall are still visible above ground, as well as the fishponds which survive as earthworks, and sections of the later Tudor Mansion garden walls. At the eastern end of BRVP, at Willing-



ROADS AND ACCESS



HERITAGE SITES

Tudor dovecote in Willington

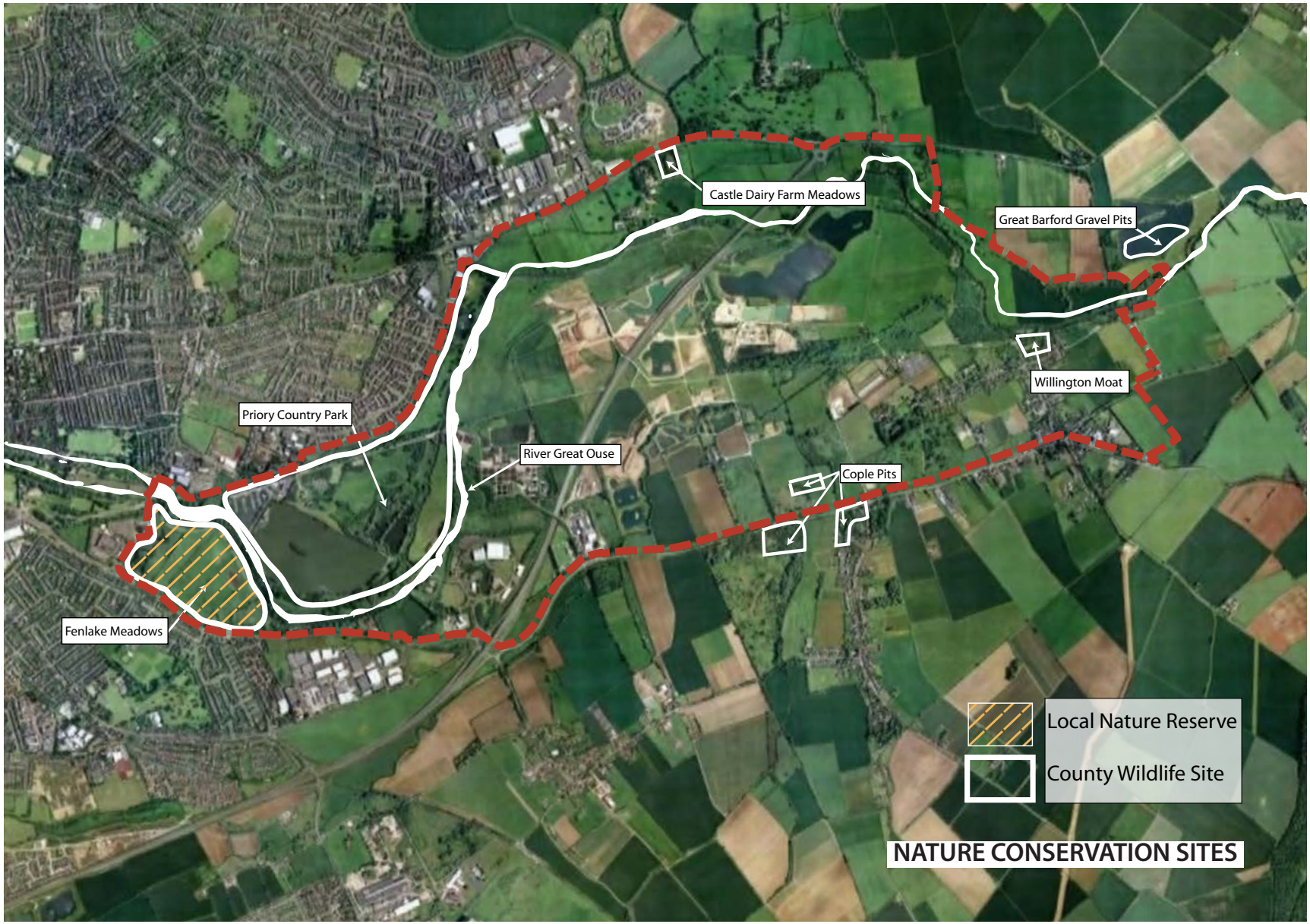
ton, the medieval moated and scheduled site of Danish Camp, and the surviving 16th century dovecote and stables of Willington Manor can be visited. There are many other listed buildings of post-medieval date in the area.

The River Great Ouse was made navigable in the 17th century which would have led to an increase in trade and traffic on the watercourse. It fell into disuse after the coming of the railway but was restored for use by pleasure craft in the 1970s. The railway line which was constructed in 1862 but closed in 1967 survives as the NCN 51 cycle route. A number of 18th and 19th century gravel pits, brick works and brick kilns, spread throughout the area of BRVP, attest to the early quarrying and processing of clays and gravels. Field names like 'Claypit Close' to the east of Octagon Farm serve to remind us of this aspect of the park's history. Modern large scale extraction continues to this day and has resulted in the identification of many archaeological sites and finds.

Fenlake Meadows Local Nature Reserve in BRVP

3.4 Landscape

Bedford Borough Council Landscape Character Assessment Final Report (2007) has identified five landscape character units in the area. The first is Priory Country Park. The second, at the centre of the site associated with the river valley is the Ouse Valley Restored Farmland, which includes restored gravel pits, plantations and pasture. To the south around the village of Willington is an area named as the 'Willington Farmland and Paddocks'. To the north of the Great Ouse are meadows which have been named as the 'Risinghoe Castle Farmland with Parkland'. Finally at the extreme east of the site are the Ouse Valley Meadows, pastures that


Castle Dairy Farm Meadows
Great Barford Gravel Pits
Willington Moat
Priory Country Park
River Great Ouse
Cople Pits
Fenlake Meadows
Local Nature Reserve
County Wildlife Site
NATURE CONSERVATION SITES

are now being exploited for gravel extraction. The site does have some scenery which is industrial and urban including gravel extraction works, an abattoir, the sewage treatment plant and the A421 Bedford Bypass. Trees on the site are largely associated with linear or boundary features such as the two principal watercourses, the Great Ouse and Elstow Brook, as well as tracks and plantations associated with mineral workings or restoration schemes. The Bedford Borough Landscape Character Assessment rated the BRVP landscape as low to moderate condition and sensitivity and therefore suitable for large scale enhancements.

The flat topography of the area means that the BRVP is visually discrete. Limited views across the site are possible from the most elevated section of the A421 Bedford Bypass and the bridge for NCN Route 51. In a few locations there are important long-range views to the Cardington Airship Hangars and the Greensand Ridge to the south and there is a recommendation to preserve these.

3.5 Biodiversity

The County Biodiversity Action Plan identifies the BRVP as an area that presents good opportunities to create floodplain habitats. The Great Ouse with its associated bankside vegetation is a County Wildlife Site (CWS). Two fish, the spined loach *Cobitis taenia* and bullhead *Cottus gobio* occur in the Great Ouse. They are both bottom-dwelling species, and are threatened in Europe and listed under Annex II of the Habitats Directive (Conservation [Natural habitats, &c.] Regulations 1994). The spined loach is also protected under Schedule 5 of the UK Wildlife and Countryside Act 1981 (as amended), and is a Biodiversity Action Plan (BAP) species in Bedfordshire and Luton.

The area is visited by otter (a european protected species), kingfisher (a Schedule 1 listed bird). The mature trees and wetlands attract several species of bat (protected under european legislation). There is habitat suitable for water vole, a declining UK Biodiversity Action Plan (BAP) priority species. However a survey undertaken for the Bedfordshire and Luton Species Action Plan: Water Vole (2009) failed to find this species, which may have been displaced by mink. Fenlake Meadows Local Nature reserve (LNR) is a County Wildlife Site, which contains grazed floodplain grassland and marshy grassland. Floodplain grazing marsh is a UK BAP priority habitat. Cople Pits CWS support great crested newt (a European protected species) and an area of marshy grassland also occurs within the Willington Moat CWS. Badgers regularly cross the site with an active main sett, outlier setts and latrines in the locality.

Existing water bodies in the area attract wintering waterfowl. Several species of duck are joined by cormorant, herons, grebes and waders. In addition, a number of notable wetland birds breed around the waterbodies in the area, including little grebe, sedge warbler, reed warbler, reed bunting and kingfisher.

3.6 Utilities

A number of utilities affect the study area. Most notable are overhead electricity lines, foul water sewers and rising mains, gas mains, water mains and surface water sewers. Dairy Farm, to the east of BRVP, is crossed by overhead electricity lines, as well as a number of buried gas mains. Running broadly parallel to NCN Route 51 is a foul water rising main as well as a gas main. A number of utility lines converge on an area around the Anglian Water sewage treatment plant.

A large number of services are also located at Priory Country Park and Priory Business Park.

