Royal Borough of
Windsor and Maidenhead

# Sustainability Appraisal

## Maidenhead Waterways Framework

June 2009

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## Contents



## Appendices



## Figures

# Contents

# Foreword

## Foreword

The Maidenhead Waterways Framework is a planning brief which provides a framework for future planning decisions along the waterway corridor stretching from the Cliveden Reach of the River Thames, through Maidenhead, to Bray Marina. Its purpose is to aid the restoration of the waterway, including the achievement of the emerging Maidenhead Waterway Project. The planning brief will help ensure that both the preparation of future planning policy and the design of development proposals along the length of the waterway corridor contribute to the overall aim of restoring the waterway and avoid obstacles to the delivery of the project.

The guidance set out in the planning brief extends to all forms of development, whether it involves the change of use of an existing building or land, the extension of an existing building or the construction of a new building.

One of the aims of the Council in producing every planning policy document has been to meet the highest possible standards of sustainability. The emerging Framework has therefore been subjected to a thorough scrutiny through the process of Sustainability Appraisal (SA).

This SA Report is being published alongside the Maidenhead Waterways Framework and seeks to:

- Consider different options of providing a planning framework for the Maidenhead Waterways Project.
- Assess and predict the sustainability effects of the different options.
- Maximise beneficial effects and reduce adverse effects of the Maidenhead Waterways Framework.
- Develop proposals for monitoring the Maidenhead Waterways Framework.

If you have any queries or would like further information on the SA process, please see the Councils' website at http://www.rbwm.gov.uk/web/pp_sustainability_appraisal.htm .

More information on the Maidenhead Waterways Framework can be found at http://www.rbwm.gov.uk/web/pp_maidenhead_waterways_framework.htm

# Glossary

## Glossary

| | |
|---|---|
| **Adverse Impact** | Where a development / policy would result in harmful effects. |
| **Cumulative Effects** | These effects can be caused by a number of developments which, individually and in themselves, may have insignificant effects, but together combine to create a significant effect. |
| **Development Plan** | Consists of the Regional Spatial Strategy and Development Plan Documents contained within the Council's Local Development Framework. Until the LDF is fully in place it will also include 'saved' policies from the Council's Local Plan. |
| **Indicator** | Measure of variables over time, often used to measure achievement of objectives. |
| **Local Development Framework (LDF)** | Consists of a number of documents which together form the spatial strategy for development and the use of land. |
| **Mitigation Measures** | Measures designed and intended to reduce adverse effects that cannot be avoided. |
| **Objective** | A statement of what is intended, specifying the desired direction of change in trends. |
| **RBWM** | Royal Borough of Windsor & Maidenhead |
| **Scoping** | The process of deciding the scope and level of detail of an SA, including sustainability effects and alternatives which need to be considered, the assessment methods to be used, and the structure and contents of the SA Report. |
| **Sustainability Appraisal (SA)** | Appraisal of plans, strategies and proposals to test them against broad sustainability objectives. |
| **Sustainable Development (SD)** | Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland 1987). Four priorities are<br>• Climate change and energy<br>• Sustainable consumption and production<br>• Natural resource protection and environmental enhancement<br>• Sustainable communities |

# 1 Background

## Maidenhead Waterways Framework

1.1 The Maidenhead Waterways Framework is a planning brief which provides a framework for future planning decisions along the waterway corridor stretching from the Cliveden Reach of the River Thames, through Maidenhead, to Bray Marina (see Figure 1). Its purpose is to aid the restoration of the waterway, including the achievement of the emerging Maidenhead Waterway Project. The planning brief will help ensure that both the preparation of future planning policy and the design of development proposals along the length of the waterway corridor contribute to the overall aim of restoring the waterway and avoid obstacles to the delivery of the project.

1.2 The guidance set out in the planning brief extends to all forms of development, whether it involves the change of use of an existing building or land, the extension of an existing building or the construction of a new building. However, in line with the principles of reasonableness and proportionality the required response will vary depending on the location, type and scale of development.

1.3 The planning brief is not part of the Local Development Framework but has been prepared in the context of key national, regional and local planning policy.

