

River Tame Flood Risk Management Strategy

May 2011

Statement of Environmental Particulars



We are the Environment Agency. It's our job to look after your environment and make it **a better place** – for you, and for future generations.

Your environment is the air you breathe, the water you drink and the ground you walk on. Working with business, Government and society as a whole, we are making your environment cleaner and healthier.

The Environment Agency. Out there, making your environment a better place.

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Appendix A Consultation Responses

Non Technical Summary

In May 2009 we published draft proposals for the River Tame Flood Risk Management Strategy (the “River Tame Flood Risk Management Strategy: Public Engagement Document” (May 2009)) along with an Environmental Report documenting the environmental considerations that influenced the draft Strategy. Following the consultation we have carefully considered the responses and modified the River Tame Flood Risk Management Strategy (the Strategy) and environmental assessment accordingly. The final Strategy has now been approved by the Environment Agency, and superseded the public engagement document.

We are publishing this document to explain how responses to the consultation were incorporated into the Strategy and how environmental considerations influenced the approved Strategy. This is the final stage in the Strategic Environmental Assessment (SEA) of the Strategy.

We did not receive any consultation responses that fundamentally affected the preferred options to manage flood risk along the River Tame, or any that caused us to update our strategic assessment of the impacts of the Strategy. We have therefore not significantly altered the Strategy or our SEA since consultation. We have however clarified within the Strategy and Appendix A to this document a range of issues that raised common queries or caused confusion over the role of the Environment Agency.

This document is part of a suite of documents which should all be read in conjunction to obtain a full picture of the Strategy development and assumptions, its potential positive and negative consequences, and how we propose to reduce any negative consequences:

- the “River Tame Flood Risk Management Strategy” (May 2011) – this is the final Strategy as adopted;
- the “River Tame Flood Risk Management Strategy: Environmental Report” (May 2009) - this documents the likely impacts of the draft Strategy, and how they could be mitigated. The impacts and mitigation have not fundamentally changed since consultation during finalisation of the Strategy;
- Statement of Environmental Particulars (May 2011) is this document, which explains how consultation responses have been taken into account, clarifies aspects of the Environmental Report, adds more detail to some mitigation, and identifies additional opportunities for environmental improvements.

We believe that the adopted Strategy offers the best option for managing flood risk along the River Tame, with environmental and social impacts that can be mitigated to ensure that no significant impacts are caused. Our Strategy also provides many opportunities to improve the environment for people and wildlife, working in partnership with others to achieve more than we can on our own.

1 Introduction and background

1.1 River Tame Flood Risk Management Strategy

The Environment Agency's Strategy will provide the sustainable management of flood risk to people, properties and infrastructure over the next 100 years (until 2109) along the River Tame. This is from its sources in the west of Birmingham to its confluence with the River Trent. A plan of the area the Strategy considers is shown in the Strategy. We took a broad (strategic) view of flood risk management to identify ways to reduce flood risk as well as identifying opportunities for environmental and social improvements.

Environmental Assessment of the Strategy

The Environment Agency undertook a voluntary Strategic Environmental Assessment (SEA) as good practice while developing the Tame Strategy in order to integrate environmental considerations into strategic decision making. The process followed is the same as that outlined in the 'Environmental Assessment of Plans and Programmes Regulations 2004' (the SEA Regulations).

We produced an Environmental Report (ER) to document the SEA, and made it available to key stakeholders and the public for consultation between May and August 2009. The draft Strategy accompanied this. At the end of this period, responses received from all consultees were carefully considered and where appropriate, amendments to the Strategy and SEA were made. This document (the Statement of Environmental Particulars, or SoEP) sets out how environmental considerations from the SEA have been taken into account and how views expressed during the consultation period have been taken into account as the Strategy has been finalised and formally approved.

We adopted the Strategy in October 2010. We are required by the SEA Regulations to make the following information available to consultation bodies and the public consulted on the draft Strategy as soon as possible following the adoption of the strategy:

- the Strategy;
- the ER that accompanied the draft Strategy consultation; and,
- a statement containing the particulars listed in Table 1.1 – a "Statement of Environmental Particulars" (this document).

Table 1.1: Information to be made public following adoption of a Strategy

Information required	Where is it in this document?
1. how environmental considerations have been integrated into the Strategy;	Section 2.1
2. how the Environmental Report has been taken into account in finalising the Strategy;	Sections 2.2, 2.3, 2.4, 2.5
3. how opinions expressed in response to consultation on the draft strategy and environmental report have been taken into account in finalising the strategy;	Section 3, Appendix A
4. how the results of any trans-boundary consultations (if there are likely to be impacts on another Member State of the European Union (EU)) have been taken into account;	This did not occur as there are no impacts on other EU member states.
5. the reasons for choosing the Strategy as adopted, in the light of the other reasonable alternatives dealt with;	Section 2 and section 3
6. the measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme.	Section 4

2 How environmental considerations were integrated into the Strategy

2.1 The SEA Process

We considered environmental issues from the earliest stages of the Strategy development through to the finalisation of the strategy, through the steps below:

- Stakeholder engagement – we involved key stakeholders in developing the baseline information and SEA environmental objectives prior to wider consultation.
- SEA – we used the SEA process and documentation of this in the ER to ensure that environmentally preferred options were identified and considered, and high level (strategic) environmental impacts and appropriate mitigation measures of the Strategy's preferred option were identified.
- Environmental expertise – we prepared the strategy and undertook the SEA using a comprehensive range of data and expertise, to ensure that the information on which the Strategy is based is accurate and up to date.
- Consultation – we consulted with stakeholders and the public on the draft Strategy and ER and, where appropriate, we incorporated responses relating to environmental issues into the Strategy and this document.

2.2 How the Environmental Report has been taken into account

The ER documents the SEA undertaken to influence the strategy option development, preferred option selection, the likely strategic level impacts, mitigation to reduce or eliminate these, and potential for improvements to the environment along the River Tame.

We have documented the process followed and the outcomes of the assessment in detail within the ER. The ER influenced the preferred options contained within the draft Strategy which was consulted on between May and August 2009.

We have clarified some parts of the process in more detail below to assist understanding of the environmental and social implications of the Strategy:

Environmental baseline

We included sites and features of interest within the baseline for each section, for example Sites of Special Scientific Interest (SSSIs) which are on the tributaries of the Tame. Where baseline features are not included within the assessment, for example the Blythe SSSI, they are not considered to be affected by the Strategy.

We reported that kayaking could take place on the lower Tame, Anker, Blythe, Cole or Rea. This is not the case as there are no rights of navigation on the River Tame or these tributaries.

Environmental objectives

We set environmental (SEA) objectives and sub-objectives for the River Tame Strategy which would help achieve our Corporate Strategy “Creating a Better Place”, and other high level, regional and local policy targets.

We used these objectives to determine which options had more potential for improvements, and also for impact assessment. Therefore they cover a broad range of issues, namely biodiversity, human health and population, land quality, material assets (infrastructure), cultural heritage and landscape character/visual amenity. We worded the objectives positively, for example we wanted to find strategic flood risk management options that had the potential to also improve or enhance biodiversity, or cultural heritage features.

Detailed options assessment

We undertook a detailed assessment on the six options across the catchment, over the nine reaches.

- Option 1: Do nothing (no maintenance work to existing flood defences and river channel);
- Option 2: Do minimum (continue with maintenance work to the river channel and to the existing flood defences until they reach the end of their design life);
- Option 3: Maintain existing level of flood risk management (as option 2 with replacement of defences at the end of their useful life);
- Option 4: Optimise existing storage (optimise use of existing flood storage areas);
- Option 5: Increase storage (increase existing flood storage areas, create new ones, and optimise use of tributaries for flood storage); and,
- Option 6: Localised improvements (including re-engineer/re-design existing defences, raise existing defences, use third party structures as flood defences, create bypass/relief channels, open up culverts, enlarge channels including setting back defences from river, enlarge bridges / remove obstructions).

We included an option called “Do something – improved conveyance” within the draft Strategy, which focussed on opening up culverts and removing or reducing the effect of other obstructions such as bridges where possible. This was integrated and assessed with Option 6 within the SEA.

These six options were assessed against all of the SEA objectives and sub objectives to show whether each option helped us achieve our objectives and indicate likely impacts of the options. The objectives were worded positively – to show where an option improves the current situation. The environmental assessment sometimes indicates a negative impact where the improvement part of the objective has not been achieved by the option being assessed. It is important to understand this, as the impact of the option itself may not actually be negative. It is therefore important to read the text in the tables in the ER section 6 to understand how the impacts are caused, rather than only reviewing the coloured boxes.

We ensured the preferred environmental option influenced the Strategy option considered. In most of the nine reaches the environmentally preferred option is also the Strategy's preferred option. Where this is not the case it was because the environmentally preferred option was not technically feasible or economically justifiable. Some of the justifications for the Strategy's preferred option noted within the ER may seem contradictory to the SEA undertaken. For example, where the environmentally preferred option supports protection of infrastructure or recreation areas but the economics show that as an organisation we cannot justify protecting infrastructure. This is due to our objectives being worded positively to identify where we could improve the current situation, and covering a range of assessment receptors to identify a range of positive and negative impacts. Some improvements to flood risk for infrastructure assets, for example, are a by-product of implementing the Strategy to reduce flood risk to properties.

The preferred options for each reach, along with their potential strategic environmental impacts (without mitigation) are detailed in the ER section 6.