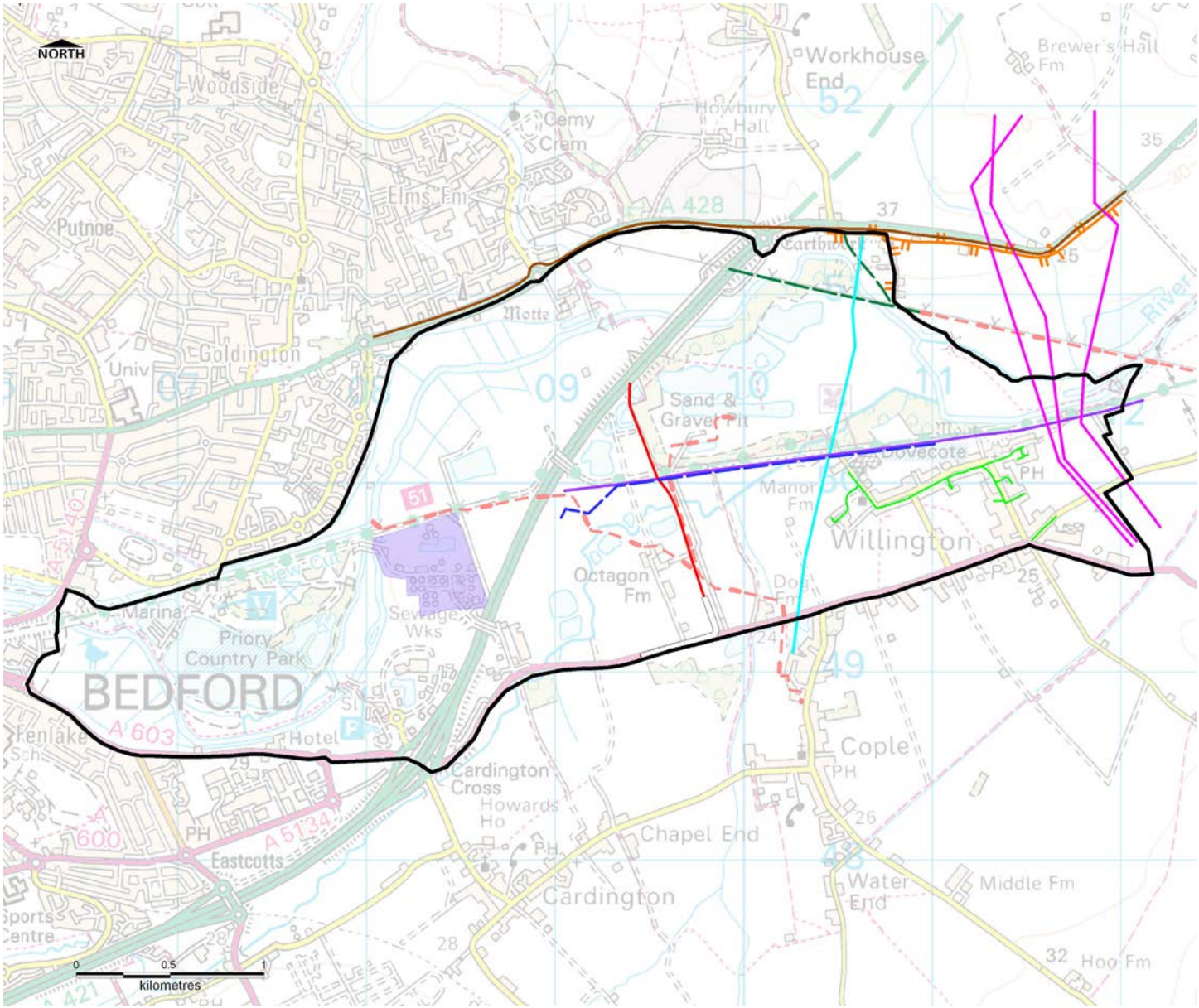
3.6 Land Ownership

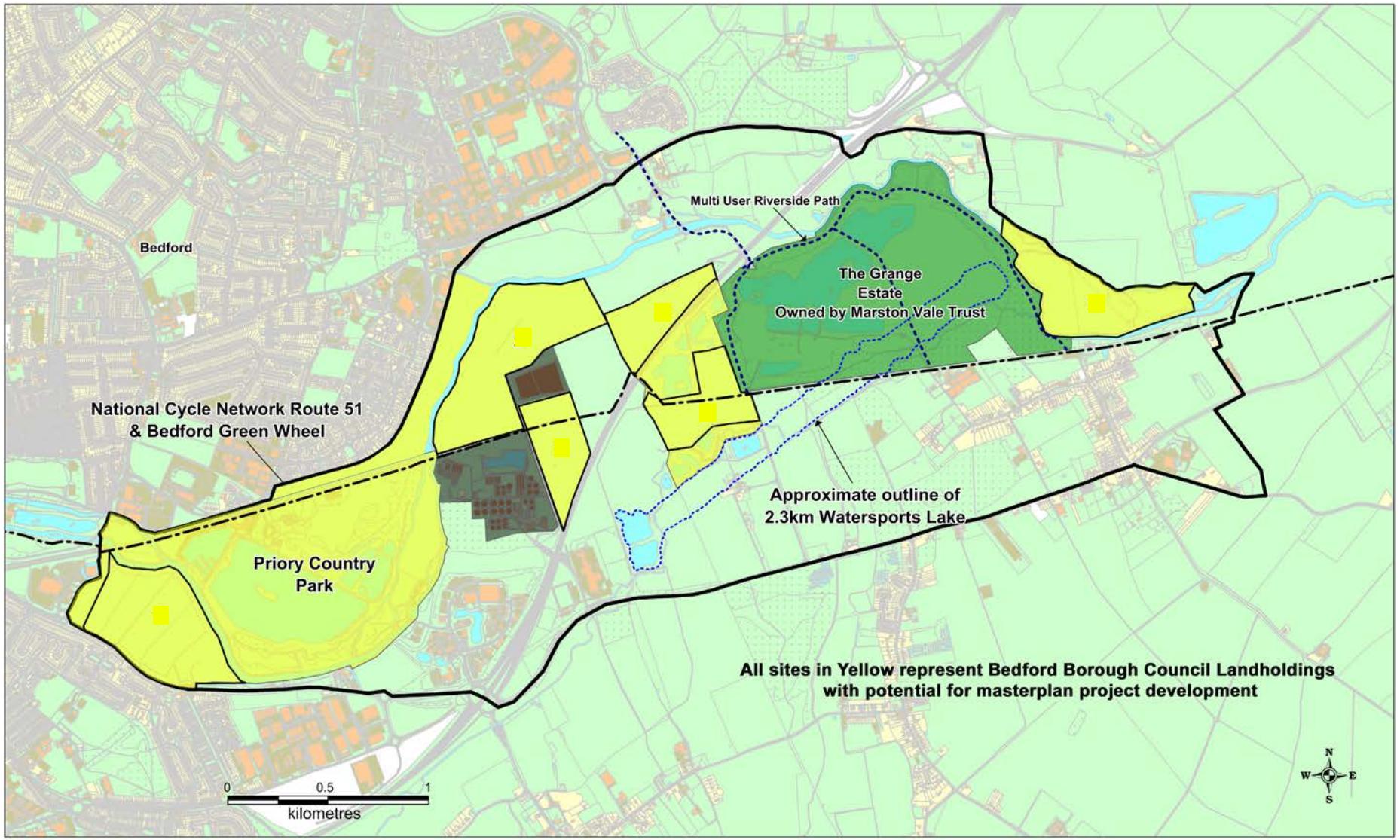
Major landowners in BRVP are Bedford Borough Council (their land being a focus of this study) and Marston Vale Trust (see plan on page 24).

Utilities

- BRVP Boundary
- Wastewater Treatment Works
- Rising Main
- Oil Pipeline
- Area to be confirmed
- Cable and Wireless
- NHP Mains
- MP Mains
- LP Mains
- LHP Mains
- High Voltage Cables
- Existing Water
- Electrical Cables
- EDF

Note: not comprehensive





MAJOR LANDOWNERS

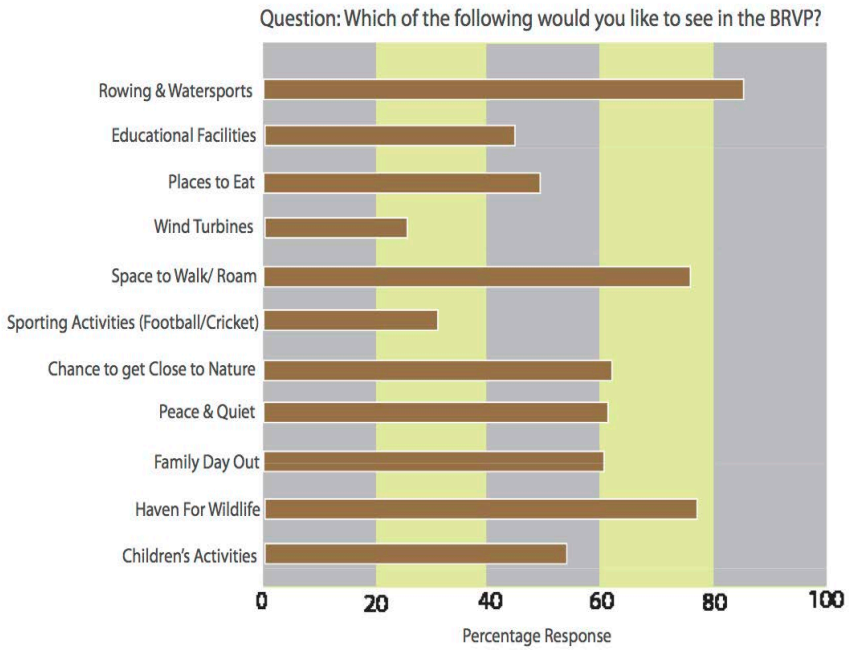
4 Consultations on BRVP

4.1 Preparation of the BRVP Framework 2006-2007

Feedback from the Public

During the summer of 2006 and the spring of 2007, the Marston Vale Trust canvassed the public and organisations on the draft BRVP Framework Plan, which had been prepared for that purpose. The consultation process was extensive, including the use of printed materials, a dedicated website, a local media campaign and personal contact through attendance at a series of public events. In June 2006, over 48,000 homes in the area between Bedford and Sandy were sent information explaining the idea of the BRVP and seeking residents' views and opinions via a freepost questionnaire. Exhibition materials were displayed at 14 different public events during 2006 where additional feedback and comments were recorded from members of local communities and the wider public. This initial feedback was used to inform the production of a draft plan in early 2007, which was subsequently used to seek more structured and detailed comments from both the public and a wide range of organisations and interest groups.

In all, over 2,100 comments were received. The vast majority (85%) were 'very supportive' of the BRVP concept - with nobody saying they were 'strongly opposed'. As expected of a consultation on such a large and complex project, there was a wide spectrum of opinion. There was great interest in walking, riding, watching wildlife and finding somewhere to enjoy peace and tranquility. A very important theme was water sports and other water-based activities, particularly rowing and canoeing. Some people expressed concerns, which were broad-ranging but centred around noise and disturbance (including proposals for motor sport), security, and over-development. Access and rights of way were also addressed by several respondents, with concerns expressed over vehicular access, car parking (both too much and a lack of) and 'access for all'.



Graphic summarising results of public feedback on BRVP

4.2 BRVP Workshop 2012

A workshop was held on the 14th March 2012 at the Corn Exchange in Bedford, to gather views from key stakeholders on issues and opportunities relating to BRVP and to seek their suggestions for future projects. The workshop was well attended by a wide variety of organisations, including heritage and user groups, parish councils, businesses and government agencies. A full list of attendees is presented in Appendix 1.

The meeting was chaired by Joel Carré, Head of Communities, BBC and addressed by Sonia Gallaher, Senior Planner, BBC on the strategic context. Gary Grant then described some of the issues and opportuni-

ties associated with delivering the BRVP, as outlined in more detail in the 'Issues and Opportunities' briefing paper sent to invitees ahead of the workshop. Following questions and an open discussion, participants worked in groups where specific themes were considered and comments and suggestions for projects were noted on large-scale site drawings and post-it notes. Themes discussed were, access and recreation, landscape and biodiversity, heritage and interpretation, other land uses (energy crops, reed bed filtration etc.) and funding (capital and revenue). Notes were recorded and used to produce a 'long list' of suggested projects and interventions (see Appendix 2).

Participants at the BRVP Workshop at the Corn Exchange, March 2012

4.3 BRVP Prioritisation of Projects

The 'long list' in Appendix 2 was evaluated against the agreed principles set out in section 2.5 the BRVP Framework. These principles are:

- Place Making
- Creating Floodplain Forest
- Multi-functionality
- Accessibility
- Promoting Sport & Recreation
- Environmental Sustainability
- Financial Sustainability
- Enhancing Existing Value
- A Functional Floodplain
- Involving People & Partnerships

In addition to compatibility with the principles set out in the Framework, consideration was given to issues such as public/ stakeholder support (as evidenced from engagement process in 4.1 and 4.2 above), initial feasibility and the various constraints and opportunities (as described in section 3 of this report). A project reference group consisting of BBC and MVT officers and the consultant team met in April to discuss all projects included in the long list and to prepare a 'short-list', which is presented in Appendix 3. The 'short list' was subsequently refined to take account of the scale of investment required, the likelihood of projects representing good value for money, deliverability, availability of supporting information and timescales for implementation, a process which resulted in the final list of projects described in section 5 (as follows).

5 Projects

5.1 Introduction

The shortlisted projects described here have emerged from the process described in Section 4. They cover the full spectrum of activities and functions across most of the BRVP, with an emphasis on land owned by the Borough. The projects may be categorised as projects to improve public access, projects to promote education and recreation, projects to facilitate water quality improvements and generate power, restore habitats and to encourage people to participate in the management of the site.