1.4 The planned timescale for the adoption of the Maidenhead Waterways Framework is June 2009.

**The Maidenhead Waterway Project**

1.5 Maidenhead grew up around its river crossings and the trade and travel which came as a result. The main River Thames lies to the east of the town centre. Smaller channels ran from the main river into the town centre, however over time these have become neglected and today are overgrown, silted up and are a shadow of their former selves.

1.6 The Maidenhead Waterways Restoration Group (MWRG) was established in 2006 with the aim of restoring and enhancing the old waterways that still run through Maidenhead town centre into a valuable amenity. It would create an accessible green corridor where everyone can enjoy boat and water related activities and walking and cycling, increasing the attraction of Maidenhead and helping to stimulate much needed regeneration.

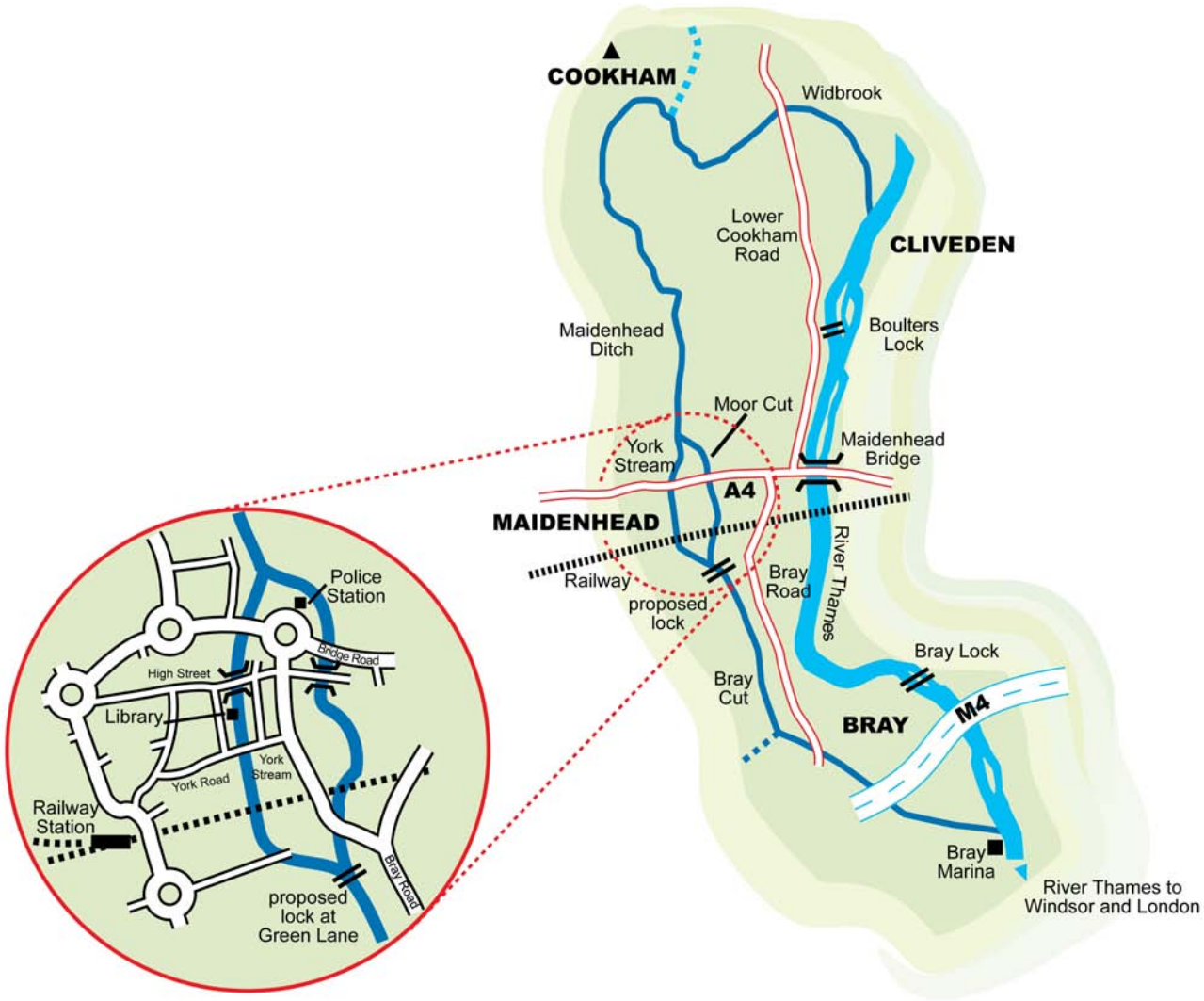
**Partnership for the Rejuvenation of Maidenhead (PRoM)**

1.7 In 2007, the Partnership for the Rejuvenation of Maidenhead (PRoM) was established. The restoration and enhancement of the waterways to create a feature in the town centre was identified as one of the key priority regeneration projects included in the ' Vision for Maidenhead Town Centre', January 2008.