2.3 Mitigation of the environmental impacts of the Strategy

We have identified strategic environmental and social impacts of varying significance based on the Strategy's preferred options for each reach. We have developed corresponding mitigation measures to remove or reduce the impacts identified.

We have developed slightly more detailed mitigation proposals for key areas in close consultation with some stakeholders.

The ER details a series of high level mitigation measures. This is summarised in the Table 3.2 in section 3.4, and includes changes and additions due to consultation on the draft Strategy and ER.

The Strategy will include and develop the mitigation and environmental improvements identified within the ER and SoEP alongside developing the flood risk management works. Where significant environmental impacts are identified through this process, we will undertake an environmental assessment to ensure that the impacts are understood in more detail and mitigation can be developed to minimise or eliminate any negative impacts.

2.4 Residual and cumulative impacts

An important part of SEA is to consider the residual (remaining) impacts of the Strategy after mitigation has been accounted for. It is also important to consider the cumulative impacts - the impact of all the works on particular receptors or groups of receptors, of implementing the Strategy. This can cause a larger impact than the sum of the individual impacts. To clarify the colour coded summary of cumulative impacts given in the ER, Table 2.1 below describes the cumulative impacts against each of the SEA objectives. The ER provides more detail.

Table 2.1: Residual and cumulative impacts (after mitigation)

Objectives	Residual impact	Cumulative impact
To protect existing material assets : <ul style="list-style-type: none"> To protect infrastructure 	If mitigation is put in place then the impact of flooding on important infrastructure should be minimised.	Significant stretches of nationally important railway, and sewage treatment works, are more affected across the study area than any other type of infrastructure.
To protect and enhance cultural heritage features : <ul style="list-style-type: none"> To minimise adverse effects on undiscovered or buried archaeology To protect designated archaeological and historic features within the floodplain 	There is a negative impact across the Tame catchment to undiscovered archaeology, which can be partially managed by the proposed mitigation. However, construction will still leave a residual impact due to the removal of the archaeological resource.	There is a cumulative negative impact across the Tame catchment due to the loss of archaeological resource through construction. There is a cumulative positive impact on designated historic features as they are benefiting from the reduction in flood risk from the strategy.
To protect and enhance landscape character / visual amenity : <ul style="list-style-type: none"> To avoid detrimental effects and enhance landscape character objectives 	Even after mitigation there are likely to be negative residual impacts on the visual amenity of some urban areas where walls are raised or built to heights of 1.5-2.5m.	Urban populations are more likely to experience significant visual intrusion. However, they are also likely to experience visual improvements, but not necessarily in the same locations.

We do not know the programme for implementing the Strategy at this stage. However, it is unlikely (due to geographical location and funding) that all the works will be undertaken at the same time. Therefore, the likelihood of cumulative impacts due to multiple construction sites along the River Tame is reduced.

We believe that, when fully implemented, the Strategy will have an overall positive cumulative impact. This is particularly the case when consideration is given to proposals to improve the environment in section 2.5 below.

There can be cumulative effects that occur as a result of implementing the Strategy in combination with other plans or strategies that cover a similar spatial area. The measures that will be carried out to implement the preferred options in each of the reaches are very specific to the reach in question, and in most cases will only affect the immediate river corridor. The other plans and strategies that are outlined in Chapter 3 of the ER are generally not as focussed on the immediate river corridor. We have reviewed these other strategies or plans and no significant cumulative effects of implementing the Tame Strategy in combination with them have been identified. This will be reviewed when project details are developed and a likely programme of works is known.

2.5 Environmental opportunities

The ER details a series of high level opportunities to improve the environment for people and wildlife.

We have summarised the potential opportunities in Table 3.2 in section 3.4, as this includes changes and additions due to consultation responses on the draft Strategy and ER. We have also identified potential partner organisations to assist in implementing these opportunities.

3 Consultation

3.1 Summary of informal consultation

We consulted on a Scoping Report in August 2004, and a Scoping Update in May 2008, to identify the information we needed to take account of when developing the strategy. Following this we involved key stakeholders throughout the drafting of the Strategy and the SEA process. These included:

- **RSPB, Warwickshire Wildlife Trust, and Birmingham and the Black Country Wildlife Trust** to discuss opportunities for environmental improvements.
- **Birmingham City Council, Sandwell, Walsall, Wolverhampton, Dudley, Tamworth, Solihull and North Warwickshire Borough Councils, and Lichfield District Council** to ensure that the Strategy was consistent with the strategic flood risk assessments for these areas.
- **Network Rail** to discuss issues, options and constraints.
- **Severn Trent Water** to determine their assets and infrastructure at risk of flooding.

3.2 Formal consultation

We undertook formal consultation with all stakeholders between May and August 2009 on the draft Strategy and the ER.

Through the consultation, we wanted to:

- consult and inform the local community and stakeholders about the Strategy;
- determine whether we had support for the preferred options in the Strategy;
- Identify potential partnerships with key stakeholders to deliver combined goals efficiently; and
- minimise objections to the Strategy based on mis-information, lack of understanding and poor consultation.

The consultation, and how to access the documents, was publicised through press releases, articles in the Birmingham Mail and Birmingham Post, as well as through local TV and radio coverage. The draft Strategy public engagement document and ER were available for viewing at our office at Fradley Park in Lichfield, six local public libraries (Birmingham Central, Tamworth, Aston, Sandwell Central, Castle Vale, and Walsall community), as well as on our website. In addition approximately 1200 leaflets were distributed to local residents and businesses in the Bromford area based on previous attempts to engage a community which has a little flood awareness due to no recent flooding. Our leaflets provided a summary of the Strategy proposals and publicising the public consultation documents and process. We wrote to all of the stakeholders and

organisations that we were aware of that had an interest in the Strategy to make them aware of the consultation. This included Natural England, English Heritage, local planning authorities, national and local interest groups such as Birmingham and Black Country, Staffordshire and Warwickshire Wildlife Trusts, and local parish councils. The consultation process made us aware of more interested parties. We provided the draft Strategy and ER to all the key stakeholder organisations and the nine consultees who requested them.

A series of meetings with different stakeholder groups were held between June and August 2009. These meetings included the local parish councils, local community and residents associations as well as stakeholder meetings. Key events and meetings involving local groups are listed in the Table 3.1 below. Stakeholders were able to respond directly at meetings by leaving comment cards, as well as sending us an email or letter.

Table 3.1: Key consultation activities

Date	Organisation/Event	Attendees
11 May 2009	Launch of consultation on the draft Strategy	
22 May 2009	5 posters put up at key public locations for Tamworth and Fazeley drop in session	
29 May 2009	Tamworth & Fazeley Public Consultation Drop-in Session	31 members of the public
29 May 2009	40 posters advertising public drop in session placed in the Hamstead/Perry Barr/Witton area	
5 June 2009	Perry Barr & Witton Public Consultation Drop-in Session	11 members of the public
10 June 2009	15 posters advertising public drop in session distributed to 3 local supermarkets near the Oldbury Arm to put up in public locations, and posters sent to residents and businesses of Oldbury and Wednesbury.	
12 June 2009	Castle Vale & Bromford Public Consultation Drop-in Session	5 members of the public
19 June 2009	Oldbury Arm Public Consultation Drop-in Session (in Smethwick)	1 member of the public
8 July 2009	Comberford Parish Council (organised and advertised by the Parish Council)	30 members of the public
9 July 2009	RSPB Forge Mill Workshop, advertised by RSPB	21 RSPB staff and volunteers
5 August 2009	Witton at Aston Villa FC, organised by Witton Flood Action Group and Birmingham City Council neighbourhood officer	20 members of the public
7 August 2009	Meeting with the Highways Agency	
11 August 2009	Meeting with British Waterways	
13 August 2009	Meeting with Sandwell, Dudley and Walsall Councils	
13 August 2009	Meeting with Lichfield District Council	
14 August 2009	Meeting with Birmingham City Council	

Date	Organisation/Event	Attendees
15 August 2009	Meeting with Birmingham City Council Nature Biodiversity & Policy Group	
7 September 2009	Perry Hall Playing Fields Workshop with Birmingham City Council	
17 September 2009	Meeting with British Waterways, with Warwickshire County Council (Kingsbury Water Park)	

Consultation Responses on the Environmental Report

A total of total of 93 responses were received.

All comments that were directly applicable to the Strategy itself are recorded in the Strategy along with our response. Appendix A of this document shows the consultation responses and how we have taken them into account in the final Strategy and the SEA.

We generally received comments supporting the Strategy preferred options and the findings of the SEA.

There was particular concern from downstream communities, landowners/managers and councils about the potential for increased flood risk downstream of works. We will be investigating this in more detail once we have reviewed the works to implement the Strategy. If increases in flood risk are likely, we will discuss this with the individuals and organisations concerned in order to mitigate the impacts.

We received numerous queries as to why the Strategy and SEA do not consider wider issues than river flooding, for example management of surface and groundwater, sustainable drainage systems, development in the flood plain, or issues / improvements related to the River Tame tributaries. This is generally because these issues are outside the scope of our work as an organisation or of the type of Strategy we have undertaken.

We received many clarifications of detail and some gaps within the baseline information and therefore the environmental assessment were raised. Although the addition of this information and review of the SEA may have meant we would have understood impacts slightly better, we were of the opinion that this updated assessment would be of sufficient magnitude to change the preferred Strategy or environmental options because of the strategic nature of the decisions being made. We have however clarified a few issues in section 2.2 above. We will use the information in these consultation responses when developing our projects that will implement the Strategy, including any environmental assessments we undertake.