Where appropriate, costs for projects have been provided and in the case of four projects, namely the proposed Cafe and Visitor Centre at Priory Country Park, the project to grow Short Rotation Coppice, the restoration of a kayak slalom and the provision of a camping and caravanning site, a more detailed analysis of financial viability has been made.

For all projects described, there is a brief assessment of the project using the BRVP key principles from the BRVP Framework. These assessments are included in order to demonstrate relevance and vailidity.

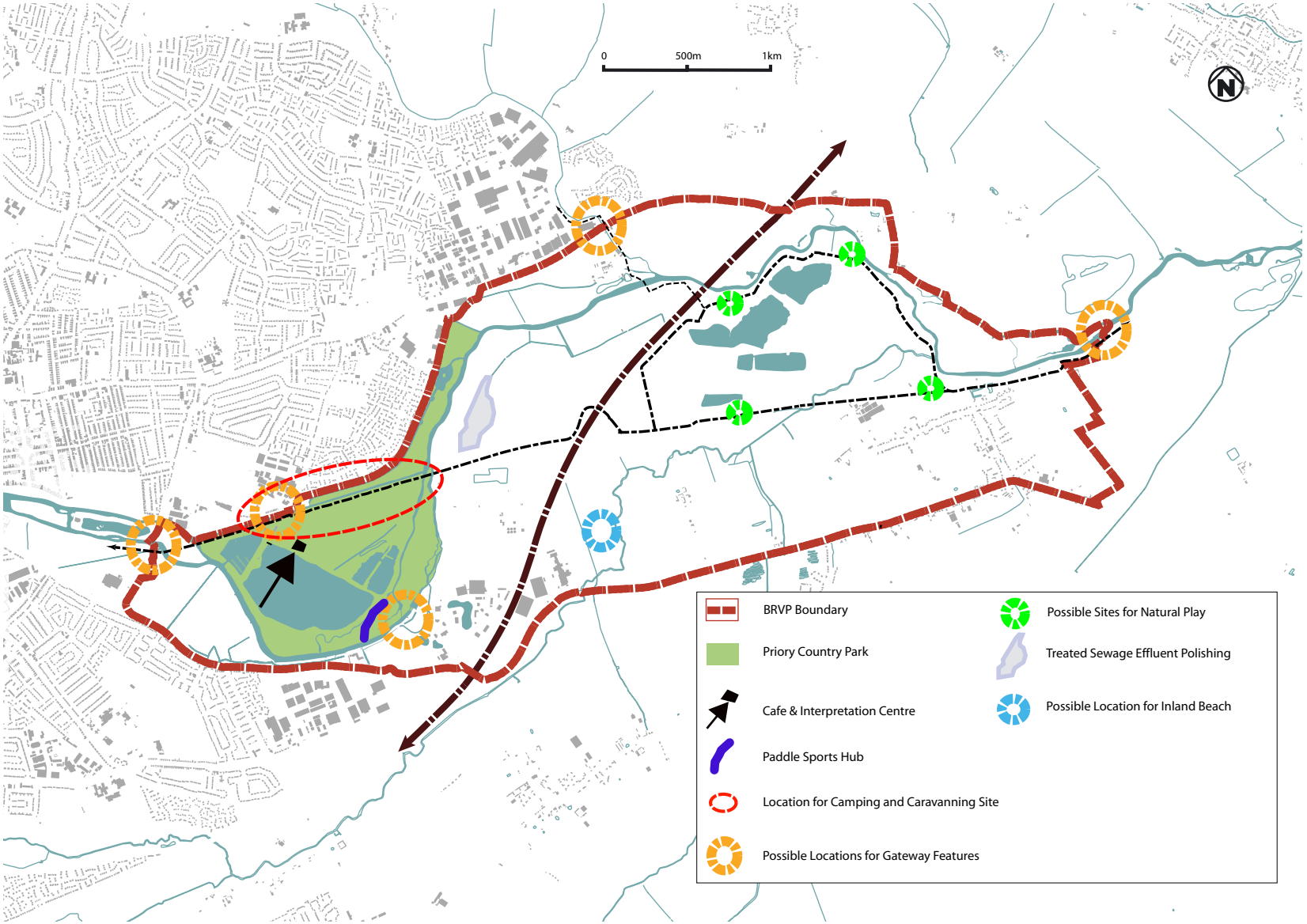
Where relevant, the locations of projects are shown on the plan on page 28, with a plan showing access improvements on page 30 and river based initiatives on page 37.

An analysis of shortlisted projects is presented in Appendix 3.

5.2 Gateway Features

Participants at the March 2012 Workshop suggested that gateway features and associated signage can celebrate a sense of place, may encourage more people to visit and help to build an identity for the BRVP. Gateway features may include symbolic gates and gate posts, public art and signs. Possible locations for gateway features include the various entrances to Priory Country Park, Castle Mills (Green Wheel link), NCN 51 and a future entrance to the BRVP associated with the enabling development for the watersports lake. High quality gateway features will require further planning, design and coordination. It may be that new gateway features can be funded as part of wider access improvement projects or provided through planning agreements.

Gateway sculptures on the Bristol-Bath cycle path



LOCATIONS OF SELECTED PROJECTS

Project Evaluation: Gateway Features

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality	√	
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	
Financial Sustainability	√	Boosts visitor numbers
Enhancing Existing Value	√	
A Functional Floodplain		
Involving People & Partnerships	√	

Project Evaluation: Heritage & Interpretation Trails

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality		
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	Part of message
Financial Sustainability	√	Boosts visitor numbers
Enhancing Existing Value	√	
A Functional Floodplain		
Involving People & Partnerships	√	

5.3 Heritage & Interpretation Trails

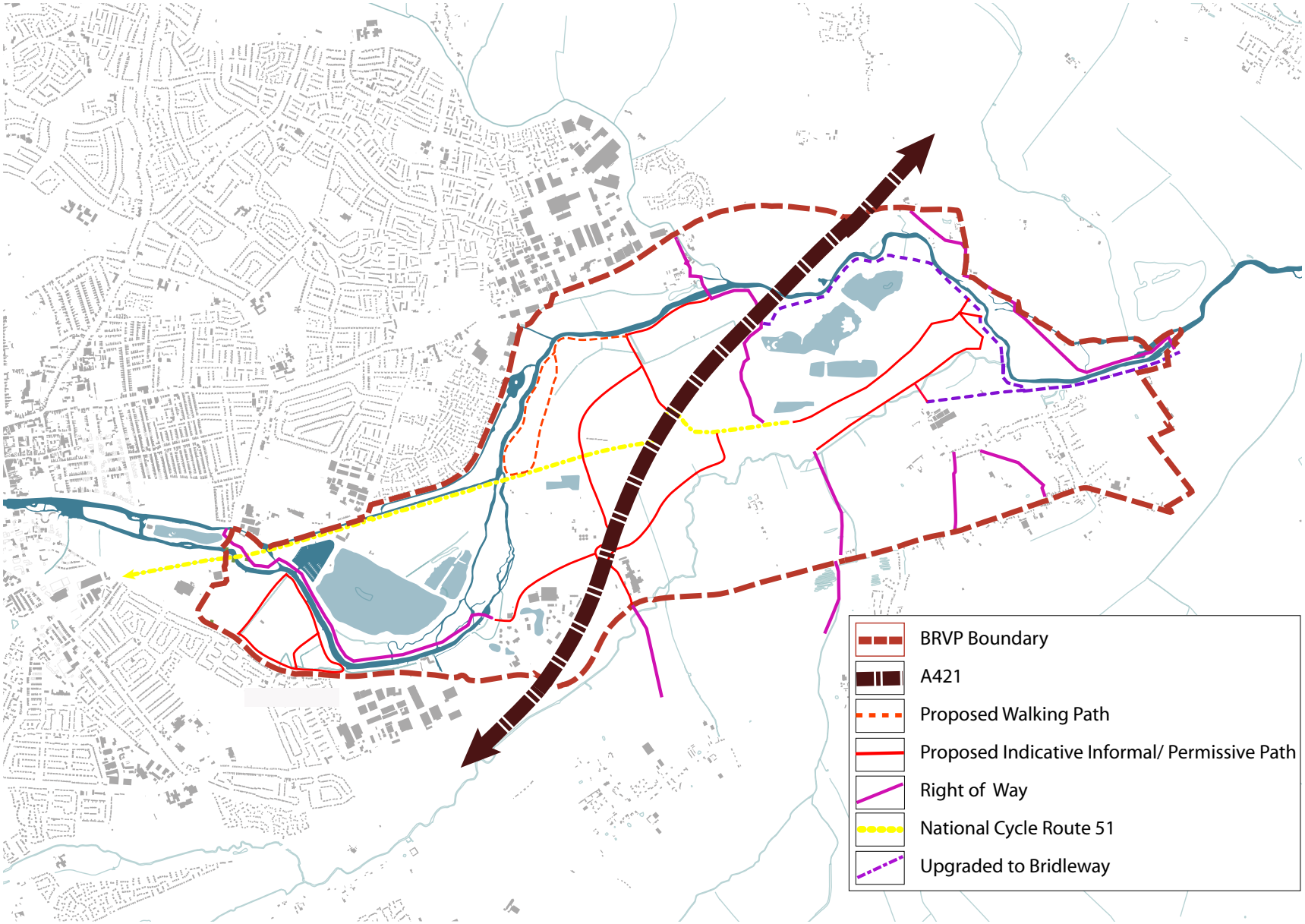
Working with Bedford Borough Council, The Marston Vale Trust has prepared a Heritage Interpretation Action Plan which is designed to communicate past and present historic landscapes and features within BRVP. The action plan has identified key locations within the park where the public will be able to access information. Information will be available through various media, including interpretation boards and digital media. Digital media may include downloadable guides, mp3 audio trails, podcasts, mobile phone guides, bluetooth hotspots and geocaching. In addition information will be available via a dedicated Facebook page and through the BRVP website.

Content will be developed by staff, specialists and volunteers. The detailed plan has been costed and £80,100 applied for from the Heritage Lottery Fund.

5.4 Multi-user Path Network

The path network of BRVP is partly complete, with the NCN 51 forming a very well used central east-west spine with links with a number of spurs and loops. However as improvements are made to newly restored, or yet to be restored, sections of the park, there will be opportunities to upgrade existing paths and provide new paths for walking, cycling and horse access, which link with the wider rights of way network. The plan on page 30 overleaf shows the post-restoration access in the north Octagon Farm /100 Acre Site. Further access improvements and changes will need to be reflected in an evolving access plan for the BRVP. The excavation of the proposed watersports lake will require the diversion of the NCN 51 around the north-eastern end of the water body.

There is considerable interest in horse riding in the Willington area in particular and there are plans to upgrade sections of the multi-user path in the Grange Estate and a section of the NCN 51 to bridleway status.



ACCESS IMPROVEMENTS

The potential for developing a dedicated trail for mountain biking needs to be investigated. Such a facility could include a range of technical challenges for different rider abilities. Trails of this nature have attracted sponsorship elsewhere and the potential for adapting restoration schemes and working with the minerals operator may improve project feasibility.