1

# Background

Figure 1.1 The Maidenhead Waterways Project Route



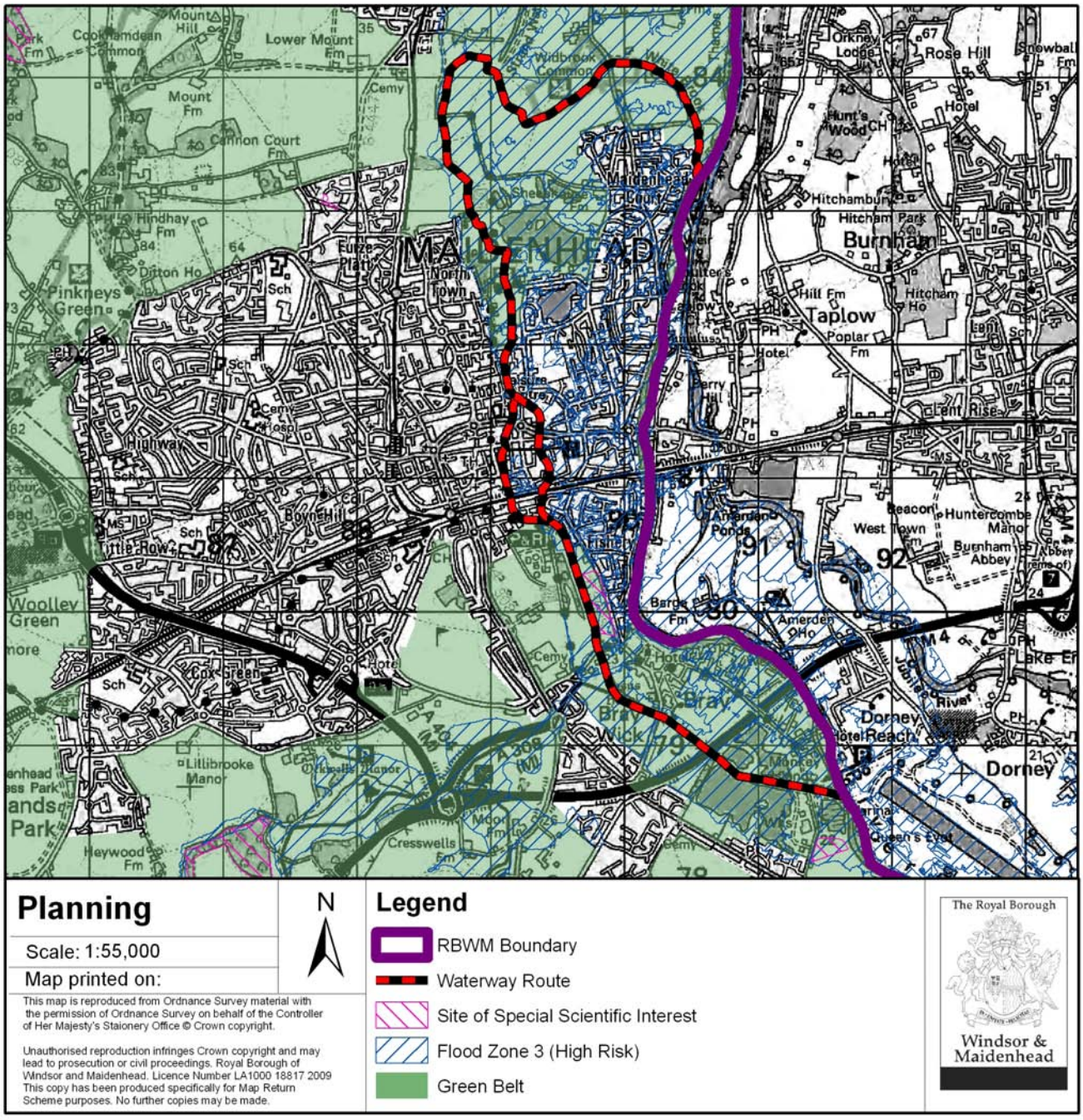

Source: Maidenhead Waterways Restoration Group

# Background



1.8 Figure 2 shows the route of the waterway as it relates to sites of national nature conservation interest, flood risk and Green Belt.