There were many suggestions for additional environmental improvement opportunities, and a few suggestions of more detail of mitigation for impacts to specific sites. We have added most of these into this SoEP to create a complete picture of the high level mitigation and potential opportunities that are linked to the flood risk management

works. We will take these suggestions into account when determining the details of flood risk management works to implement the Strategy.

3.3 Changes to the Strategy

We did not receive any consultation responses that raised major objections or made us rethink our preferred Strategy options. Therefore, the Strategy's preferred options as presented in the draft Strategy have not changed. However, the comments received have prompted us to clarify issues such as our management activities and our future work. These changes and clarifications can be seen within the Strategy itself, and are discussed within Appendix A of this document.

3.4 Amendments to the SEA since the Environmental Report

We did not receive any consultation responses that raised major objections or made us rethink our environmentally preferred options or the SEA undertaken. Therefore, the SEA is essentially unchanged.

We did receive comments that have prompted us to clarify particular issues. These clarifications can be found within this section and within Appendix A.

This means that the preferred options and strategic impacts remain as documented in the ER.

Consultation has made us aware of the following suggestions for mitigation in addition to those identified in the ER:

- more detail of mitigation that may be required at Forge Mill;
- clarification of archaeological mitigation for any flood risk management works;
- proposals for Whitacre Heath to mitigate any negative impact due to a potential increased risk of site flooding;
- proposals for biodiversity, access and visual improvements in Witton to mitigate the visual impact of the proposed flood wall and being cut off from the river
- potential for additional mitigation to be required in reaches seven and eight if flood risk is increased downstream of proposed flood risk management works in reach seven at Whitacre Heath.

A summary of the strategic mitigation for the Strategy, taking into account consultation responses, is shown in Table 3.2 below.

Table 3.2: Mitigation for the Strategy's impacts

Reach 1: Oldbury Arm
Reduce the visual impacts of new defences (raising of up to 1.0m in three locations) by ensuring the design is in keeping with local building materials.
Reach 2: Willenhall Arm
Ensure owners and operators of the railway are aware of the flood risk and appropriate protection/ infrastructure resilience plans are implemented.

Reach 3: Bescot Junction

Ensure owners and operators of recreational facilities (for example Walsall Football Club Stadium and Public Right of Way) are aware of their flood risk in order that they can either obtain flood warnings and/or implement resilience plans.

Ensure owners and operators of the railway and the rail freight yard are aware of the flood risk and appropriate protection/ infrastructure resilience plans are implemented. Consultation has been undertaken with Network Rail through the Strategy development to inform them of the flood risk and partner with them to aid in the formulation of appropriate resilience plans.

Reduce the visual impacts of new defences (raising existing defences by approximately 1.0m) by ensuring the design is in keeping with local building materials.

Reach 4: Newton & Hamstead

Perry Hall playing fields are currently a flood storage area. The strategy proposal would see the flood storage area being used on a more frequent basis, potentially causing temporary impacts on recreational users as they would be unable to access the fields. We have discussed our proposals with Sandwell Metropolitan Borough Council to make them aware of this proposal and will continue to work with them to develop appropriate warnings and signage before this work is undertaken.

Forge Mill Lake LNR & Sandwell Valley RSPB Reserve. We have agreed a series of mitigation measures for lowering the height of the spillway and using the flood storage area on a more frequent basis that can be developed further if/when these works go ahead. There is potential for increased flood water storage to adversely affect the important breeding bird populations that nest on the lake shore and on the islands in the lake. There is potential to:

- increase the height of the existing islands, create new islands in the lake and create new marginal habitat on the lake shore (including reedbed planting and bank reprofiling), so that any nesting sites lost, are compensated for;
- in addition, the creation of refuge sites immediately north of the lake could be used by breeding birds during periods for high flows in the River Tame;
- a further proposal to be investigated is the installation of a bund across the lake in the vicinity of the RSPB reserve boundary to protect the main nesting islands from smaller flood events but without impeding the lake's flood storage capacity;
- lowering of the spillway is likely to also increase the flood risk to the existing birdwatching hide located at the edge of the lake. Unless the secondary bund proposal above is taken forward, it is likely that the hide will require raising to prevent flooding (the RSPB have indicated that this would be a costly operation and would not be their preferred solution);
- the existing footpath located around the edge of the lake and which crosses the existing spillway, will require reinstatement following any work;
- could create a steep bank with nesting opportunity for sand martins, areas of shingle on islands for nesting terns.

The owners and operators of Sandwell Valley RSPB reserve aware of their flood risk posed at present in order that they can either obtain flood warnings and/or implement resilience plans.

Reach 5: Perry Barr & Witton

Ensure owners and operators of recreational facilities (for example Salford Park Boating Lake & stadium) are aware of their flood risk in order that they can either obtain flood warnings and/or implement resilience plans.

Reduce the visual impacts of raising several sections of existing defences and constructing new defences (various heights, which reach an average of 2.5m) by ensuring the design is in keeping with local building materials.

There are a number of locations within this reach where new or raised defences erected to heights of

<p>There may need to be further discussion with the RSPB if more detailed investigations show potential for an increased risk of flooding at Middleton Lakes RSPB Reserve due to upstream works as this may adversely affect ground nesting birds, in particular on the islands located in the lake. This has been discussed with the RSPB and will be mitigated by improving habitat for breeding birds and could include raising the level of the islands and creating new islands in the lake, so that any nesting sites lost are compensated for.</p>
<p>There may need to be further discussion with Warwickshire Wildlife Trust and Natural England if more detailed investigations show potential for an increased risk of flooding at Whitacre Heath, due to upstream work, as this may adversely affect the SSSI. Mitigation may include creation of rafts for nesting birds, scrape and island creation, and improvement of the wet woodland to retain flood water.</p>
<p>Ensure landowners are aware of the flood risk to grade 2 and 3 agricultural land and consider appropriate use of their land within the floodplain. There may need to be discussion with landowners if more detailed investigations show an increased risk of flooding at this site due to upstream works.</p>
<p>Reduce the visual impacts of raising existing defences and creating new defences by ensuring the design is in keeping with local building materials.</p>
<p>Reach 9: Downstream of Tamworth</p>
<p>Our investigations have indicated that, as a result of the works proposed at Whitacre Heath and based on our high level assessment of the information we have now, there may be a marginal increase in flood risk in this location. We will review this in more detail as part of any future scheme, and discuss appropriate mitigation if risk is increased. We will ensure that any impacts as a result of measures undertaken elsewhere are mitigated and that no property receives a reduced standard of protection as a result of the proposals. As part of this we will investigate whether individual property protection is appropriate for properties in this location</p>
<p>Ensure owners and operators of recreational facilities (for example National Memorial Arboretum) are aware of their flood risk in order that they can either obtain flood warnings and/or implement resilience plans. There may need to be discussion with landowners if more detailed investigations show an increased risk of flooding at this site due to upstream works.</p>
<p>Ensure landowners are aware of the flood risk to grade 2, 3 and 4 agricultural land and consider appropriate use of their land within the floodplain. There may need to be discussion with landowners if more detailed investigations show an increased risk of flooding at this site due to upstream works.</p>
<p>Ensure that English Heritage and the owners/residents of the 3 Scheduled Ancient Monuments (Air Photographic Site SW of Elford, Settlement sites and enclosure 460m NE of Sittles Farm & Site of round barrow near River Tame) and listed buildings (grade II) are aware of their increased future flood risk due to climate change in order that they can either obtain flood warnings and/or implement resilience plans.</p>
<p>All Reaches</p>
<p>We will carry out desk based assessments as appropriate to determine the required mitigation of potential impacts on undiscovered archaeology. For example, mitigation may include undertaking trial trenches before construction (to influence detailed design), and further mitigation on site.</p>
<p>We have assumed that by 2025 flood risk would increase due to climate change. This impact happens in the majority of reaches. We will ensure that all the properties at increased flood risk are within an area able to receive flood warnings, and encourage residents to sign up to the flood warning service.</p>

Consultation has made us aware of the following opportunities for environmental improvements in addition to those identified in the ER:

- RSPB provided additional details of potential habitat improvements to Middleton Lakes;

- Birmingham City Council and English Heritage raised particular improvements in relation to the historic sites and features, linked to more general interpretative material and proposed improvements in public path networks;
- Birmingham City Council has identified potential for biodiversity improvements at Tame Valley from Castle Vale through to Tamworth and limited opportunities may exist in the Castle Vale stretches and around Junction 6 of M6
- Birmingham City Council has identified opportunities for re-engaging the public in Birmingham with the river;
- Warwickshire Wildlife Trust has identified potential for improvements to fish passage of weirs in Lea Marston Lakes;
- Warwickshire Wildlife Trust has identified additional benefits from the raising of the flood bank at Whitacre Heath could include the opportunity to improve access, and the potential for scrapes created on Whitacre Heath SSSI for wetland habitat to be a source of construction material for flood risk management works;
- Warwickshire Wildlife Trust has identified opportunities at Kingsbury Water Park to undertake works to the pools to improve channel naturalisation, habitat for invertebrates and fish, and wetland fauna;
- Warwickshire Wildlife Trust has identified opportunities at Eon Meadows to naturalise the channel banks;
- Birmingham and Black Country Wildlife Trust are keen to see contributions to the delivery of actions and targets for Priority Habitats and Species, improve local wildlife sites; to contribute to public experiences and enjoyment of the natural world
- Lichfield District Council is willing to be involved in opportunity to create BAP habitats and areas of open space and recreation;
- West Midlands Bird club are willing to see habitat and access improvements at Ladywalk Nature Reserve.