Existing informal paths in Fenlake Meadows could be improved to create a circular route. Priory Country Park has an excellent interior path network and there are popular routes connecting Priory Business Park with NCN 51. There may be opportunities to improve access to the river's edge for walkers in selected locations (for example in the 100 Acre Site to the north of the sewage treatment works). However, for some areas it may be necessary to consider potential conflicts with biodiversity interests and develop practical solutions for minimising possible problems. New links may be possible to improve the access network both into and within the park itself. The plan on page 30 (preceding) shows a preliminary scheme for extending the path network.

Project Evaluation: Multi-user Path Network

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality	√	
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	Promotes sustainable transport
Financial Sustainability	√	Boosts visitor numbers
Enhancing Existing Value	√	
A Functional Floodplain		
Involving People & Partnerships	√	

Location of Cafe and Visitor Centre in Priory Country Park (circled). BRVP area shaded

5.5 Café & Visitor Centre

At each stage of the BRVP consultation process, there has been strong support for the proposal to establish a café and improved visitor centre at Priory Country Park.

Council officers have indicated that a potential location for the facility is within the existing visitor centre/ranger station, which is currently occupied by the park rangers and the Wildlife Trust. The suggestion is that an upgraded facility would consist of a café and new exhibition area with an environmental and heritage education display.

Visitor Demand

Priory Country Park is in an attractive lake and riverside location close to the town centre. The Bedford Waterspace Economic Impact & Op-

portunities Study (RGA 2011) notes that there 'is considerable scope to increase the volume and variety of visitor activity associated with the river in order to increase its economic impact.' The location of the existing ranger station/visitor centre, overlooking Priory Lake along with its adjacent parking facilities, makes it a prime location to accommodate the upgraded café and visitor centre. It is understood from consultations with council officers that the park is intensively used and a very popular resource for both local residents and visitors from further afield. Estimated annualised visitors number 750,000. The current visitor centre is basic and an upgraded facility could cater for the predicted increase in demand.

A 44 seat café would be extended from the southern edge (the current public room) of the building onto a purpose-built raised terrace in order to provide additional seating. The proposal assumes that the offices in the main section of the building would be removed to make space for the café kitchen and exhibition area. The current tenants would would need to find alternative accommodation.

Capital Costs & Revenues

The table that follows presents an appraisal of potential costs and revenues associated with implementing the BBC's preferred café and visitor centre refurbishment option. This is based on a five year plan and assumes that the facility will be run directly by the BBC. Information is based on figures provided by the BBC, uses 2012 prices and does not include inflation. A relatively large initial capital sum of approximately £150,000 would be required to upgrade the current facility. Other significant new costs would include new staff and stock for the café. As noted above, it is assumed that the facility would be operated by the BBC, however there is the option of involving a commercial operator. Based on these factors, it is estimated that the Year 1 costs would be £253,000 and total five years cost £665,000.

Assessment Factors	Costs / Revenues	Notes & Assumptions
Capital set up costs		
Refurbishment to cafe + visitor centre (as per plan)	£150,000	Based on costing undertaken by BBC. Includes equipment and furniture costs.
Education and interpretation centre displays	-	Confirmed to be funded already through BBC BRVP budget.
Additional ongoing (new) annual costs		
Cafe staffing and food costs	£68,000 £26,000 (Annual)	Assumes 2 FT food servers; 1 FT kitchen worker/ cook; 1 FT cleaner (£16k, £16k, £20k, £16k salaries approx.) Assumes four rangers would continue to be funded from central BBC budgets. Food costs based on £500 per week.
Utilities (phone/electricity/water)	£3,000	Based on internet research
Maintenance budget	£6,000	Assumes £500 per month. Does not include any further major upgrade work.
Total Year 1 costs	£253,000	
Total 5 year costs	£665,000	
Revenues (annual)		
Angling Activities etc	£6,000	Assumes continuation of 2011-12 actual revenues (£5 to 7k – median figure taken).
Cafe Turnover	£200,000	Based on comparable country park café figures.
Total Year 1 Revenue	**£206,000**	
Total 5 year Revenue	**£1,030,000**	
Balance year 5	**£365,000**	

The rangers have confirmed that the only activity currently generating revenue for them associated with the ranger station/visitor centre is angling, which last year generated between £5,000-£7,000. It was noted that this income stream has declined in recent years as private fisheries have opened in the area. It has been assumed that current revenues for angling will continue at the same rate.

Elevations of a preliminary scheme for cafe and visitor centre in Priory Country Park

Based on market research, it has been estimated that the new 44 seater café may turnover £200,000 each year and therefore it could take up to 4 years for the cafe to begin to make a return on investment. The café would not be able to expand to become a fully fledged restaurant or serve alcohol due to a prior agreement with the adjacent restaurant.

Increasing the number of revenue generating activities can assist the situation though there may be restrictions on what the Council is able to do contractually and from a public spending perspective. The rangers have suggested that longer term there may be opportunities to increase revenues associated with the café and visitor centre by charging visitors for car parking, renting the new exhibition room to groups, charging an operator a fee to teach bush craft and survival skills in the park, plus introducing a combined angling pass with other locations.

Bolam Country Park Visitor Centre - a similar facility to that envisaged for Priory Country Park

Potential Funding Sources

As the Council has no available capital programme to fund the upgraded cafe and visitor centre project, the section that follows provides a brief overview of other potential external sources of funding that may be available.

Grant Funding via Heritage Lottery Fund

If there is a heritage component to the visitor centre and application of the grant is via a constituted not for profit group, the Heritage Lottery Fund (HLF) may be in a position to support the project. However, given its restricted budget, increased competition for funding and strategic priorities (as set out in their Horizons of Heritage policy statement), any application will need to be backed by appropriate strategic statements, such as a Training Plan, Access Plan and Audience Development Strategy as well as a Business Plan.

The Heritage Grants element of the programme covers projects over £100,000 and may be suitable if it is made clear that the visitor centre has a strong heritage theme. Projects funded must help more people to take active part in and make decisions about heritage, and/or conserve the UK's diverse heritage. Projects can also include nature conservation, historic buildings, museum collections, archive collections, spoken history records, cultural traditions, and objects and sites relating to the UK's industrial, transport and maritime history.

In addition, grants of over £250,000 are available though the HLF's Parks for People fund. Constituted not for profit applicants must show that the community values the park as part of their heritage, that the park meets local social, economic and environmental needs and that the park actively involves local people.

For the visitor centre element of the project to be considered under this scheme it must meet all five of the following expected outcomes:

- increase the range of audiences enjoying the park
- conserving and improving the heritage value
- increase the range of volunteers involved
- improving skills and knowledge through training
- improving management and maintenance of the park

Historically HLF have not funded large-scale capital projects, although capital investment may be considered if projects maximise visitor experience. HLF will potentially contribute to costs of visitor experience e.g. landscaping, interpretation, visitor services and other activities in line with their aims to improve visitor experience, enjoyment and learning.

Developer Contributions

The use of developer contributions, through Section 106 Agreements associated with commercial or residential schemes developed elsewhere in BRVP could be investigated. Bedford Borough Council is currently preparing a Community Infrastructure Levy (CIL) charging schedule and consideration could be given to whether this proposal might benefit from CIL funding in the future.

Commercial Partner

Under this model, the Borough Council would enter into an agreement with a commercial operator and in return receive a fixed price lump sum from the operator for allowing them to operate the café as a business. The benefits for Council adopting this approach would be that café staffing costs would be removed and the income stream would be guaranteed, though it would take longer to make back the initial capital sum invested.

Conclusion

The initial capital outlay required to upgrade the facility is relatively high and the revenue streams modest so as a business the proposal is on the margins of feasibility. To offset the high capital costs, the Council could seek grant funding, though in the current economic climate, success may be elusive.

To reduce outgoings such as staff costs and receive a guaranteed monthly income stream (albeit smaller) the Council may wish to engage with a commercial operator, which has been done successfully elsewhere. In addition, there appears to be scope to increase the range of fee paying activities and revenues associated with the upgraded café and visitor centre and these should be explored further.

It is clear that the café and visitor centre is in high demand and it will significantly improve visitors' experience to the country park so the Council may take a view that these considerable benefits outweigh the overall financial feasibility issues.

Project Evaluation: Café & Visitor Centre

BRVP Key Principle	Addressed?	Remarks
Place Making	√	Centre for community
Creating Floodplain Forest		
Multi-functionality	√	
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	Can demonstrate sustainability
Financial Sustainability	√	Profitable
Enhancing Existing Value	√	
A Functional Floodplain		
Involving People & Partnerships	√	

5.6 Moorings

The Bedford Waterspace Study (2011) has recommended mooring improvements in a number of locations along the River Great Ouse within BRVP. The highest priority is given to the provision of moorings at the Barns Hotel near Cardington Lock, at the south of Priory Country Park, however there are also proposals for facilities at Fenlake Meadows, Cardington Lock, the old railway bridge by the NCN 51, the Great Ouse Boating Association, Castle Mill Lock, Willington, Danish Camp and Willington Lock (see plan taken from the strategy on page 37).

Both BBC and MVT are willing to consider proposals for new moorings or mooring improvements, which conform with the Bedford Waterspace Study, within BRVP. The Bedford Waterspace Study can be viewed at http://www.bedford.gov.uk/business/strategies,_plans_and_research/bedford_waterspace_study_2011.aspx

Project Evaluation: Moorings

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality		
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability		
Financial Sustainability	√	Boosts visitor numbers
Enhancing Existing Value	√	
A Functional Floodplain		
Involving People & Partnerships	√	

5.7 Canoe Access and Trails

There is a thriving canoeing scene in the Bedford area and the River Great Ouse between Bedford and Great Barford is a popular section for people to explore. This scene has been further invigorated as a result of the interest generated by local kayaker, Etienne Stott, who won an Olympic Gold Medal in the kayak slalom discipline at London 2012. There are opportunities to build on this interest by improving existing facilities, such as 'portage' points around weirs and near riverside car parks for river access. Portage points can consist of beaches, steps, ramps and/or platforms where canoes can be launched safely and are relatively inexpensive to construct. Popular existing portage points include Cardington Lock and Danish Camp.

There are also business opportunities associated with developing a canoe hire business within the BRVP to enable people to access and enjoy

the river by canoe or 'sit on top' kayak in organised groups or on a self-led basis. This could be linked to the Paddle Sports Hub proposal described in 5.8 below or to the BBC's own Bedfordshire Outdoor Adventure service and in particular its Kempston Outdoor Facility.

Project Evaluation: Canoe Access and Trails

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality	√	Portage can give others access
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	Low carbon sport
Financial Sustainability	√	Boosts visitor numbers
Enhancing Existing Value	√	
A Functional Floodplain	√	
Involving People & Partnerships	√	

5.8 Paddle Sports Hub

The existing kayak slalom facility (Cardington Slalom Course) in Priory Country Park is based on a dismountable system of deflectors/ obstacles, which are individually secured by adjustable tensioned straps to the channel each time the course is set up. Viking Kayak Club is based in Bedford and it has set out a strong case and justification for BRVP to be promoted as a regional centre of excellence for canoeing and kayaking. The club has recommended as part of its representations that new and upgraded paddle sports facilities should be provided. Its recommneda-tions include upgrading and extending the existing kayak slalom facility at Priory Country Park to become a paddle sports hub. This development opportunity could be combined with the project described in 5.7 above and in particular the base for a canoe hire business. The facility would include the following key features:

- The slalom would continue to be served by naturally flowing water so would not require any expensive pumping equipment.