Figure 1.2 Strategic Constraints

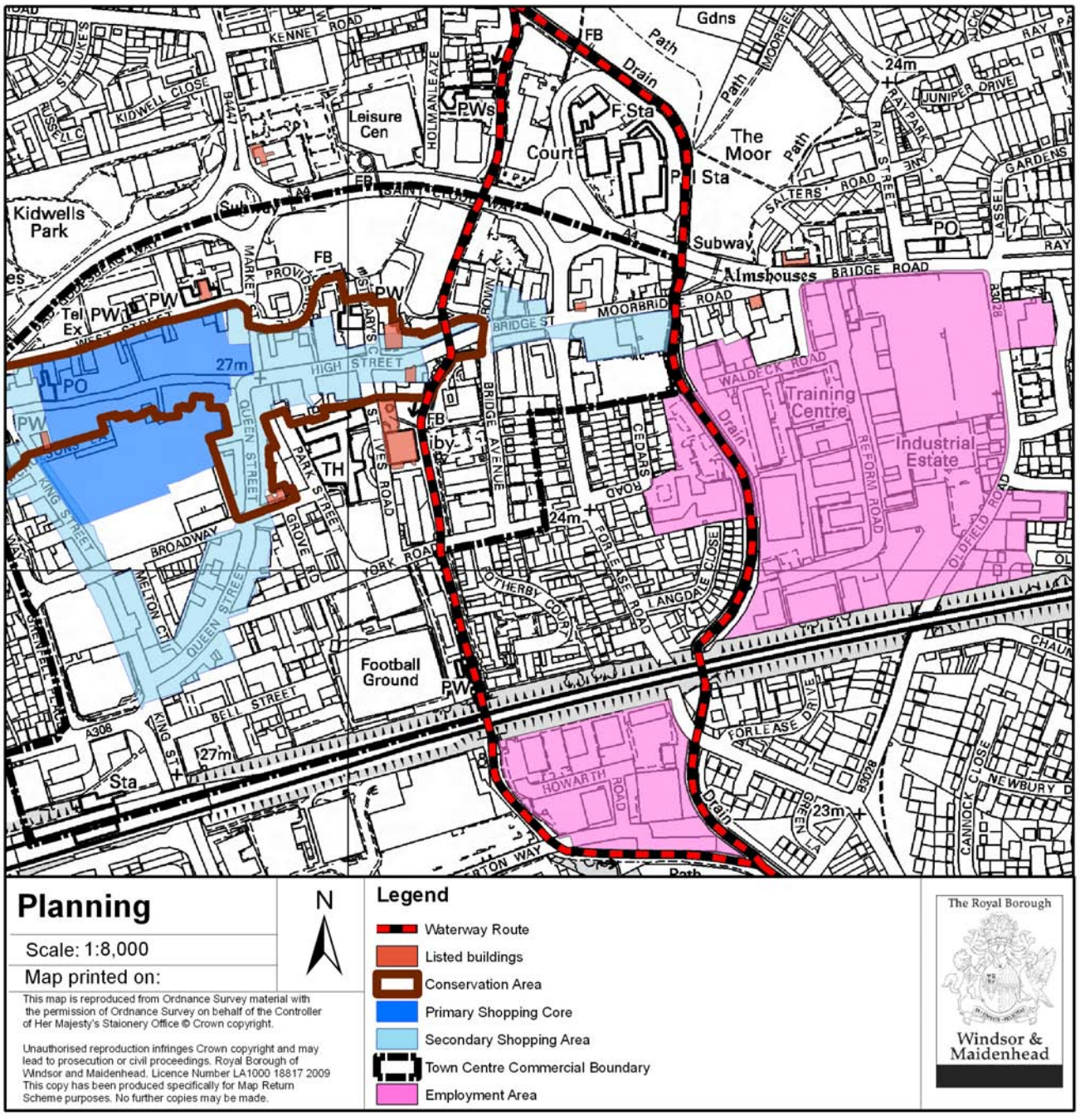


1

# Background

**1.9** In central Maidenhead the waterway passes through a variety of land uses (see Figure 3).

Figure 1.3 Local Plan Context for Maidenhead Town Centre




## Purpose of the Sustainability Appraisal

**1.10** The SA encourages sustainable development by making sure that environmental, social and economic considerations are taken into account throughout the preparation of a plan. Sustainable development is the core principle underpinning planning. At the heart of sustainable development is the simple idea of ensuring a better quality of life for everyone, now and for future generations. A widely used definition was drawn up by the World Commission on Environment and Development in 1987: "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*."

# Background



**1.11** The Government set out four aims for sustainable development in its 1999 strategy.[1] These are:

- social progress which recognises the needs of everyone;
- effective protection of the environment;
- the prudent use of natural resources; and
- the maintenance of high and stable levels of economic growth and employment.

**1.12** These aims should be pursued in an integrated way through a sustainable, innovative and productive economy that delivers high levels of employment, and a just society that promotes social inclusion, sustainable communities and personal well being, in ways that protect and enhance the physical environment and optimise resource and energy use. The aims of this SA are to:

- Make the Waterways Framework as sustainable as possible by ensuring the principles of sustainable development are integrated into the plan making process, influencing all stages;
- Use consultation to challenge and confirm professional judgment.

**1.13** It is not the role of the SA to determine which development and design principles should be progressed but it should help identify the most sustainable principles overall. This informs choices about which principles are most appropriate to take forward.

1 A Better Quality of Life - A Strategy for Sustainable Development for the UK (May 1999).