A summary of the potential environmental opportunities, taking into account consultation responses, is shown in Table 3.3 below.

Table 3.3: Summary of potential environmental opportunities

Environmental Improvement Opportunities	Potential Partner
Biodiversity	
Setting back our existing defences when they are replaced, for example through Sandwell Valley and Perry Hall playing fields, to improve the biodiversity value of the river corridor.	Landowners
Encouraging future development/ redevelopment to be set back from the river corridor and existing defences to be set back when replaced particularly in the upper Tame. These measures would help promote greater river / floodplain connectivity, a more naturalised river channel, and would result in a general improvement in river corridor biodiversity, hence improved water quality (particularly dissolved oxygen and suspended solids) and ecological status in the long term. This would be promoted through the Strategic Flood Risk Assessments / local planning policies.	Local Planning Authorities
Creating a fish refuge at junction with tributary of the Tame in reach three at Bescot junction	Landowner
Fish passage on Lea Marston Lakes	Warwickshire Wildlife

Environmental Improvement Opportunities	Potential Partner
	Trust
Creating additional wetland habitat at Park Hall Nature Reserve in reach seven	Birmingham and Black Country Wildlife Trust
Contributions to the delivery of actions and targets for priority habitats and species in the context of both regional and local BAPs; Contribute to the improvement of local wildlife sites in Birmingham & the Black Country (Sites of Importance for Nature Conservation (SINCs) and Sites of Local Importance (SLINCs)), and engage with Local Sites Partnerships in order to facilitate this.	Birmingham and Black Country Wildlife Trust and Local Sites Partnerships
Improvements to Ladywalk Nature Reserve site: Habitat management such as managing the silting up of ditches, management of Himalayan Balsam, grassland to be turned into more marshy area, reprofiling of islands, management of tree encroachment, create more wading bird habitat and open water (spoil could be used to create spits into open water); improve fish habitat for species present in pools.	West Midlands Bird Trust and Eon
Remove the concrete revetment lining the channel banks at Eon Meadows to encourage natural processes and marginal habitats to occur in the river.	Warwickshire Wildlife Trust
Improve existing BAP habitats and create additional BAP habitat at Middleton Lakes RSPB reserve: Managing the lagoons and nesting islands within the current nature reserve to enhance their suitability for breeding and wintering waterfowl, and developing a major extension to Middleton Lakes reserve.	RSPB
Improving floodplain grassland habitat through control of floodplain grazing in the lower Tame (reaches seven to nine).	Natural England
Removing weir downstream of Tamworth to improve fish migration.	Landowner
Improving riverside habitat at Tameside local nature reserve, adjacent to Tame at Fazeley through re-profiling river and creating additional reedbed habitats in partnership with Staffordshire wildlife trust.	Landowner
Extending existing BAP habitat and creating new BAP habitat (e.g. grazing marsh/wet woodland); and create sections of braided channels in lower Tame (reaches eight to nine).	Central Rivers Initiative partnership
Creation of BAP habitat to the northwest and south west of Tamworth.	Lichfield District Council
<p>Opportunities at Kingsbury Water Park:</p> <ul style="list-style-type: none"> • Grebe Pool and Tame bend: potential project to pull back and widen the bend in the River Tame to encourage deposition and the formation of a gravel bar, to improve the in-stream habitat for invertebrates and fish spawning. Also to create a fish refuge by linking an existing pond adjacent to the river, to the Tame and create a 0.5ha reedbed along the eastern and southern edges of Grebe Pool contributing to Local BAP targets and enhancing this area for wetland fauna. • Mitchell's Pool (and also Cliff Pool): potential project to improve connectivity between the River Tame and the pool, by lowering the riverbank opposite the pool by 1.5metres and creating a reedbed, contributing to LBAP targets and enhancing this area for wetland fauna. • Hemlingford Water: potential project to link Hemlingford Water to the River Tame and create new reed fringe habitat along its edges. 	Warwickshire Wildlife Trust, Warwickshire County Council
Scrapes on Whitacre Heath SSSI to create more wetland habitat and this may be a source of spoil for flood risk management works.	Warwickshire Wildlife Trust
Potential for biodiversity gain at Tame Valley from Castle Vale through to Tamworth	Birmingham city council

Environmental Improvement Opportunities	Potential Partner
and limited opportunities may exist in the Castle Vale stretches and around Junction 6 of M6.	
Recreation & access	
Improving footpaths, disabled access, access for anglers etc. at Sheepwash Local Nature Reserve (LNR).	Local Councils, angling clubs, landowners
Improving recreational access to the river corridor through setting back existing defences when they are replaced in the upper Tame. This would be of particular benefit in existing formal recreational areas (e.g. Sandwell Valley Country Park).	Landowners, Local Councils
Access improvements to Ladywalk Nature Reserve, e.g. to second bird hide from public footpath along edge of site.	West Midlands Bird Trust and Eon
Contribute to the delivery and management of Accessible Natural Greenspace and Local Nature Reserves where the public can experience and enjoy the natural world.	Birmingham and Black Country Wildlife Trust
Improving the path networks, in particular where there are gaps in the strategic Tame Valley Way footpath in Birmingham (e.g. around Bescot (reach three), between Perry Barr and Salford Park (reach four), and in the vicinity of Park Hall Nature Reserve (reach seven).	Local Councils
Improving recreational facilities at Salford Park	Local Council
Improving access to river corridor, for general public and anglers, in vicinity of Castle Vale/ Water Orton and adjacent to Kingsbury Water Park.	Local Council, angling clubs, landowners
Improving river access where defences are to be raised in the vicinity of Fazeley.	Local Councils, landowners
Improving footpaths / Tame Valley Way to the north of Tamworth/ in the vicinity of Hopwas.	Local Councils, landowners
Flood risk management works at Whitacre Heath could provide an opportunity to improve access to the site, especially to enhance the condition of pathways through use of the spoil; to create a smoother path on the top of the flood bank, create disabled access route to top of bank and to at least one hide, and to create a safe holding area for grazing animals in time of flood.	Warwickshire Wildlife Trust
The opportunities for the Birmingham section of the Tame lie mainly in re-engaging the public with the river, through promotion and development of the Tame walkway, linkages from adjacent parks and open space and interpretation/education/recreation; Birmingham City Council is the main riparian landowner through the Birmingham area of the Tame, and has a further interest in the section of the Tame at Elford/Fisherwick, the riparian zone being owned by Birmingham City Council and leased as agricultural tenancies.	Birmingham city council
Creation of access and recreational improvements to the northwest and south west of Tamworth.	Lichfield District Council
Archaeology & cultural heritage	
Improving public information / signage for designated archaeological sites (listed buildings / scheduled monuments and non-designated sites e.g. Perry Hall moat, that are located adjacent to the River Tame and/or linked to access improvements to the river (Tame Valley Way footpath). These include a number of bridges (Water Orton Bridge, Perry Bridge).	Birmingham City Council and English Heritage
Landscape character and visual amenity	
Encouraging future development/ redevelopment to be set back from the river corridor and existing defences to be set back when replaced. This would help	Local Planning Authorities

Environmental Improvement Opportunities	Potential Partner
ensure that the river is restored as important feature of landscape.	
Creating new landscape features e.g. waterbodies in floodplain, as part of mineral restoration plans, through the Central Rivers Initiative Partnership.	Local Planning Authorities

We propose that these environmental improvements would be undertaken alongside or integrated into flood risk management works to implement the Strategy. We will review these opportunities in more detail during implementation of the Strategy to ensure that the priority opportunities are developed further. It is unlikely we will be able to undertake every opportunity identified. We may also add new opportunities that arise out of our more detailed investigations on a site by site basis.

We need to ensure that any improvements we undertake meet targets set for us by government and also help to achieve targets identified in our plans (for example River Basin Management Plans and Catchment Flood Management Plans).

Work to implement these opportunities is reliant on the Strategy being implemented, and will be influenced by the budget available, the work being undertaken to manage flood risk, as well as the targets to be achieved and the priority of these, and the involvement of partners.

We are aware that we have similar targets as other organisations, or can help other organisations achieve their targets through works to implement the Strategy. We are interested in working in partnership with other organisations or groups to achieve more together for the benefit of the environment and society than we can achieve alone. This is especially the case as some of the improvements identified are not a priority for us, but we could enable others to achieve them through our works.

4 Monitoring

4.1 Monitoring Plan

A fundamental part of the SEA process is to monitor the predicted significant environmental impacts of the Strategy against the actual impacts, to ensure that mitigation is effective and that no unforeseen impacts occur. Monitoring can also be used to address gaps in data, or uncertainty highlighted by the assessment or to provide a more comprehensive baseline for any review of the Strategy.

Table 4.1 summarises the proposed monitoring that is specific to the River Tame Strategy and that will be fed into any future review of the Strategy. We will undertake some of the monitoring through environmental assessments undertaken on projects that implement the Strategy.