- The new facility would be operational year round – currently it only operates between April and September (seven months of the year) because of the lack of facilities. In addition, the course would be used during weekdays as well as at weekends.

- Obstacles would be fitted as semi-permanent features. Currently they have to be moved and positioned each time the course is set up, taking up to a day to preparations.

- The slalom would still function as a flood relief channel.

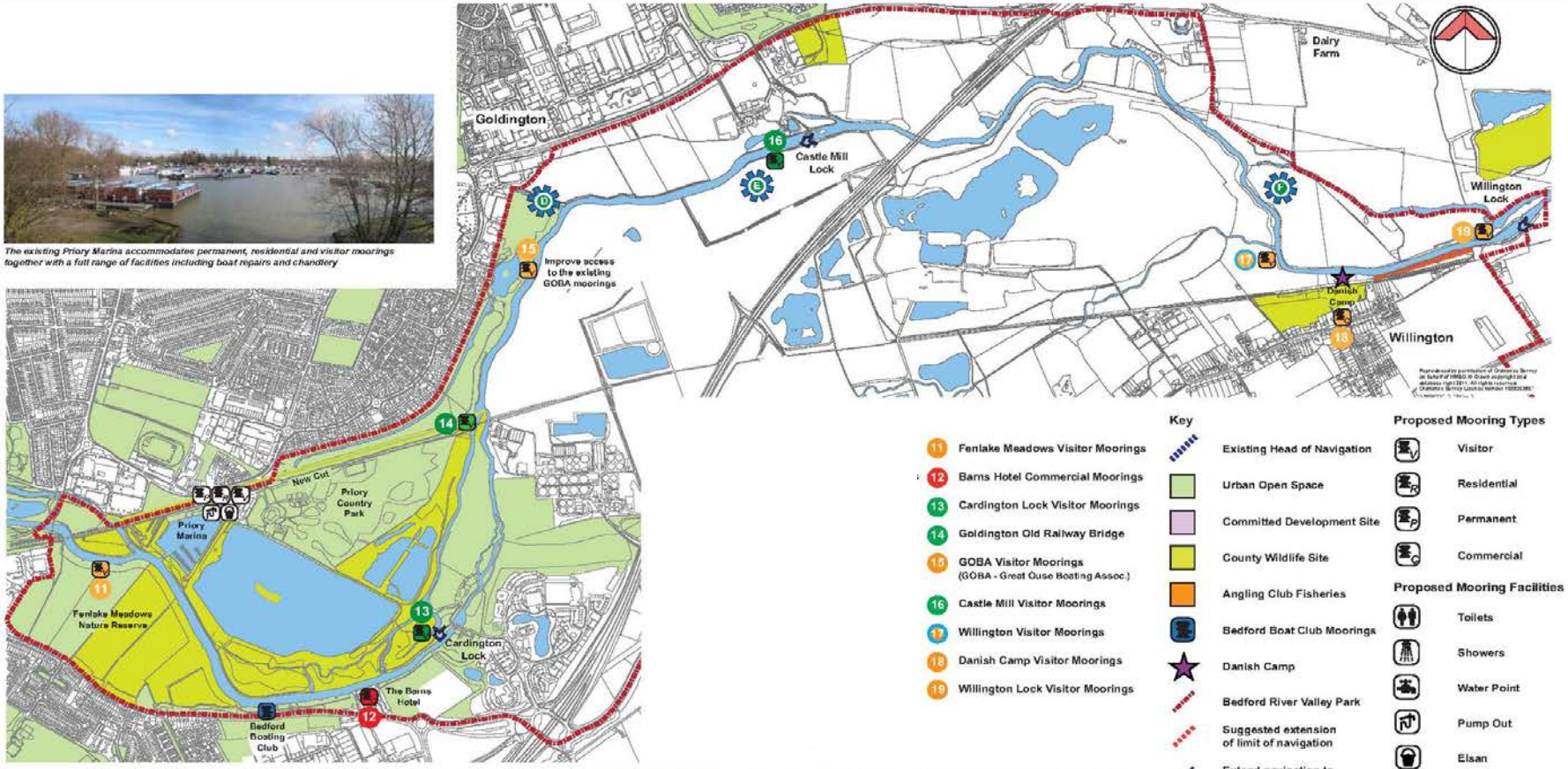
- Improvements to facilities, including changing/ toilets/ kitchen. meet-ing room would encourage and allow use by public, corporate clients and private groups; and inter-club events.

- An adjacent hard standing providing parking for up to five cars.

Funding Options

Sport England's 'Community Investment Fund' accepts bids between £100,000 and £500,000 and focuses investment into projects and programmes that help create an active nation though sport and recre-ation. They look for projects that seek to involve the whole community, particularly hard-to-reach groups, that match regional priorities laid out in their plans for sport and that recognise the wider benefits of sport and activity in terms of health, education and community. There is no closure date for this fund. UK Sport's 'World Class Events' fund, as the name suggests, focuses on staging major sporting events in the UK, but it is worth exploring further whether this can be used to fund capital

The existing Priory Marina accommodates permanent, residential and visitor moorings together with a full range of facilities including boat repairs and chandlery



9 Improve facilities and access to existing moorings on the Lower River, Mill Meadows

The existing Bedford Boat Club moorings

12 Develop visitor/patron moorings at the Barns Hotel

13 Develop visitor moorings as part of the Cardington Lock redevelopment

19 Opportunity to develop visitor moorings above Willington Lock

Bedford Waterspace Study - *River Great Ouse*

costs associated with facilities. There is also no closure date for this fund. Developer contributions are unlikely to be applicable for this use as it is a pure recreational resource and difficult to justify in planning terms as an item that is related to development growth and pressures.

Conclusion

Capital set up costs are relatively high, particularly for the new building that is required. Currently many potential users are put off by not being able to shower after using the slalom course. This situation also means that use of the facility during the winter is not feasible. It is also evident that potential revenues are relatively low (even once corporate hire rates are allowed for) and it could take between ten and fifteen years to make a surplus. Revenues would be insufficient to cover basic staff costs. It is clear that there are other benefits associated with improving the facility such as improved health and social inclusion and there is a strong demand for an upgraded facility among users. A good case can be made for grant funding, making use of updated information and arguments set out in the 'Bedford River Valley Park as a regional centre of excellence for Canoeing and Kayaking' (Viking Kayak Club 2007).

Cardington Slalom Course in 2006 (see http://www.purecollector.com/photos/2006/cardingtonslalomjuly06/IMG_2342.JPG)

Assessment Factors	Costs / Revenues	Notes & Assumptions
Capital set up costs		
Upgrading slalom course	£50,000	Insertion of gates and permanent boulders. Based on estimations from VKC.
Constructing facilities	£250,000	Based on Currie & Brown and VKC estimates. Includes toilets, showers, changing room, meeting room, Tannoy system, and hard standing area outside for five vehicles.
Additional ongoing (new) annual costs		
Staffing	£25,000	Assumes 1 PT administrator; 1 PT coach (£10,000 £15,000 approx.) This is basic salary cost only. These posts currently do not exist, but will be required for more intensive use.
Utilities (phone/electricity/water)	£3,000	Based on internet research
Maintenance budget	£12,000	Assumes £1,000 per month to cover both building and course. Does not include any further major upgrade work.
Total Year 1 costs	**£340,000**	
Total 5 Year costs	**£500,000**	
Revenues (annual)		
Weekend hire - sports clubs and community groups	£12,150	Assumes continuation of current rate of £300 per weekend, plus £150 profit made on food served. Assumes half of weekends in a year are used (x27). £450x27.
Weekday hire - sporst clubs and community groups	£13,000	Proposed rate of £100 per day. Based on estimate from VKC. Assume 50% of 260 weekdays. £100x130.
Corporate hire - weekends	£7,000	Assumes rate of £500 per weekend. Assumes a quarter of weekends in a year are used (x14). £500x14.
Corporate hire - weekday	£5,200	Proposed rate of £200 per day. Based on estimate from VKC. Assume 10% of 260 weekdays. £200x26.
Total Year 1 Revenue	£37,300	
Total 5 Year Revenue	**£186,700**	
Balance Year 5	**£-313,300**	

Project Evaluation: Paddle Sports Hub

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality	√	
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	Low carbon sport
Financial Sustainability	√	Boosts visitor numbers
Enhancing Existing Value	√	
A Functional Floodplain	√	
Involving People & Partnerships	√	

5.9 Inland Beach

Inland beaches are long established and very popular in continental Europe. In the UK, the Keynes Country Park, part of the Cotswold Water Park near Swindon, features a children's beach which in 2004 became the first UK inland beach to achieve an international Blue Flag award.

An inland beach in the BRVP would act to relieve pressure on the more sensitive wetland habitats, while offering a host of recreational benefits associated with beach sports like volleyball and football or simply building sandcastles. One possibility is that a section of the bank of the western end of the watersports lake could be covered with sand and the resultant beach (and buoyed off swimming bay) could form part of what could become a central hub close to the proposed enabling development.

Inland beach at Keynes Country Park (Photo: Peter Watkins - Creative Commons Licence)

Project Evaluation: Inland Beach

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality	√	
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	
Financial Sustainability	√	Boosts visitor numbers
Enhancing Existing Value	√	
A Functional Floodplain	√	
Involving People & Partnerships	√	

5.10 Camping & Caravanning

Bedford Borough Hotel & Visitor Accommodation Futures report (Hotel Solutions August 2009) concluded that there 'may be opportunities for further touring caravan and camping provision linked to facilities for outdoor activities such as water sports, fishing, walking and cycling' (page 65) and that Priory Country Park and the BRVP are key locations. Camping is also identified as a development opportunity in the Bedford River Valley Park Framework. Campsites located close to rivers and lakes are popular and water bodies would provide a recreational resource for campers and picturesque backdrop. In addition, a touring caravan site and/or camp site would be useful to provide short term accommodation for people attending water sports and other leisure events.

There are several potential sites owned by BBC and MVT where camping and caravanning could take place but the most promising locations are those with good vehicular access with power, water and sewerage connections within a short distance. Opportunities may arise with the implementation of the watersports lake infrastructure and associated enabling development plans, but in the meantime, consideration should be given to the provision and management of a scaled down/low key/ low cost camoing facility within Priory Country Park.

The following economic appraisal is based on information obtained from a 1.1 hectare touring caravan site, Lovatt Meadow in Milton Keynes. This site provides pitches for tents and about 40 caravans. It operates from April to October, usually at about 50% capacity.

A typical facility of this kind requires the following:

- Drinking water/waste water disposal/office-block/communal toilet / washing facility – within 90m from any part of the site
- Fire points & alarms – at office
- Chemical toilet disposal – collection point at office
- Signage – basic
- Toilets and hot showers with access for the disabled
- Fencing and entrance
- Basic lighting
- Drainage – all into existing sewers in adjacent road
- Minor ground modelling works
- All utilities available close by
- New access onto highway network – 10m radii, 7.5m width
- Say, 25m of 7.5m wide road within the site
- Internal gravel roads – 4m width, say total length of 250m
- 16A power supply at individual pitches
- Small office for administration

Costs are based on 2012 prices and do not include inflation.