# 2 Appraisal Methodology

## Sustainability Appraisal Framework

**2.1** As part of earlier work on the LDF, an SA Framework was established for the Maidenhead area.[2] This provides a way of checking whether the Maidenhead Waterways Framework principles are the best possible ones for sustainability - a yardstick against which the social, economic and environmental effects of the document can be tested.

**2.2** For the purposes of assessing the Maidenhead Waterways Framework, not all the SA objectives (i.e.only part of the overall SA Framework) are relevant to a strategic appraisal of the Maidenhead Waterways Framework. SA objectives excluded are 1 (homes), 4 (education), 9 (employment), 12 (diverse economy), 15 (air and noise pollution), 16 (climate change), 20 (resources), 21 (waste) and 23 (energy). The following SA Framework shows how the Maidenhead Waterways Framework was tested.

Table 1 SA Framework and SA Objectives.

| SA Objective | Indicators |
|---|---|
| 2. Improve the health and well-being of the population and reduce inequalities in health. | a. Death rates from circulatory disease, cancer, accidents and suicides.<br>b. Average life expectancy. |
| 3. Reduce poverty and social exclusion and close the gap between the most deprived areas and the rest. | a. Percentage of children that are living in families that are income deprived.<br>b. Percentage of population of working age claiming key benefits.<br>c. Percentage of households in fuel poverty.<br>d. Indices of multiple deprivation. |
| 5. Reduce crime and the fear of crime. | a. Rate of domestic burglaries, violent offences in a public place and vehicle crimes.<br>b. Fear of crime. |
| 6. Create and sustain a vibrant and distinctive communities which recognise the need and contributions of all individuals. | a. Percentage of people who agree that their local area is a place where people from different backgrounds can get on well together.<br>b. Percentage of people satisfied with their local area as a place to live.<br>c. Percentage of residents who agree that they can influence decisions affecting their local area. |
| 7. Improve accessibility to all services and facilities including the countryside, natural and historic environment. | a. Percentage of new residential development within 30 minutes public transport time of key services.<br>b. Additional public open space secured.<br>c. % of residents satisfied with the borough's parks and open spaces. |
| 8. Encourage increased engagement in cultural and sporting activity across all sections of the community. | a. Percentage of public rights of way that are easy to use by members of the public.<br>b. Percentage of residents satisfied with sports and leisure facilities. |