Table 4.1: Monitoring plan for the Strategy

Strategic objectives	Sub-objectives	Indicators	Targets	Proposed monitoring until Strategy review and responsibility
To protect and, where possible, enhance biodiversity	To avoid damage to designated wildlife sites	Reported condition status of designated sites	Condition of designated sites	Environment Agency – Monitor through Strategy implementation
	To contribute to achieving UKBAP and local BAP objectives	Reported progress against BAP objectives and targets	Progress against BAP objectives/ targets for water related habitats/ species. Area of water related BAP habitat created / enhanced.	Environment Agency – Monitor through Strategy implementation, Defra targets achieved
	To enhance biodiversity in the urban environment	Areas of habitat and urban greenspace creation or enhancement	Area of water related BAP habitat and urban greenspace created / enhanced.	Environment Agency – Monitor through Strategy implementation
To avoid and, where possible, enhance possible effects on human health and population	To protect people and their property from the adverse effects of flooding	Numbers of people and properties affected by flooding	Numbers of people and properties protected from flooding. Numbers of properties covered by flood warning scheme. Numbers of properties signed up to flood warning scheme.	Environment Agency – Monitor through Strategy implementation, Defra targets achieved

Strategic objectives	Sub-objectives	Indicators	Targets	Proposed monitoring until Strategy review and responsibility
	To protect and enhance recreation and amenity facilities	Number and area of recreational and amenity facilities	Recreational sites enhanced as a result of flood risk management activities.	Environment Agency – Monitor through Strategy implementation
To protect and enhance land quality	To protect valuable land from adverse effects of flooding and safeguard soil quality and quantity	Area of valuable agricultural land at risk from flooding	Area of valuable agricultural land at risk of flooding. Area of floodplain agricultural land used for activities compatible with flood risk.	Environment Agency – Monitor through Strategy implementation and National Policy team
To protect and enhance water	Contribute to maintaining or improving water quality standards where feasible. Support achievement of Good Ecological Status/Potential under the Water Framework Directive (WFD).	General Quality Assessment Classification Grade. Achievement of Water Framework Directive objectives	Length of river achieving WFD objectives.	Environment Agency – Monitor through Strategy implementation, Defra targets achieved, and next cycle of Humber River Basin Management Plan
	Protect geomorphological features for the river and floodplain and, where possible, provide opportunities for enhancement.	Length of natural or unmodified river and area of unmodified floodplain	Length of river achieving WFD objectives. Length of river in which greater connectivity between river and floodplain achieved.	Environment Agency – Monitor through Strategy implementation, and next cycle of Humber River Basin Management Plan
To protect existing material assets	To protect infrastructure	Critical infrastructure (rail, road, water treatment works etc.) at risk from flooding	Key strategic transport networks and infrastructure protected from adverse effects of flooding.	Environment Agency – Monitor through Strategy implementation
To protect and enhance cultural heritage features	To minimise adverse effects on undiscovered or buried archaeology	Area and quality of potential archaeological assets threatened	Proposed flood risk management schemes for which appropriate archaeological study / watching brief carried out.	Environment Agency – Monitor through Strategy implementation
	To protect designated archaeological and historic features within the floodplain	Number of Scheduled Monuments and other designated features at risk from adverse effects of flooding	Number of Scheduled Monuments and other designated features at risk from adverse effects of flooding	Environment Agency – Monitor through Strategy implementation

Strategic objectives	Sub-objectives	Indicators	Targets	Proposed monitoring until Strategy review and responsibility
To protect and enhance landscape character / visual amenity	To avoid detrimental effects and enhance landscape character objectives	Number of valuable landscape features protected or enhanced	Number of sites at which landscape character improvements achieved.	Environment Agency – Monitor through Strategy implementation

5 Conclusion

This Statement of Environmental Particulars gives a brief overview of the SEA process and key outcomes for the River Tame Flood Risk Management Strategy. Overall, the Strategy development has been integrated with the SEA process and has comprehensively taken account of environmental issues and the recommendations from the ER. The approach has received general support from consultees and where appropriate, specific consultee comments have further influenced the Strategy and proposals within the SEA (for example environmental improvement opportunities). There are no significant changes in the Strategy proposals from the draft Strategy published in for consultation in May 2009, nor any significant changes to the SEA.

Although the consultation did not directly change the preferred options outlined in the SEA, the comments and recommendations have caused us to clarify some issues (for example the baseline), and add some detail to others (for example, mitigation and environmental opportunities).

There is the potential for some negative environmental impacts. For example, raising existing defences and constructing new defences will reduce public visibility of the watercourse, separate the river from the adjacent land, and introduce large visual masses into the urban landscape. Additionally, a number of infrastructure and recreational assets along with some properties will remain at risk from flooding. We also identified potential for our flood risk management works to increase flood risk in other locations. We have identified these impacts as far as possible at this strategic level and will work on these in more detail to ensure that these potential impacts are effectively mitigated. The monitoring plan addresses how the potential impacts can be measured and assessed during the implementation of the Strategy.

There are also significant opportunities for environmental improvement. In particular, creation of new BAP habitat and improvement of existing BAP habitat has been identified at a number of locations. We have also identified, with stakeholders, a wide range of opportunities for improvements to public engagement with the River Tame and its history and biodiversity, public access to the river, fish passage, and channel naturalisation.

We have identified some partnerships through consultation on the draft Strategy and ER, which we would like to develop to create a better place through the flood risk management and associated environmental improvement work we are proposing.

5.1 Next Steps

We will be implementing projects identified in the Strategy by undertaking more detailed studies and assessing the environmental impact of these as required as part of obtaining planning permission and/or obtaining other consents. These investigations will develop the project designs, impacts, mitigation and environmental opportunities. This

will be undertaken consistently with the preferred Strategy options identified, although in more detail than the SEA. Further consultation will be undertaken on the details of these schemes with stakeholders and the public before permissions are sought.

As the Strategy is to manage flood risk over 100 years, it will need to be reviewed at some point to ensure it is still proposing the most appropriate preferred options. We will review the SEA alongside any Strategy review undertaken.

6 Changes since the adoption of the Strategy

Following recent changes to Environment Agency policy we have amended our approach to environmental improvements on the River Tame. The draft Strategy recommended the creation of Biodiversity Action Plan (BAP) habitat as the main environmental opportunity. However, large scale freshwater BAP habitat creation at Middleton Lakes is no longer a priority target for the Environment Agency. New environmental targets set by government include our statutory requirement under the Water Framework Directive to improve the ecological quality of water bodies, for example improvements to water quality or creation of more natural channels, especially in the urban areas. Therefore, we will review environmental opportunities proposed in the Strategy and SEA and our priority will change to focus on these new targets. We have discussed this change with the key stakeholders affected.

We believe that this change will not affect the overall impacts of the SEA or Strategy as these improvements are above any mitigation required and this new targets is still focussed on improving biodiversity and ecology, although focussed more on rivers environments.

We have reviewed the proposals to improve flood storage in the upper Tame in more detail while investigating ways to implement the preferred option in reach four. As part of the consultation exercise concerns were raised by the RSPB and Sandwell Metropolitan Borough Council regarding the impact on birds and the nature reserve of using the storage area at Forge Mill more frequently. Further detailed investigation in to the operation of the existing flood storage areas has identified that stand alone improvements at Perry Hall Playing Fields will provide an acceptable reduction in flood risk downstream at Witton. This means that the Strategy can currently be implemented with none of the foreseen impacts at Forge Mill Lake. The improvements to the storage area at Perry Hall playing fields have recently been completed on site.

We believe that this change only has a positive change to the outcome of the SEA, as it has avoided the potential for negative impact to Forge Mill nature reserve and the breeding birds that use the site, while still reducing flood risk downstream.

In some cases the Strategy identifies new/improved defences which would benefit development land only. In these cases, we would expect the landowner to provide their own defences as part of any future redevelopment proposals.

This does not affect the outcome of the SEA as no additional properties are being put at flood risk.

Glossary

BAP	Biodiversity Action Plan
CFMP	Catchment Flood Management Plan
ER	Environmental Report
ESS	Environmental Stewardship Scheme
HA	Highways Agency
LNR	Local Nature Reserve
MBC	Metropolitan Borough Council
RIS	Regional Investment Site
RBMP	River Basin Management Plan
RSPB	Royal Society for the Protection of Birds
SEA	Strategic Environmental Assessment
SoEP	Statement of Environmental Particulars
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
UKBAP	United Kingdom Biodiversity Action Plan
WMBC	West Midlands Bird Club
WFD	Water Framework Directive

Appendix A

Consultation responses

Response from	Issues raised	How we have dealt with issues raised
RSPB	<p>Requesting further information about flood levels at Sandwell Valley/Forge Mill Lake.</p> <p>Wants to fully appreciate the implications on the viability of the Forge Mill site as a breeding site for waders. This is particularly with regard to increased rate and frequency of inundation and effects of water quality, to mitigate for this adequately.</p>	<p>Meetings were held with RSPB to discuss their concerns and broadly agree what mitigation would be required if work was undertaken at Forge Mill to lower the spillway. Improvement proposals at Middleton Lakes were also discussed.</p> <p>Before any work is undertaken in this location, further consultation would be undertaken on a detailed environmental assessment to fully understand and reduce/eliminate the likely impacts.</p> <p>We will hold further discussions with the RSPB once more details are known about how to implement the Strategy.</p>
	<p>Regarding the proposal to lower the spillway from the River Tame into Forge Mill Lake so that the flood storage can be used for flood events of 1 in 5 years instead of the existing design for 1 in 50 years. The increased use of the lake to receive floodwater may have an impact on breeding lapwings and other waterfowl that nest on the islands within the lake if floods occur during the breeding season, late March to early June. Nests with eggs and small young are particularly vulnerable. The main species of concern would be lapwings as they are red-listed as a species of high conservation concern, following national declines of >50% in the last 25 years. The RSPB reserve is regionally important for lapwings, holding up to 10 pairs each year nesting on the main island.</p>	<p>The draft and final Strategy propose changing the current flood frequency from the current design (1 in 10 year, not 1 in 50 year), to 1 in 5 year.</p>
	<p>We are concerned that although the current design is for 1 in 50 year floods, the spillway has been overtopped at least three times between 1987 and 2007, indicating that overtopping occurs during lesser flood events. If this pattern were to be repeated for a 1 in 5</p>	<p>See response above.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>year design, there is a very real risk of more frequent floods that would have serious impacts on breeding birds.</p> <p>Studies of breeding waders on the Ouse Washes in Cambridgeshire has shown that wading bird populations are not sustainable where regular spring flooding (one in five years or more) occurs.</p> <p>We also need to bear in mind the future impact of climate change and the prediction that our climate will become more extreme, with increased risk of flooding.</p> <p>There will also be increased risk of our birdwatching hide on the edge of Forge Mill Lake being flooded, which we have been advised will lead to premature deterioration of the building as well as putting it out of service for periods. It is technically feasible to raise the hide and access bridge but this would be a major and costly operation and the might look quite unsightly – currently it is “tucked away” in the bank around the lake.</p> <p>Want more detailed information on the likely increased future flood risk and estimated increase in lake level would be for different flood return periods.</p>	
	<p>There is also a risk of polluted water entering the lake during flood events as floodwaters are likely to be contaminated with urban runoff.</p>	<p>Due to the urban nature of the river catchment, and because Forge Mill Lake is within the natural floodplain, there is a risk of polluted water entering the lake during flood events. This is the case currently, although if the spillway is lowered the frequency of this happening would increase.</p>