The table overleaf shows costs and revenues. The toilet blocks represent a major expense, which could be reduced by sharing such a facility with another project, for example a visitor centre/clubhouse. It may also be possible to eliminate the cost of internal tracks, although this will depend on ground conditions. The figures suggest that it would take around 4 years to recover the cost of establishment, with the facility becoming profitable thereafter.

It is unlikely that grant funding or developer contributions would be applicable for this kind of project. A joint venture with a commercial operator may be the most practical and low risk option, although profits would be much lower.

According to discussions with existing operators at similar sites in the region, there is spare capacity, which could make an investment into a campsite questionable, however if BRVP becomes a more popular venue for watersports and other outdoor activities and events, the facility could perform an important role in developing BRVP as a whole.

Project Evaluation: Camping & Caravanning

BRVP Key Principle	Addressed?	Remarks
Place Making		
Creating Floodplain Forest		
Multi-functionality		
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	
Financial Sustainability	√	Income stream
Enhancing Existing Value	√	
A Functional Floodplain		
Involving People & Partnerships	√	

Well-screened 40 caravan and camp site at Lovatt Meadow

Assessment Factors	Costs / Revenues	Notes & Assumptions
Estimated capital set up costs		
40 caravan and 10 tent site (as described above)	£290,000	Costs provided by Currie & Brown
Continuing annual costs		
Staff	£22,000	Assumes 1 FT site manager 7 months; 1 PT handyman 7 months (£14k, £8k approx.) Basic salary costs only.
Utilities (telephone, Electricity,water)	£5,000	Based on internet research
Maintenance	£6,000	£500 per month. Does not include major upgrades
Total 1 year	**£323,000**	
Total 5 years	**£455,000**	
Revenues (annual)		
Caravans	£77,000	Pitches 50% occupied at £18 per night- based on two occupants. 2012 prices at Lovatt Meadow Caravan Park and Wellington Country Park. =213 days x 20 pitches x £18
Car parking fees	£2,000	Based on 5 extra cars on site at any one time at £2 each per night.
Gaezebo/Canopy Hire	£1,000	25% of caravans hire a gazebo/sun canopy at £1 per night.
Extra adult fees	£8,000	25% of caravans have an extra adult at £7.50 per night.
Extra child fees	£21,000 (£7,000+ £14,000)	25% of caravans have one extra child at £6.50 per night + 25% of caravans have two extra children at £6.50 per night.
Camping	£8,500	Based on 50% occupancy of 10 pitches during season at average of £8 per night. (213 x 5 x £8)
Total 1 Year Revenue	**£118,000**	
Total 5 Year Revenue	**£590,000**	
Balance 5 Years	**£135,000**	

5.11 Natural Play Facilities

The wider BRVP provides many locations and opportunities for families to explore and children to play, however there will be opportunities to create specially designed playgrounds, in some cases, close to densely populated neighbourhoods where demand for play space for younger children is high. Conventional playgrounds tend to rely on engineered equipment which can be vulnerable to vandalism and can require frequent repair. There is now growing interest in providing more naturalistic playgrounds which encourage tree climbing, scrambling, digging, den building and planting. These facilities include carefully selected vegetation and features like shelters, boulders, heavy timbers, sand pits and rainwater to create safe, accessible, age-appropriate play opportunities. The appropriate choice of planting and materials will help such facilities to survive heavy use and to blend in well with the wider park.

The partners will identify suitable locations associated with the park's multi-user path network to install low key/ low cost natural play facilities, such as those at MVT's Bedford's Green Gateway sites. The development of the water sports lake and associated infrastructure may open up the opportunity to establish a more formal/ income generating natural play facility attraction, such as an aerial assault course.

Natural play space See http://www.leavesofgreen.co.uk/landscape-design/natural-play-spaces.htm

Project Evaluation: Natural Play Facilities

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality	√	
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	
Financial Sustainability	√	Boosts visitors numbers
Enhancing Existing Value	√	
A Functional Floodplain		
Involving People & Partnerships	√	

Grange Estate showing potential locations for natural play facilities (circled)

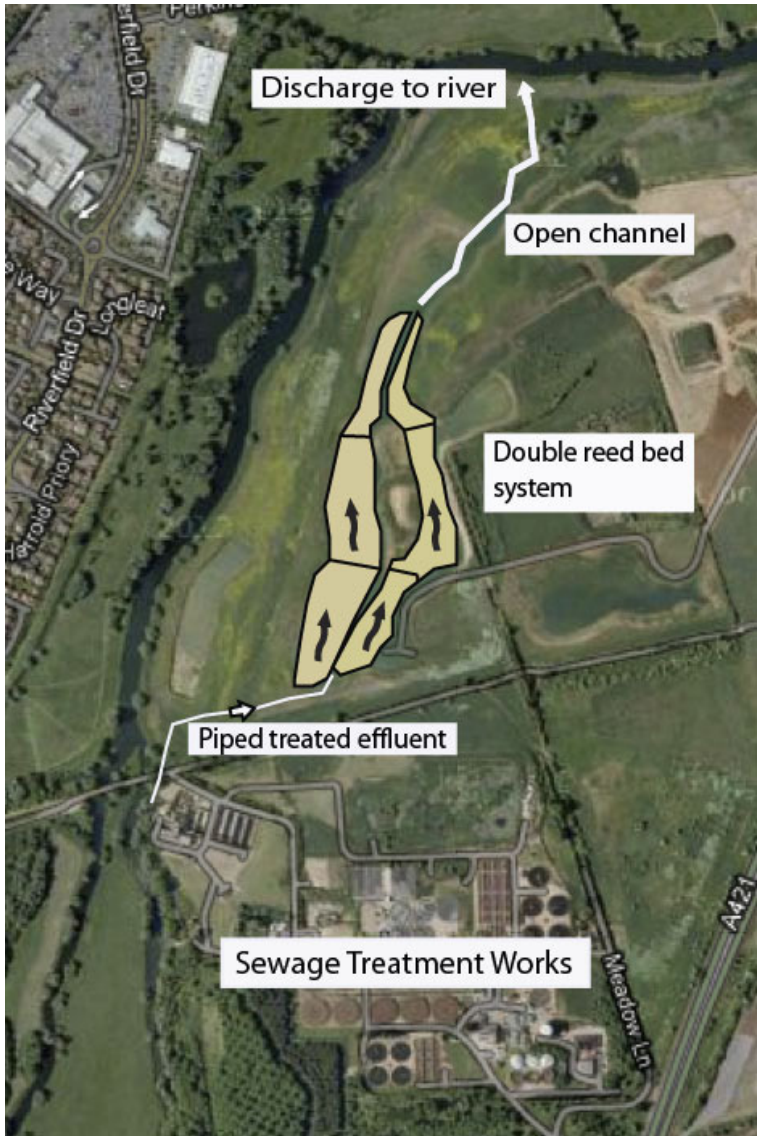
5.12 Polishing of Treated Effluent

The EU Water Framework Directive (2003), makes a commitment to improving freshwater, ground water and freshwater ecosystems. See http://www.environment-agency.gov.uk/research/planning/33362.aspx. There is increasing concern over the possibility that low river flows caused by drought could reduce water quality in the River Great Ouse. It is therefore appropriate that consideration is given to the possible use land within BRVP for improving water quality, whether treated effluent or urban or agricultural run-off.

It would be possible to 'polish' treated effluent from the Meadow Lane Bedford Sewage Treatment Works (STW) site using constructed wetlands. The BBC's restored 100 Acre site to the north of the STW includes a water body of 2.5 hectares, which could be converted into a series of reed beds and/or wet woodlands, to receive treated effluent from the STW. Treated effluent would pass through these habitats, which would remove dissolved nutrients before discharging into the river. Such an scheme would provide attractive and valuable habitat and could be overlooked in places from publicly accessible paths.

Project Evaluation: Polishing of Treated Effluent

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest	√	
Multi-functionality	√	
Accessibility		
Promoting Sport & Recreation		
Environmental Sustainability	√	
Financial Sustainability	√	Rental income
Enhancing Existing Value	√	
A Functional Floodplain	√	
Involving People & Partnerships	√	



Illustrative STW effluent polishing scheme at 100 Acre site, which would use existing waterbody

5.13 Short-rotation Coppice

Short-rotation coppice (SRC) involves the cultivation of rapid growing tree species like willow or poplar for the purpose of providing woodchips, which can fuel heating systems, electricity generation or combined heat and power plants. SRC can improve water quality through the process of being irrigated with treated effluent (see section 5.12 above), which also has the effect of increasing growth rates. There is also the possibility of allowing some public access through or around areas planted with SRC, which, despite being managed as a crop can still provide moderate landscape and biodiversity benefits.

SRC usually consists of densely planted, high-yielding varieties of willow harvested on a 2 to 5 year cycle, although most commonly every 3 years. A plantation could be viable for up to 30 years before re-planting becomes necessary, although this depends on the productivity of the coppice stools. In the UK, yields from willow SRC at first harvest are expected to be in the range 7 to 12 oven dry tonnes per hectare per year (odt/ha/yr) depending on site characteristics. The key determinants of SRC yield are water availability, weed control, light and temperature. For the purposes of our assessment below we have assumed a higher range yield estimate of 12 odt/ha/yr.

Demand

BBC is considering using the wood chip within local combined heat and power (CHP) facilities associated with its own building stock. MVT have also indicated that they already use wood chip as a fuel source - they are currently paying £25 per m^3 on a contract running to March 2013. There may also be opportunities with using wood chip as a renewable combined heat and power fuel source associated with the adjacent proposed enabling developmemt scheme.

Capital Costs and Revenues

The table over the page sets out an economic appraisal of potential costs and revenues associated with implementing SRC within a nominal 80 hectare area. Key assumptions are that this is based on a three yearly harvesting cycle lasting 30 years in total. Information is approximate and based on secondary data sources and published data that is available online. Major factors affecting the financial returns from SRC are wood chip yields and prices and the establishment costs. The availability and level of an establishment grant is therefore important. The data source used to determine the economic yield assumes low transportation costs so the importance of identifying a relatively local buyer so that transportation costs can be minimised must be emphasised. It may be more economical for woodchip to be delivered directly to the buyer.

Availability of grant funding and support

In England grants from DEFRA are available to assist with the establishment and management of SRC under the Energy Crops Scheme (ECS). The extent of grant funding available is subject to change and should be subject to further investigation. If BBC and MVT are interested in exploring SRC they should consult with DEFRA which could lend support with a more detailed feasibility study, building upon the information presented here.

Conclusion

It is clear that investing in SRC would be a long term investment and any financial return would only come after a minimum of three years with any profit on any initial investment potentially taking longer. If high growth levels are not achieved then harvesting may have to be increased to longer rotations, hence lengthening the period of the financial return and decreasing the overall net additional profit.
It has been noted that transportation costs are also critical and it is

important for BBC/MVT to identify a local customer, such as the enabling development scheme. It has also been noted that availability of grant funding to assist with capital set up costs may be critical to ensuring these operations are financially viable and this should be explored further with DEFRA.