2 Revised Scoping Report - Maidenhead Town Centre (June 2008).

# Appraisal Methodology



| SA Objective | Indicators |
|---|---|
| 10. Sustain economic growth and competitiveness and a buoyant, sustainable tourism sector by focusing on the principles of smart growth. | a. Gross Value Added (GVA) per head.<br>b. Viability and vitality of towns, district and local centres. |
| 11. Stimulate economic revival. | a. Planning Briefs covering Maidenhead Town Centre. |
| 13. Re-use previously developed land and existing materials from buildings, and ensure that there is a high quality townscape. | a. Percentage of new and converted dwellings on previously developed land.<br>b. Percentage of land developed for employment which is on previously developed land.<br>c. Existing recycling rate for Construction and Demolition Waste (Berkshire) |
| 14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment. | a. No. of properties at risk from flooding.<br>b. Number of planning applications approved against Environment Agency advice on grounds of flood defence.<br>c. Compliance with Flood Risk Assessment (FRA) |
| 17. Conserve and enhance the borough's biodiversity. | a. % of SSSIs in favourable condition.<br>b. Condition of Wildlife Heritage Sites.<br>c. Extent of ancient woodlands.<br>d. Change in areas of priority habitats.<br>e. Occurrences of farmland birds.<br>f. Occurrences of garden butterflies.<br>g. Occurrences of stag beetles.<br>h. Impact of housing development on the Thames Basin Heaths SPA. |
| 18. Protect and enhance the borough's countryside, natural and historic environment. | a. Extent of nature conservation designations.<br>b. Listed Buildings on the national 'Buildings at Risk' Register.<br>c. % of conservation areas with a character appraisal.<br>d. % of conservation areas with a character appraisal with management proposals updated in the last 5 years. |
| 19. Improve the efficiency of transport networks by enhancing the proportion of travel by sustainable modes and promoting policies which reduce the need to travel. | a. Congestion - average journey time per mile during the morning peak. (NI 167).<br>b. Mode of travel to work.<br>c. Percentage of residents who think that for their local area, over the past three years, that public transport has got better or stayed the same. |
| 22. Maintain and improve the water quality of the borough's rivers and ground waters, and to achieve sustainable water resources management. | a. Rivers of good or fair chemical and biological quality.<br>b. Number of planning permissions granted contrary to the advice of the Environment Agency on water quality grounds.<br>c. Per capita consumption of water. |

# Developing and Refining Options and Assessing Effects

## 3 Developing and Refining Options and Assessing Effects

### Main Strategic Options Considered

**3.1** There are two different options that could be implemented at the present time in order to provide a planning framework for the Maidenhead Waterways Project.

Table 2 Options Selected and Reasons for Selection

| | Options Selected | Assumptions for Selecting Options |
|---|---|---|
| A. | 'Business as Usual'. Rely on current local planning policy to support the achievement of the Maidenhead Waterway Project as set out in the development plan. | Resources could be diverted to other planning policy work. |
| B. | Develop a new Maidenhead Waterways Framework | The Framework could provide up to date information that is focused specifically on the achievement of the Maidenhead Waterway Project. |

### Choosing the Preferred Option

**3.2** Option A, 'Business As Usual', has the following potentially negative effects in comparison to Option B.

- Increased uncertainty.
- No principles for safeguarding land for necessary waterway infrastructure.
- Difficult to help deliver the overall vision of the Maidenhead Waterway Project.

**3.3** Although Option B is more resource intensive in the short term, it is the preferred option as it will provide a planning framework that is specific to the achievement of the Maidenhead Waterway Project. Current development plan policy does not expressly cover the full range of measures necessary to achieve the Maidenhead Water Project.

# Development of the Maidenhead Waterways Framework



## 4 Development of the Maidenhead Waterways Framework

**4.1** Ten general development and design principles have been identified to aid the achievement of the Maidenhead Waterway Project. These are outlined below. The plan contains more detail under each of these headings.