Response from	Issues raised	How we have dealt with issues raised
		We will be looking at opportunities to reduce river pollution, with partners, as part of achieving the Humber River Basin Management Plan objectives.
	<p>The main enhancements we wish to explore as a partnership between Environment Agency, Sandwell Metropolitan Borough Council and the RSPB linked to the spillway lowering are:</p> <ul style="list-style-type: none"> • Creating more, and improved, islands within the whole lake for a variety of wading birds, especially lapwings, but also encouraging little ringed plover, oystercatcher and redshank to nest. • Creating more shallow water with islands in the Marsh Pool area of the RSPB reserve that currently sits about 2m above Forge Mill Lake. This could include installation of a water control system (e.g. electric pump powered by renewable energy) that enables management to deliver the optimum conditions for wading birds and as potential refuge for adults with young when the lake floods. • Creation of fringing reedbed areas using material dug from the Marsh Pool. This will benefit a range of wildlife, potentially including wintering bittern. • Explore in detail the potential to establish a bank across the lake in the vicinity of the RSPB reserve boundary (currently marked by a series of posts) that could serve to protect the main nesting islands from smaller flood events but set at the appropriate height below the spillway so it does not impede flood storage capacity. This solution might also provide sufficient protection from flooding for the hide. 	<p>We will consider these opportunities in more detail when developing the detail of works to implement the Strategy.</p> <p>We have included these as potential environmental opportunities in this document.</p>
	<p>The strategy indicates that the preferred options in reach seven will increase the risk of flooding in reach eight. This will impact on breeding birds nesting within the floodplain, particularly on islands within the lake system as they will be more vulnerable to floods during the breeding season. We therefore wish to see further</p>	<p>Our investigations have indicated that, as a result of the works proposed at Whitacre Heath, there may be a marginal increase in flood risk downstream (in the remainder of reach seven and reach eight). This increase is based on our high level assessment of the information</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>habitat improvements carried out at Middleton lakes to mitigate for this increase in flood risk.</p>	<p>we have now (for example approximate property threshold levels/ground levels). We will review this in more detail as part of any future scheme. We will consider the implications of any increased flood risk along with mitigation requirements within detailed environmental assessment.</p>
	<p>We welcome the inclusion of Middleton Lakes as site for environmental enhancement. We would like to develop two major habitats in partnership with you through this Strategy: Managing the lagoons and nesting islands within the current nature reserve to enhance their suitability for breeding and wintering waterfowl, and developing a major extension to Middleton Lakes reserve. This delivers the majority of the Catchment Flood Management Plan (CFMP) habitat creation target and priority Biodiversity Action Plan (BAP) habitat. The objective would be to create extensive areas of priority habitat and at the same time deliver flood management benefits downriver by increasing floodplain capacity in this section. This would involve partnership working to acquire land and restore wetland habitats.</p>	<p>We will consider these opportunities in more detail when developing the projects to implement the Strategy.</p>
	<p>We are concerned about a recent fish kill incident on the River Tame associated with a summer flood event on 26 June 2009. We consider it important that this Strategy supports the delivery of favourable ecological status for the Tame and reduces the potential for future fish kills.</p>	<p>We will implement the Strategy consistently with the requirements of the Humber River Basin Management Plan, and will be working towards good ecological status for the River Tame. This can only be achieved with partnership working, and especially with all organisations, private individuals, and businesses reducing their contribution to poor water quality in the river.</p>
<p>Sandwell Metropolitan Borough Council – public</p>	<p>There are public footpaths at Bescott, Forge Mill and Sheepwash where you are proposing to do work. Potential enhancement opportunities, linked to the Council's Rights Of Way Improvement Plan.</p>	<p>We will understand more about the implications on public rights of way when we develop works to implement the Strategy. Impacts to rights of way are dependent on details of where we may do work. These details are not</p>

Response from	Issues raised	How we have dealt with issues raised
rights of way		available through the Strategy work.
Wigginton and Hopwas Parish Council	<p>Want to understand the effects of conveyance improvements upstream on their village of Comberford.</p> <p>Want to know that the Environment Agency are aware of potential flooding at this location.</p>	<p>We are aware that properties in Comberford are currently at flood risk.</p> <p>Our investigations have indicated that there is potential for works upstream to affect downstream areas, including Comberford. This increase is based on our high level assessment of the information we have now (for example approximate property threshold levels/ground levels). We will review this in more detail as part of developing any future works.</p> <p>Further engagement will be undertaken with all affected communities once we know more about the works that may take place upstream, and therefore the likely impacts on downstream areas (including Comberford). We will directly contact individual homeowners likely to be put at increased risk as a result of any works so that we can determine the help we can provide to mitigate any increased flood risk caused by works upstream.</p>
	Want to know whether there will be any flood risk management works at Comberford.	The Strategy does not propose to undertake flood risk management works to reduce the existing flood risk at Comberford, but we will investigate undertaking individual property protection.
	The Parish Council has a flood warden which is part of a proactive approach by Lichfield District Council.	The Flood Warden Scheme is provided by Lichfield District Council. We are working with the council to provide advice and support.
Elford Parish Council	Raised queries regarding works to reduce the amount of water reaching downstream areas, the effects of this, and any future consultation with individual householders affected by increases in	Further engagement will be undertaken with all affected communities once we know more about the works that may take place upstream, and therefore the likely impacts

Response from	Issues raised	How we have dealt with issues raised
	<p>flooding (even if the works marginally impinge on the floodplain) to help plan and provide their own protective works.</p> <p>The potential to divert peak flows in the Green Brook around the village should demonstrate that the pumping station is failing to cope with flood flows adequately. The power situation at the pumping station should be reviewed rather than 'we will send someone with a generator' when the power fails.</p> <p>Wanted to know whether the houses in the village can be given notification of impending flood events.</p>	<p>on downstream areas (including Elford).</p> <p>We will directly contact individual homeowners likely to be put at increased risk as a result of any works so that we can determine the help we can provide to reduce the impact.</p> <p>We consider that the pumping station referred to is adequate for its purpose, and remote alarms will alert us of the need to take appropriate action in the event of a power failure. However, this watercourse is outside of the Strategy scope of work and so has not been considered.</p> <p>Elford is within our flood warning service area and we provided details of how to sign up for flood warnings. Further information about signing up to flood warning service is available in the Strategy.</p>
	<p>Can we have better channel maintenance to ensure that the channel and structures are all clear and fit for purpose?</p> <p>There is a public lack of awareness over the fundamental principals of flooding. Educate the public through simple easy to understand accessible information. Be clear that it cannot be prevented in every case, get the economic argument understood.</p>	<p>We have included clarification of the proposed future channel maintenance within the Strategy and also clarification on our role in channel maintenance with respect to blockages in the 'responses to the draft strategy consultation' section.</p> <p>We have tried to make the existing and future flood risk, management of flood risk, and the importance of economics for undertaking work clear in the Strategy. Our website is a resource that the public can access in order to increase their understanding of flooding and their flood risk and our role in flood risk management www.environment-agency.gov.uk</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>Give drainage maintenance the priority it deserves and fund it. Get local teams from the local community to manage and maintain the system there is no substitute for local knowledge. Have fully evaluated drainage impact analyses of all development; review design criteria - use higher standard storm intensities.</p>	<p>We have a strategic overview role for flood risk management from all sources, including surface water in England. We support and work closely in partnership with local authorities, who are responsible for managing flood risk from surface water locally. The planning process should deal with surface water drainage on newly developed sites.</p>
	<p>Flood land upstream of cities in preference to defences through cities. Maximise flooding in floodplains through management of waterway structures to attenuate flows - supported by intelligent computer controlled systems.</p>	<p>The Environmental Report (ER) and Statement of Environmental Particulars (SoEP) show the options that have been considered to reduce flooding throughout the River Tame catchment. We are proposing to better use existing flood storage within Birmingham to reduce flood risk. We do not consider there to be any additional opportunities for flood storage because of the volume of water that would need to be stored in a flood event to make a difference and the lack of opportunity for this. Our Strategy also proposes to flood the natural floodplain where possible while not increasing flood risk to properties. However, this is only possible downstream of Birmingham.</p>
	<p>Improve the linkages between regional water authorities and the Environment Agency to make the management of storm water a seamlessly managed process. Manage the whole water cycle more effectively from rainfall to discharge to sea. Encourage reinvestment by water authorities and highways authorities in their crumbling drainage infrastructure. Use local knowledge who will take ownership of the problem and have the knowledge to act quickly when needed.</p>	<p>We are working with local authorities and water companies to improve the management of surface water and surface water flooding along the Tame. The Strategy only seeks to reduce the risk of flooding from the River Tame. We support and work closely in partnership with local authorities, who are responsible for managing flood risk from surface water locally.</p>
	<p>Stop building in flood sensitive areas.</p>	<p>We have a role in influencing planning proposals, including the appropriateness of development within the</p>