BBC and MVT should also review whether land parcels are available that could increase the total SRC yield. Though it should be noted that the physical environmental constraints associated with the BRVP site, such as its heritage, archaeology and biodiversity interest, may limit the available land area suitable for SRC to a level that makes the operation no longer commercially viable. Though financial returns may be relatively low there may be other clear environmental benefits to implementing SRC (notably the low carbon emissions) which may favour this approach. A supplementary source of capital and revenue may involve using the SRC to treat treated effluent from the sewage treatment works (see section 5.12 above)

Project Evaluation: Short Rotation Coppice

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest	√	Compatible
Multi-functionality	√	Energy, water quality, biodiversity
Accessibility		
Promoting Sport & Recreation		
Environmental Sustainability	√	Low carbon, cleaner water
Financial Sustainability	√	Income stream
Enhancing Existing Value		
A Functional Floodplain	√	
Involving People & Partnerships	√	

Assessment Factors	Costs / Revenues	Notes & Assumptions
Estimated capital set up costs + ongoing costs (maintenance, harvest, 'local'transportation) - per hectare	£1,800	Based on 'Short Rotation Coppice Willow - Best Practice Guidelines'. http://www.ruralgeneration.com/BEST%20PRACTICE%20GUIDE.pdf -Please note available figures date back to 2007.
Estimated capital set up costs + ongoing costs as above - for 80 hectares	£144,000	
Estimated economic yield per hectare (each 3 year period)	£1,116 (£372 x3)	Assumes £31 per odt/ha . Source: http://www.scotland.gov.uk/Resource/Doc/288738/0088342.pdf -Note – assumes power station is fairly close to SRC crop. -Assumes 12 odt/ha yield. -Assumes 3 yearly harvesting cycle
Estimated economic yield per hectare (for 30 years)	£11,116	-Assumes a total of 10 x 3 year harvesting cycles.
Estimated yield for 80 hectares (each 3 year period)	£89,280	
Estimated economic yield for 80 hectares (for 30 years)	£892,800	-Note that this would equal the net profit if total capital set up costs are funded by grant.
Potential net additional profit over 30 years (for 80 hectares)	**£748,800**	Assumes today's prices. Does not factor in inflation or tax. Likely to climb in line with oil prices.

The calculations in the table assume a high yield of 12 odt/ha. The lower end of the productivity range is 7 odt/ha and this would yield £436,800 in total over the 30 year cycle for 80 hectare site.

SRC being harvested

5.14 Other Low Carbon Energy Generation

In addition to Short-rotation Coppice, there are opportunities to produce low-carbon energy from within the BRVP by generating electricity from micro-hydro turbines, wind turbines and photovoltaics (on buildings or as small-scale 'farms'). The most promising locations for wind turbine and PV installation are close to the necessary infrastructure and where visual impact is less of a concern, for example by the business park or close to the A421 by-pass. PVs can be fitted to buildings and on ground-mounted arrays.

The Bedford Waterspace: Economic Impact & Opportunities Study published by the Environment Agency (see http://publications.environment-agency.gov.uk/PDF/GEAN1111BVEN-E-E) indicates that the River Great Ouse offers the possibility of small-scale hydroelectric generation at its weirs and locks, such as the one recently completed at the Boat Slide Weir on Mill Meadows, which has a target power generating capacity of 160 megawatt hours (MWh). The Bedford Waterspace report also notes that elsewhere in the country, British Waterways has formed a partnership with the Small Hydro Company to create 25 schemes on the canal network, generating 210,000 MWh of power and saving 110,000 tonnes of CO_2. The initiative is backed by the Climate Change Ventus Fund, which is targeted at the UK renewable energy sector.

Project Evaluation: Other Low Carbon Energy Generation

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest		
Multi-functionality		
Accessibility		
Promoting Sport & Recreation		
Environmental Sustainability	√	Low carbon energy
Financial Sustainability	√	Income stream
Enhancing Existing Value		
A Functional Floodplain		
Involving People & Partnerships	√	

PVs combined with green roofs as seen here in Basel, Switzerland

5.15 Habitat Network

The conservation and restoration of biodiversity is already at the heart of much of the work which goes on within BRVP and the masterplanning process embraces a landscape-scale approach, with special attention paid to the establishment of ecological networks, through modification to the hydrology, remodelling of landforms, planting, seeding and changes in management.

At the catchment level there are projects to restore wetlands with the Great Fen Project downstream and floodplain forest in the Milton Keynes area. Closer to BRVP, Lafarge, the company responsible for gravel extractions, has prepared plans to restore wetlands all along the Great Ouse Valley as far as Chawston, as quarries are worked out. These restored sites will link with older flooded gravel pits at St. Neots and the Paxton Pits further downstream.

Within BRVP, there is an opportunity to restore floodplain forest within the floodplain, one of the key principles of the BRVP Framework. MVT has undertaken several projects in the Grange Estate designed to restore floodplain forest in the long term including the excavation of back-channels that connect the river with woodland, the thinning of plantations and the planting of native tree species. Although the core habitat of floodplain forest consists of native wet woodland, a wide range of habitats may also occur as part of a mosaic which may incorporate native broadleaved woodland on drier ground, reedswamps, pools, channels, wet grassland and gravel terraces. Together these habitats will create the new landscape at the heart of BRVP and the enhanced setting for other elements.

Existing habitats will form the core areas of the future network, with restored habitat established wherever practicable between the core areas making the landscape more permeable to wildlife, especially less mobile or specialised species. Important core areas of existing habitat may be found in Fenlake Meadows, Priory Country Park and the Grange Estate.

There are barriers to the movement of wildlife, usually urban or intensively managed areas where the restoration of habitat is not possible. For example BRVP is surrounded and crossed by major roads. The A421 Bedford by-pass acts as a partial barrier, splitting BRVP into western and eastern sections. The by-pass, however is carried over the River Great Ouse and part of the valley on a viaduct and this presents an opportunity to connect the eastern and western parts of the BRVP by establishing high quality floodplain forest habitats on each side of the viaduct. Habitat on the Grange Estate is close by. New habitat to the west will connect with what could become a continuous belt of high quality habitat restored through the 100 Acre site (north of the sewage treatment works), eventually connecting with Priory Country Park and Fenlake Meadows.

There are also opportunities to improve connectivity within Priory Country Park. There are extensive areas of grassland, some of which may be converted to new habitat, through localised relaxation of mowing regimes or planting.

Project Evaluation: Habitat Network

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest	√	
Multi-functionality	√	
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	
Financial Sustainability	√	Forest products, visitors
Enhancing Existing Value	√	
A Functional Floodplain	√	
Involving People & Partnerships	√	

Wildlife can pass beneath the viaduct that carries the A421 Bedford bypass if suitable habitat is created on each flank

Recently completed river backwaters on the Grange Estate

Yellow denotes ecological spine of proposed floodplain forest habitats. As they mature, projects undertaken within this corridor will have the effect of connecting existing high quality habitat within BRVP.

The creation and restoration of habitat however, must not be confined to this narrow corridor - there will be other opportunities associated with, for example, the proposed Elstow Brook re-alignment and watersports lake and improvements to Fenlake Meadows and elsewhere.

5.16 Volunteer Service

MVT, BBC and partners already work successfully with volunteers. Volunteer work can involve wardening, practical conservation work, survey and monitoring. There may also be opportunities for internships to give valuable experience to students and recently qualified professionals looking for experience. Consideration should be given to the establishment of a volunteer corp that identifies itself with the whole of the BRVP. It is likely that the number of active volunteers will continue to grow and this may necessitate some adjustments in the way that employed staff work, so that more time is spent supporting, training and supervising the work of volunteers. Discussions should take place between MVT, BBC and partners (including the Wildlife Trust, the RSPB local group, the Blunham & District Angling Club and others, as appropriate), to explore the possibility of joint work parties and web-based bulletin board to exchange information. Volunteers could also have a significant role to play in the successful development and delivery of a number of the proposed projects in this plan and their ongoing management/ maintenance.

Project Evaluation: Volunteer Service

BRVP Key Principle	Addressed?	Remarks
Place Making	√	
Creating Floodplain Forest	√	
Multi-functionality	√	
Accessibility	√	
Promoting Sport & Recreation	√	
Environmental Sustainability	√	
Financial Sustainability	√	Fundraising, volunteering
Enhancing Existing Value	√	
A Functional Floodplain	√	
Involving People & Partnerships	√	

6 Next Steps

The masterplan process, through the analysis of constraints and opportunities and key stakeholder consultation and engagement, has enabled the identification of a project options 'long list' (Appendix 2); and through a more detailed assessment and appraisal process, a project short-list (see Section 5) that conforms with the key principles of the BRVP Framework.

Four projects, namely the Cafe & Visitor Centre, Paddle Sports Hub in Priory Country Park, Short-rotation Coppice and Camping & Caravanning Site have been subject to economic appraisal.

BBC will continue to promote the development of BRVP, working with MVT and other partners and stakeholders, including local communities, landowners, businesses and government agencies. The information contained in this plan will be used by BBC and MVT to guide further project planning, development and delivery work as opportunities and resources allow.

Appendix 1

INVITED DELEGATES LIST
Bedford River Valley Park Masterplan: Issues and Opportunities Workshop, Wednesday, 14 March, 2012

Organisation	Invitees
Public sector	
Bedford Borough Council:	
- Culture, leisure & sport	Sue Drummond
- Drainage & flood risk	Nicola Wilson
- Economic development	Paul Vann
- Environment and communities, incl. parks and countryside	Steve Tomlin, Joel Carré, Simon Fisher , Ed Burnett, Jon Bishop
- Heritage and archaeology	Vanessa Clarke
- Legal	Nigel Bennett, David Doorne
- Minerals	James Delafield
- Outdoor access and rights of way	Phill Fox
- Planning	Gill Cowie, Sonia Gallaher
- Property	Adrian Piper, Andrew Broadbent
- Portfolio Holders	Cllr Sarah-Jayne Holland, Cllr Michael Headley and Cllr Dough McMurdo
- Ward Members (Kingsbrook, Newnham, Great Barford)	Cllr John Mingay, Cllr Kirsty Adams, Cllr Anita Gerard, Cllr James Saunders, Cllr Carole Ellis and Cllr Stephen Moon
Central Bedfordshire Council	Jonathan Woods, Laura Kitson
Parish Councils (Renhold, Cople, Willington and Cardington)	*via parish council clerks*
Environment Agency	Ian Hirst, Paul Henderson, Erin Witcomb-Voss
Bedford Group of Drainage Boards	John Oldfield
Voluntary and community sector	
Bedford Borough Local Access Forum	Bob Wallace
Bedford River Users Group	Martyn Pearson
Bedford Rowing Lake CIC	Andy Rowe
BRCC	Cliff Andrews
GOBA	Alistair Reid
Marston Vale Trust	James Russell, Darren Woodward, Nick Webb
Viking Kayak Club	Rob Bates
Wildlife Trust for Beds	John Comont
Bedfordshire Bird Club	*via Hon Secretary*
Bedfordshire Natural History Society	*via Hon Secretary*
Private sector	
Anglian Water	
Danish Camp Riverside Visitor Centre	
Priory Marina Cycling	
Lafarge	Tim Deal
The Southill Estate	Mark Egar
BRVP consultancy team	*Gary Grant, Lani Leuthvilay, Olaf Bierfreund, Kinga Wec*