Development along the waterway corridor should:

1. provide and enhance the waterside setting
2. provide high quality buildings and spaces
3. respond to the risk of flooding
4. protect and enhance biodiversity
5. respond to historical features and their setting
6. allow for or improve continuous walking and cycling
7. provide and enhance accessibility to and from the waterside
8. improve the provision and quality of public spaces
9. allow for the continuous navigation by craft
10. provide or contribute to the provision of waterway infrastructure
11. provide for the maintenance of the waterway and associated infrastructure

### Significant Effects of the Waterways Framework Objectives

**4.2** In order to ensure that the Framework objectives are in accordance with sustainability principles, they were assessed for their compatibility with the SA objectives. Detailed results of the assessment are contained in the table in Appendix 1. A summary of the findings are described below (not in any particular order):

**Potential Positive Effects**

- Improved / increased open space and better cycle and walking routes could have an indirect positive effect on health and wellbeing.
- Design for safe access for children and the disabled could reduce social exclusion.
- Buildings with active face towards waterway (to increase natural surveillance), improved lighting and the use of 'Secure By Design' principles could help to reduce crime and the fear of crime.
- Restoration / reinstatement of historic features could enhance distinctiveness.
- Improved connections, upgrade of cycle and pedestrian routes, provision of waterway infrastructure to support navigation and new and improved open spaces could improve accessibility to the natural environment.
- New or improved public spaces could have an indirect positive effect on cultural and sporting activities.
- Restoration of the waterway could encourage an increased number of visitors to Maidenhead.
- Indirect positive effect on the rejuvenation of Maidenhead town centre.
- High quality buildings and spaces should have a positive effect on townscape.
- Respond to the risk of flooding.
- Environment Agency's consent for alteration in water levels, integrating habitats into landscaping, avoiding adverse effects on Sites of Special Scientific Interest (SSSIs) and other locally important sites and taking the opportunity to create habitats could all lead to a positive effect on biodiversity.
- Positive effect on the historic environment as a result of restoration / reinstatement of historic features.
- New / improved and better connected routes have the potential to increase cycling and pedestrian journeys.

**Potential Negative Effects**

- Some trees may need to be removed.
- Potential negative effects on flora, fauna and channel ecology. Effect difficult to assess at this stage as baseline data for the whole length of the river channel is not sufficient.
- Short term disturbance to riverbanks and longer term unmanaged disturbance by boats and people could have adverse cumulative effects on flora and fauna.

4

# Development of the Maidenhead Waterways Framework

## Mitigation

4.3 The term 'mitigation' encompasses any approach, which is aimed at preventing, reducing or offsetting significant adverse sustainability effects. In addition, it is also important to consider measures aimed at enhancing positive effects. Mitigation measures in the Framework include:

**Mitigation**

- Requiring consent and advice from the Environment Agency when responding to flood risk.
- Requiring the Environment Agency consent for water level alteration.
- Requiring Natural England consent for a change in water levels near to Sites of Special Scientific Interest (SSSIs).
- Enhancement measures included for biodiversity.
- Protection of certain species such bats.
- Replanting of native flora appropriate to the waterside setting.

# 5 Implementation

**5.1** It is recommended that the following significant effects of the Framework be monitored to identify unforeseen adverse effects and to be able to undertake appropriate remedial action. The table below sets out the significant effect indicators.

Table 3 Monitoring the Significant Effects

| Significant Effect | Significant Effect Indicators | Target | Data Source and Reference |
|---|---|---|---|
| Biodiversity and River Channel Ecology | Ecological value. | No reduction in ecological value[3] (according to existing survey information and baseline surveys of flora, fauna and channel ecology to be carried out in the future along the whole river channel). | River Corridor Survey of Maidenhead Flood Relief Channel and York Stream, Black and Veatch (October 2008). Trees surveyed by Vivien Hodge, Arboricultural Consultant (12-14 and 29 August 2008). Bat survey along the Maidenhead Flood Relief Channel and the York Stream, Furesfen (September 2008). White Brook, Maidenhead Ditch and York Stream – a river corridor survey carried out for the Environment Agency Thames Region, Walker A. (2000). |
| Potential Flooding | The number of properties at risk of flooding. | | RBWM Annual Monitoring Report |

3 The condition of SSSIs are not taken into account here. Relevant planning applications will need to judge any impact on the SSSIs and possibly set a monitoring framework.

6

# Conclusions

## 6 Conclusions

**6.1** This Sustainability Appraisal has identified that the Maidenhead Waterways Framework has a mostly positive effect on the SA objectives. The only potential negative effects identified at this stage are on biodiversity and river channel ecology. This is however uncertain due to the lack of baseline data available along the whole channel. Collection of more data and further monitoring has been included in the monitoring framework.