Response from	Issues raised	How we have dealt with issues raised
		floodplain, and this role will continue independently of the Strategy.
Highways Agency	<p>The Highways Agency (HA) need to ensure stability and integrity of the Strategic Road Network (SRN) and given the proximity of the Tame would like to be involved to ensure that the SRN (in this instance the M5, M6, M42, M6 Toll and A5 Trunk road) is in no way compromised by potential works and to ensure access to the SRN for maintenance purposes. The HA has a number of maintenance repair contracts adjacent or underneath the various sections of the SRN and these also need consideration.</p> <p>Raised detailed queries about work to implement the Strategy on the Oldbury Arm, Bescott Junction, Gravelly Hill and Bromford.</p>	<p>We held a meeting with the Highways Agency during consultation on draft Strategy.</p> <p>We will undertake further discussions with you when working on the detail to implement the strategy to ensure that structures and access are not affected, and we also discuss land ownership especially under elevated sections of the SRN.</p>
British Waterways	<p>If there is a change in the current flood risk to their waterways network because of increased floodwater downstream they wanted to know what could be done about it.</p> <p>Would like to look a little more in depth at how the proposals will affect the flood risk to the canal at Curdworth.</p> <p>Aware that the River Tame being concentrated through only two of the seven arches under the Salford Aqueduct has caused a major bottleneck and is causing scour around the central piers in the river bed as well as silt build up at either side of the channel.</p>	<p>We will consult British Waterways about how our proposals to implement the Strategy may affect the waterways network once more detail is known.</p> <p>We will look in more depth at Curdworth, where the River Tame flows in to the Birmingham and Fazeley Canal and causes flooding downstream.</p> <p>We will determine if we can alleviate erosion of the Salford Aqueduct piers in conjunction with any flood risk management work we may undertake, taking into account the historic nature of the structure.</p> <p>We will discuss with British Waterways regeneration department any potential for improvements in locations where we may be undertaking flood risk management work in future.</p>
Warwickshire	Explained the importance of Kingsbury Water Park in terms of	We have recognised Kingsbury Water Park in the

Response from	Issues raised	How we have dealt with issues raised
County Council	<p>supporting the local and wider North Warwickshire economy by attracting recreational users.</p> <p>Wanted to know whether raising the banks at Whitacre Heath increase the flooding of this site. This affects businesses (as the park is closed) and losses of expensive fish stocks. Flooding occurs to the admin offices and erosion to the banks of the pools within the park</p> <p>The Strategy has ignored the flooding of the water park at times of high rainfall.</p>	<p>Environmental Report 'Key issues, constraints and opportunities' section as an important recreational asset within the River Tame corridor. In our assessment, the preferred option within reach seven is considered to have a major adverse impact on the Water Park. This is partly due to the positive wording of the objective to not reduce the flood risk at this location. Our investigations have indicated that, as a result of the works proposed at Whitacre Heath and based on our high level assessment of the information we have now, there may be a marginal increase in flood risk in this location. We will review this in more detail as part of any future scheme, and discuss appropriate mitigation if risk is increased.</p> <p>If there is no change in flood risk due to our works, it is for the owners to be aware of flood risk and manage the current and future flood risk as appropriate as riparian owner. Unfortunately we cannot economically justify flood risk management work solely to benefit recreation facilities or any other infrastructure economically. We are able to provide advice to help address any specific flooding problems.</p> <p>The justification for the preferred option in reach six is within the Environmental Report and SoEP.</p> <p>As Kingsbury Water Park has been taken account of within the Strategic Environmental Assessment (SEA), which balances all the environmental and social issues, we have not altered the assessment or the</p>

Response from	Issues raised	How we have dealt with issues raised
	<p data-bbox="398 459 1256 560">Eight dwellings are at risk. A scheme to provide a defence to lock cottages and stop water from entering canal has been identified, can this be undertaken?</p> <p data-bbox="398 596 1256 730">Concerns about the large bunds at the water ski centre just to the north of Kingsbury village stopping flood water from flowing back into the channel - instead it goes into the Birmingham and Fazeley canal as a flood flow route.</p> <p data-bbox="398 735 1256 831">A penstock was also added to Fisher Mill Bridge sluice gates to allow access water out of the canal - but cannot be operated at times of flood.</p>	<p data-bbox="1305 325 2067 459">environmentally preferred option. The preferred option within the Strategy takes into account the economic, environmental and social issues and recommends the preferred option on this basis.</p> <p data-bbox="1305 464 2067 598">Flood risk management works to reduce the flood risk to the cottages only is not economically viable. However, we will investigate this location in more detail in combination with works to prevent flood water entering the canal.</p> <p data-bbox="1305 603 2067 730">See Strategy 'responses to the draft Strategy'.</p> <p data-bbox="1305 735 2067 831">We will investigate this in more detail in discussions with British Waterways when considering work to prevent flood water entering the canal.</p>
English Heritage	<p data-bbox="398 839 1256 973">Made comments about cultural heritage and landscape objectives in future SEAs to take into account the full range of cultural heritage features such as parks and gardens, buildings and valued townscapes.</p> <p data-bbox="398 1010 1256 1106">Although the baseline outline for archaeology and cultural heritage appears comprehensive, particularly with regard to archaeology, conservation areas have been omitted.</p> <p data-bbox="398 1142 1256 1206">Highlighted that four boroughs of the Black Country are covered by an urban historic landscape characterisation</p>	<p data-bbox="1305 839 2067 903">We will take the English Heritage guidance into account in future when setting objectives for SEAs.</p> <p data-bbox="1305 1010 2067 1340">We unfortunately did not include Conservation Areas in our assessment. We have not updated the SEA with this baseline information or taken this information through the assessment. We do not believe that at this stage it would alter the preferred strategic level environmental option or Strategy option chosen. We have considered listed buildings which are indicative of areas of historic interest in the urban landscape, and have considered the macro scale landscape. We will include Conservation Areas within our more detailed assessments of the projects to</p>

Response from	Issues raised	How we have dealt with issues raised
		implement the Strategy. For similar reasons, we are also not proposing to update the ER with information on urban historic landscape characterisation, although will also consider this within the implementation of the strategy.
	Welcome the use of a Desk Based Assessment to identify archaeological sites and listed buildings and areas of archaeological importance.	No response needed.
	Welcome the proposal to improve the information on and signage of historic sites and features, linked to more general interpretative material.	We will consider how and where it may be appropriate to provide this information linked to any works to implement the Strategy.
Advantage West Midlands	As the Strategy protects a number of properties and will also safeguard businesses and jobs, it is aligned with Strategic Objective 2.4 of the West Midlands Economic Strategy. This Objective suggests that the region should manage the impacts of climate change and respond to threats to future growth in a sustainable way that will be key to ensuring that the region can prosper in the long term.	The Strategy explains how we propose to manage the effect of climate change on flood risk management decisions over the next 100 years.
	The most relevant part of the Strategy is the Perry Barr and Witton 'reach' due to the location of the proposed Aston Regional Investment Site (RIS). We have land ownership interests in this area. We would support a combination of Option 3 and Option 6, which include both maintaining existing defences, improving and increasing certain sections of the existing defences and constructing new ones. These proposals do not affect our land or the proposed RIS. However, they will significantly reduce flooding in the surrounding areas, particularly around the residential area of Witton. We welcome these proposals in principle as helping to manage and mitigate potential climate change effects in a positive	As is suggested in the comments, the Aston RIS is not in the floodplain. However, this reach is at high flood risk and so we will take this into account. We have not changed our preferred options 3 and 6 in this location between the draft and final Strategy.