Appendix 2

BRVP Workshop at Corn Exchange 14 March 2012

Long list of Projects, Comments and Suggestions

Based on writing on Maps and Post-it Notes

Priory Country Park/Western BRVP

1. Improve Priory Country Park heritage education/ heritage walk/ nature walk
2. Interpretation for more recent heritage - mills, power station, railway
3. Education Centre
4. Business Parks big user of PCP
5. Hydropower from weirs
6. Finger Lakes prime wildlife interest
7. Open space can be turned into play areas, maze, mix of open meadows and trees
8. More art? Sculpture trail
9. Remove Oasis Beach Pool (save council £420,000 a year) and make a reservoir
10. Use sluice gates for freestyle kayaking
11. To assist with the WFD looking at a combined canoe and fish pass on the backwaters around the lock
12. Revenue income stream leased moorings
13. Visitor moorings increase
14. Canoe trails
15. Access/egress at Longholme, Duck Mill, Priory, Cardington
16. Create multi-functional site with several specialist interests areas (canoeing, environmental, kayaking)
17. Visitor centre/ cafe
18. Value of Fenlake Meadow LNR as wildlife refuge as PCP wildlife interest has declined due to increasing public pressure .
19. Improve visitor centre as family welcome site. Top priority!
20. Development of education on environmental services. Great opportunities but poor facilities. Could 'marina' businesses income be used? Other sources of investment?
21. Pick up any fall out missed in Bedford Waterspace Study
22. Cross reference to Bedford Waterspace Study to pick up on canoeing/rowing and hub developments.
23. Infrastructure - provide canoe portage - access/egress - moorings
24. Biodiversity opportunity on island (east of Fingers Lake) – Kings Mead. Currently leased to grazier.
25. Flooded discreet island, manage specifically for wildlife, wet woodlands?
26. Reserve services training area at Cardington sluices
27. Investigate potential for secondary visitor hub to serve PCP (at Sluice Bridge entrance)
28. Improvements to slalom. Other use could include freestyle facility, canoe trail. Commercial opportunities (of canoe events) not realised? (Cardington Course)
29. Improve temporary moorings for PCP and surrounding sites (maybe Cardington Spillway area)
30. Open up access to more areas
31. Better links and signage
32. Highlight specific areas: tranquil, wildlife, river, active
33. Visitors' centre upgrade
34. New bridge crossing from northern sliver to neighborhood
35. Link neighbourhood into Riverside Meadows, open up access, link into park
36. Lack of use in open areas. Opportunities for event/play?
37. Include path which connects city area along river to PCP?
38. Footbridge from Fenlake Meadows to PCP?
39. Engage community and link to Fenlake Meadows
40. Fenlake Meadow issues: vandalism, litter, unknown site, not enough signage, not loved
41. Allotments in Fenlake Meadow?
42. Bird watching towers in Fenlake Meadow
43. Signs to Priory industrial estate
44. Dead end river for navigation
45. How do we target other river users?

100-Acre Site/ Central BRVP

46, Hydroelectricity scheme at Castle Mill (northeastern)
47. Additional potential noisy sports area (eastern portion)
48. Manage schedules monuments and archaeology tran adverse effects of increased public access and other proposals
49. Interpretation of heritage assets and improve awareness of the historic landscape
51. Outdoor events, fairs, circus, rallies?
52. Potential for noisy sports, SAM constraints (southern portion)
53. Short crops rotation / treating Anglia water effluence (western portion, north of SWT)
54. River is main navigation corridor for both powered and unpowered craft
55. Potential for proximity to develop circular canoe routes
56. Valve of river corridor as principal wildlife route (sliver of land between River and lake northwest) – and beyond.
57. SAM - Reconstruction of monuments?
58. Quieter area in northern part? Wildlife? Management? Sensitive ecology
59. Bomb Hole fishery managed for junior angling (northeast)
60. Monument land use in eastern triangle, pastures
61. Open up angling potential on whole site
62. Ancient monument crop/service delineation
63. Site Park and Ride parks

64. Augmented reality for monuments
65. Pop up /mobile interpretation containers
66. Restrict noisy activity (motorbikes) in southern triangle along A421? Poor ecology potential
67. Heritage-SAM with rather than ignore
68. Why not reroute Ouse Valley Way?
69. Big Society- Park guides volunteers
70. Hills and areas for biking/sledding etc
71. Detrimental to habitat if link lakes to river
72. Sewage works ruins views and aesthetics - bunds to screen site
73. Wildflower meadows?
74. Car park opportunities
75. Signage on A421
76. Slip road off A421 for cafe and new mini park design for leisure but screen planted
77. Improve views and land near sewage works
78. Smaller circular access routes but not tarmac
79. Grazing
80. River underused
81. Hotels car parks and boat hire
82. Holiday package for river usage ie one pass gets cycle hire and kayak hire etc
83. Cafe opportunities community run?
84. Private sector partnership
85. Forested park/parking/camping/BMX/Mountain bike track/SAM in land adjacent to SWT?
86. Change levels to create hills for mountain bikes or sledding (northeastern triangle)
87. Cyclists too fast, separate users?
88. Skate Park

Octagon Farm Fields/Grange Estate/Dairy Farm/Eastern BRVP
Dairy Farm site
89. Potential further moorings for visitors/leased permanent for income-If any camping fees - double up for river user changing shower facilities
90. Is planned/approved restoration appropriate? Could it be more diverse for wildlife?
91. Improve canoe/boat access and portage (south of Dairy Farm)
92. Glamping/luxury camping, caravan
93. Biodiversity - create protected species 'Havens' (water voles, otter, kingfisher, especially Dairy Farm area/ Begway Brook
94. Legacy feature
95. Access (public access to Dairy Farm)
96. SAM
97. More wetlands both deep water and shallow
98. Circular loops needed
99. Retain bridge
100. River crossing at Danish Camp
101. Opportunities for partnership working with other sites for cycle hire and boat hire, etc
102. BMX/Mountain biking
103. River as barrier
Octagon Farm Fields
104. Octagon Farm contains part of a larger scheduled monument
105. Management issues and enhancement and interpretation opportunities
106. Camping / caravan potential
107. Inland swimming, canoe polo in collection of ponds?
108. Add path/cycle route linking PCP and the Grange Estate along river (West-East)
109. Links eastwards along R51 to Sandy and Biggleswade
110. R51 - Legal issues need to be sorted
111. Route 51 underfunded
112. Good potential for ecological connectivity along river and lakes
113. Quiet areas with pedestrian access only (lakes and river just north of Octagon Farm building)
114. Angling school of excellence etc (lakes south of A421)
115. Inland beach area
116. Managed wader area for wetlands
117. Car parking (south of A421 near lakes on Octagon Farm land)
118. 'Vantage Points', industrial heritage and educational aspect
119. Hydropower from weir
Eastern BRVP
120. Income, land use, pedestrian access, more parking, Route 51 Access links, neighboring villages
121. Potential access near Castle Dairy Farm area
122. Mooring, Water Taxi
123. Dog free and Dog Lead areas
124. Off road cycling
125. Access from Willington village
126. BRVP shouldn't become too commercial
127. Changes to restoration schemes mislead locals from original application schemes, etc
128. Infill development not wanted! Need to protect village inner open space (green north of Willington)
129. Camping site in square piece of land south of the Grange Estate?
130. Worried about losing local identity of village
131. BRVP signage needed and site named
132. Reed beds in lake within Grange Estate, enhance and nurture

Appendix 3

Bedford River Valley Park – Project Shortlist April 2012

Project	Locations	Demand (based on public consultation and responses at workshop)	Capital	Revenue	Benefits	Short-term	Medium-term	Long-term	Notes
ACCESS & INTERPRETATION									
Gateway features	Priory, Fenlake, Riverside Meadows, Central Hub, Willington	High	Medium	No	Social, Economic (more footfall)	Feasibility/Installation	Expansion	Renewal	Builds BRVP identity. Wait for BRVP to build momentum?
Heritage & Interpretation trails	Site wide	Specialists	£80,000	No	Social, Economic (Could increase footfall)	Design and early phases	Expansion and Renewal	Expansion and Renewal	Application submitted
Improved and Extended multi-user path network	Site wide	High	Low/Medium	No	Social	Design and early phases	Later phases	Renewal	See plans showing existing and new routes
Café & Visitor Centre	Priory CP	High	Medium	Yes	Social, Economic	Pilot	Expansion	Operation	Phased. Rent based on turnover
ENERGY									
PV	Business Park, PV farms, Buildings	?	Low/Medium	Yes	Economic, Environmental	Installation	Growth	Renewal	Mainly on buildings, small 'farms' possible
Wind	A421, Business Park, Gateway features?	?	Medium	Yes	Economic, Environmental	Feasibility	Construction	Renewal	Small vertical axis turbines may be more acceptable in terms of visual impact
Micro-hydropower	Weirs (West)	?	Medium	Yes	Economic, Environmental	Feasibility	Construction	Renewal	Can be contracted to partner
Short Rotation Coppice	100-acre, Grange Estate?	High	Medium	Yes	Environmental, Economic	Feasibility	Leasing	Lease renewal	Can be contracted to partner. Possible link with STW effluent polishing
Natural play area(s)	Priory CP, Grange Estate	High	Low	No	Social	Design and construction	n/a	Renewal	Will increase footfall for kiosks etc
RECREATION									
Moorings	Priory CP and Willington	High	Low	Yes	Social, Economic	Design and install	Expansion	Renewal	See Water-space strategy.
Canoe access	Priory CP. Willington	High	Low	No	Social	Design and install	Expansion	Renewal	Strong club
Canoeing trails	Site wide (river)	High	Low	Yes	Social	Invite operator to bid	Operation	Expansion	From Priory to Danish Camp and return by boat
Kayak slalom	Priory CP	High	Medium	Yes	Social	Design	Installation	Renewal	Install features. Changing facilities required
Mountain Bike/BMX Facility	Meadow Lane	High	Medium	?	Social	Feasibility	Construction	Renewal	Can be contracted to partner
Inland beach/ swimming lake	New Central Hub	High	Medium	Yes	Social, Economic	Study	Construction	Renewal	Linked to camping/glamping? Can be contracted to partner
Camping/glamping/ caravaning	New Central Hub. Grange Estate, Priory	?	Medium	Yes	Economic	Feasibility	Construction	Renewal	Priory Country Park or Central Hub
ECOLOGY & BIODIVERSITY									
Habitat Network Plan	Site Wide	Specialists	Low	No	Biodiversity	Study, early phases of habitat restoration	Works	Management	Include site specific issues and guidance
FOOD									
Allotments	Margins	Varies by district	Low	Yes	Social	Consultation and construction	n/a	n/a	Do not progress – wait for demand to emerge
WATER QUALITY									
Treating Anglian Water effluent	100 acre	High	High	Yes	Environmental, Economic	Negotiations/ feasibility	Construction	Operation	Discussions with EA and Anglian Water to be progressed
MAINTENANCE									
Volunteer Ranger Service	Site-wide	High	Low	No	Social, Environmental	Corp. established	Corp. expanded	Corp self organising	Landowners to discuss shared approach

Capital - Low: < £100,000, Medium: £100,000-£500,00, High: > £500,000

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