**6.2** No changes have been made to the Maidenhead Waterways Framework as a result of the SA.

# Appendix 1: Sustainability Effects of the Waterways Framework Objectives

## Appendix 1: Sustainability Effects of the Waterways Framework Objectives

Table 4 Sustainability Effects of the Development and Design Principles

| | RBWM SA Objectives | Description of the Effect and Comments | | | | Mitigation |
|---|---|---|---|---|---|---|
| | | | ST | MT | LT | |
| 2 | Improve the health and well-being of the population and reduce inequalities in health. | Improved / increased open space and better cycle and walking routes could have an indirect effect on health and wellbeing of residents, employees and visitors. | √ | √ | √ | |
| 3 | Reduce poverty and social exclusion and close the gap between the most deprived areas and the rest. | Design for safe access for children and the disabled could reduce social exclusion. | √ | √ | √ | |
| 5 | Reduce crime and the fear of crime. | Buildings with active face towards waterway (to increase natural surveillance), improved lighting and the use of 'Secure By Design' principles should help to reduce crime and the fear of crime. | √ | √√ | √√ | |
| 6 | Create and sustain vibrant and distinctive communities which recognise the needs and contributions of all individuals. | Restoration / reinstatement of historic features enhances distinctiveness. | √ | √ | √√ | |
| 7 | Improve accessibility to all services and facilities including the countryside, natural and historic environment. | Improved connections, upgrade of cycle and pedestrian routes, provision of waterway infrastructure to support navigation and new and improved open spaces should improve accessibility to the natural environment. | √√ | √√ | √√ | |
| 8 | Encourage increased engagement in cultural and sporting activity across all sections of the community. | New or improved public spaces could have an indirect positive effect on cultural and sporting activities. | √ | √ | √√ | |
| 10 | Sustain economic growth and competitiveness and a buoyant, sustainable tourism sector by focusing on the principles of smart growth. | Restoration of the Waterway could encourage increased number of visitors to Maidenhead. | √ | √ | √ | |
| 11 | Stimulate economic revival. | Potential indirect effect on the rejuvenation of Maidenhead. | √ | √ | √ | |
| 13 | Re-use previously developed land and existing materials from buildings, and ensure that there is a high quality townscape. | High quality buildings and spaces should have a positive effect on townscape. | √√ | √√ | √√ | |

# Appendix 1: Sustainability Effects of the Waterways Framework Objectives

| | RBWM SA Objectives | Description of the Effect and Comments | | | | Mitigation |
|---|---|---|---|---|---|---|
| | | | ST | MT | LT | |
| 14 | Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment. | Respond the risk of flooding. | √√ | √√ | √√ | Consent and advice from the Environment Agency. |
| 17 | Conserve and enhance the borough's biodiversity. | Some trees may need to be removed. Potential negative effects on flora, fauna and channel ecology but effect difficult to assess at this stage as baseline data for the whole length of the river channel is not sufficient. Short term disturbance to riverbanks and longer term unmanaged disturbance by boats and people could have adverse cumulative effects on flora, fauna and channel ecology. Integrating habitats into landscaping, avoiding adverse effects on SSSIs and other locally important sites, taking the opportunity to create habitats could all lead to positive effect on biodiversity. | √X | √X | √X | Environment Agency consent for water level alteration. Natural England consent for water level change near to Sites of Special Scientific Interest (SSSIs). On going collection of data and monitoring of flora, fauna and whole channel ecology required. Protection of certain species such bats. Replanting of native flora. |
| 18 | Protect and enhance the borough's countryside, natural and historic environment. | Restoration / reinstatement of historic features. Protect and enhance the green corridor, improving openness and views, incorporating the waterway into developments, maximising sunlight reaching the waterway. | √√ | √√ | √√ | |
| 19 | Improve the efficiency of transport networks by enhancing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel. | New / improved and better connected routes have the potential to increase cycling and pedestrian journeys. | √ | √ | √ | |
| 22 | Maintain and improve the water quality of the borough's rivers and ground waters, and achieve sustainable water resources management. | Water quality should not be harmed during construction and subsequent use. | √ | √ | √ | |

# Appendix 1: Sustainability Effects of the Waterways Framework Objectives

Scale of effect: ST (short term), MT (medium term), LT (long term), √√ (very positive), √ (positive), √X (positive and negative impacts), X (negative), XX (very negative), - (no effect).