Response from	Issues raised	How we have dealt with issues raised
	and proactive way.	
Natural England	<p>Natural England support the strategy and consider that the preferred options are likely to lead to an environmentally acceptable solution with respect to River Blythe, Alvecote Pools, Birches Barn Meadow, Whitacre Heath, and Middleton Pool Sites of Special Scientific Interest (SSSIs). No assessment under the Habitat Regulations 1994 is required.</p> <p>Would like to work with the Environment Agency to identify and develop opportunities to retain and enhance recreational open spaces, focussing on the river corridor, footpath and other recreational developments. This includes heritage value of the area.</p> <p>Urged us to work in partnership with the National Farmers Union, Wildlife Trusts, Forestry Commission, land managers, etc to develop ways to reduce surface runoff, increase flow attenuation, and provide opportunities for flood storage through land use change. There are opportunities for higher level stewardship and entry level stewardship to contribute to land use change.</p> <p>Two SSSIs (Alvecote Pools and Birches Barn Meadow, reach eight) noted in the baseline of the SEA appear to be missing from the impact assessment.</p>	<p>We will work with Natural England to ensure this continues to be the case while we develop the detail of proposals to implement the Strategy.</p> <p>We will look to work with Natural England, and other partners, in this respect when we are developing detail of work to implement the strategy.</p> <p>We considered these options within the options appraisal and were not able to show the level of flood reduction needed at a strategic level on the River Tame due to a lack of land upstream of the main areas at flood risk and areas downstream outside of the flood plain in which to store additional water. We are willing to support works that will reduce flood risk in localised areas.</p> <p>These two sites both lie on the River Anker, and are outside of the 1 in 100 flood extent for the River Tame. They have therefore been omitted from the assessment, and we do not consider them to be affected by any Strategy proposals to alter flood flows.</p>
Birmingham City Council - Biodiversity	<p>The Strategy is an opportunity to reduce flood risk at the same time as improving biodiversity and recreational use of the Tame. Maximum biodiversity gain has been identified as possible at Forge Mill Lake and Park Hall Farm, and could be achieved in the Tame Valley from Castle Vale through to Tamworth. Limited opportunities for enhancement may exist in the Castle Vale stretches and around</p>	<p>Our SEA has identified potential biodiversity, recreation and other improvements that could be undertaken with flood risk management works. We have added these suggestions to the list of potential improvements and will look in more detail at the project stage at the improvements to biodiversity to ensure they help us</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>J6 of M6.</p> <p>The opportunities for the Birmingham section of the Tame lie mainly in re-engaging the public with the river, through promotion and development of the Tame walkway, linkages from adjacent parks and open space and interpretation/education/recreation.</p> <p>Actions should be tied in with sympathetic management by riparian land-owners to gain maximum benefit.</p> <p>Birmingham City Council is the main riparian landowner through the Birmingham area of the Tame, and has a further interest in the section of the Tame at Elford/Fisherwick, the riparian zone being owned by Birmingham City Council and leased as agricultural tenancies.</p> <p>The Tame Strategy should have support and reflect the Tame Valley Project aims.</p>	<p>achieve our Environment Agency, and wider, targets. We will also engage further with riparian and other landowners at this time.</p> <p>We are one of the partners working on the Tame Valley Project and this project will take this work into account.</p>
	<p>Changes to the flood capacity of Forge Mill Pool in Sandwell Valley - The immediate area bounding the Tame to the south and the east is in Birmingham and forms part of the Hilltop proposed Local Nature Reserve. Creation of more islands and planting reedbeds both within the RSPB leased part of the pool and the rest of the pool, could deliver major biodiversity gains to the whole Sandwell Valley.</p>	<p>We have added this to our list of mitigation measures within this SoEP to be taken into account at the project stage, when looking at proposed works in this site in more detail.</p>
	<p>Improvement of the damaged flood defences at Bromford should also be considered for replacement with a more sympathetic environmental solution. This could use stone block and green engineering as has been employed on the Tame south of the Perry Barr storage area. At present the channel consists of a brick lined</p>	<p>We believe that the wall in question is not a flood defence, but supports the higher ground behind. Therefore it is the responsibility of the riparian owner to maintain this.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>base and two vertical brick walls, one of which is collapsing. Silt is accreting around 3 dumped cars within the river channel.</p> <p>The land adjacent to this site is being developed by Birmingham City Council as a green waste recycling compound, the mitigation for which will involve the creation of a wet woodland running down to the river channel.</p> <p>The Tame Strategy should promote good practice (sustainable drainage systems, green roofs, creation of flood alleviation areas and support locally adopted policies in developing these further).</p> <p>The Strategy should deal with water quality issues from wrong connections, combined sewer overflows, contaminated land that impacts on biodiversity of the Tame.</p>	<p>We do not believe that these cars are causing any additional flood risk, and therefore it is the responsibility of the riparian landowner to remove these.</p> <p>We will look at how to use more environmentally beneficial materials for any replacement or new flood defences, and will take the green waste recycling site into account at the project stage, when looking at proposed works in more detail.</p> <p>We will work with partners to reduce poor water quality and other water pollution issues where we can through the project work we undertake to reduce flood risk. We will also promote good practice, and highlight where others can make improvements. We currently provide advice on good practice, as suggested, on planning applications. However, none of these issues are part of the Strategy to manage river flooding and therefore we have not amended our Strategy.</p>
Hyder Consulting (on behalf of Severn Trent Water)	<p>Star City pipe bridge removal is owned by Severn Trent Water and is currently redundant and has been capped off. Severn Trent cannot confirm at present whether the asset may be used in the future, but are willing to discuss further.</p> <p>The bridge is still used as a walkway route and any decision to remove it would need to be approved by the landowners (National Grid).</p>	We will continue to have discussions with Severn Trent about the proposed removal of the pipe bridge when developing the project details.
West Midlands Business Council	The floods that have impacted on the business community in the River Tame area have cost the regional economy millions of pounds. Delays in just in time deliveries, flooded business premises and flooded roads from 2007 are still being felt in the business	We have noted this.

Response from	Issues raised	How we have dealt with issues raised
	<p>cycles of local firms. The threat of flooding – combined with a recession – is a scenario that business will try to avoid so that local jobs are not threatened. The impact of flooding in the River Tame area also has a disproportionate impact on the regional economy – as well as on the local economy. The River Tame area covers, for instance, Birmingham, Walsall and Tamworth. This area equates to just under 5% of national gross value added with a range of business sectors, from manufacturing, professional services as well as farming, being located in this area. Therefore, our response to this submission reflects the economic primacy of this area to the national and regional economy as well as expressing the need to safeguard local jobs during an economic downturn.</p>	
	<p>Parts of the River Tame area, such as Birmingham and the Black Country, are particularly prone to groundwater flooding. We understand that this would be aggravated by potential flooding from the River Tame. The West Midlands Regional Assembly report notes that: There is currently no one organisation with responsibility to respond to groundwater flooding (paragraph 4.5.15). Business believes that this situation should not continue and it should be made clear in the River Tame strategy that the Environment Agency assumes responsibility for dealing with groundwater flooding, rather than confusion as to different bodies being responsible for different forms of flooding in the River Tame area.</p>	<p>At the time of the 2007 floods, and our 2009 consultation, there was no one organisation responsible for groundwater flooding. The Environmental Report explains lessons learnt from the Pitt Review in section 3.2.3.</p> <p>The Environment Agency now has a central role in managing flood risk. We have the strategic overview role for flood risk management from all sources, including groundwater in England. We support and work closely in partnership with local authorities, who are responsible for managing flood risk from groundwater locally.</p>
	<p>The consultation, while referring to the need for a flood warning system, goes into no detail on this matter. This is a matter of grave concern for businesses who became acutely aware of the lack of warning in 2007 of the oncoming floods caused, in part, by a lack of a joined up warning approach between the Environment Agency and the Meteorological Office. We propose that greater detail is included in the River Tame strategy as to how this flood warning</p>	<p>We have provided more detail in our Strategy on how the flood warning system operates, how you can find out whether you are at flood risk, and how residents and businesses can register for flood warnings.</p> <p>We have since improved our flood warning system, and flood action groups and flood wardens have been</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>system will operate and how local businesses and residents will be made aware of the flood warnings.</p>	<p>established in partnership to improve local flood awareness. If you are concerned about your flood risk we encourage you to look on our website for more information. You can get flood warnings for private properties and businesses. More detail is available in the Strategy.</p>
	<p>The draft River Tame Strategy does not refer to the draft Regional Spatial Strategy, which is currently being considered by Government planning inspectors and proposes a significant increase in house building across the West Midlands region. This includes a very significant rise in house building rates over the next 20 years in Birmingham and the Black Country.</p>	<p>We have considered the West Midlands Regional Spatial Strategy and the policy in question within the SEA, and it is documented in the Environmental Report. This has then influenced the Strategy.</p> <p>Future houses that may be built were not considered in future projections of flood risk because any new development at flood risk would need to demonstrate that it is not at unacceptable flood risk. This would be the responsibility of the developer.</p>
	<p>We note that the River Tame flood catchment area lies close to the country's largest inland oil depot at Kingsbury in Warwickshire. The security of this depot is critical for business continuity as well as for the strategic interests of the country. We would therefore request clarification that the proposals included in the draft document will provide full security to the depot from flooding.</p>	<p>This site is not at flood risk and therefore was not considered in the Strategy.</p>
<p>West Midlands Bird Club</p>	<p>Want to be made aware of progress with Ladywalk and Forge Mill Lake. Potential biodiversity improvements identified for Ladywalk that WMBC would like to undertake include:</p> <ul style="list-style-type: none"> • Management of habitat – managing the silting up of ditches, management of Himalayan Balsam, grassland to be turned into more marshy area, reprofiling of islands, management of tree encroachment, create more wading bird habitat and 	<p>We held a meeting with West Midlands Bird Club (WMBC) during the consultation. We have included these potential improvements in the SoEP, to be considered when we look at the flood risk management works in more detail.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>open water (move spoil around to create spits into open water);</p> <ul style="list-style-type: none"> • Improve fish habitat for species present in pools; • Access improvements – to second bird hide. Existing public hide from public footpath along edge of site; • Need to be a member to access site; • Land is leased from Eon. 	
Black Country Consortium	The Consortium is currently leading on the development of the Phase 2 Environmental Infrastructure Programme - referred to as the 'Landscape Action Plan' in the West Midlands Regional Spatial Strategy. We would expect that the work on this by specialists will take on board the opportunities afforded by Flood Risk Management, e.g. of the Tame and links to other environmental features in the area - e.g. green infrastructure/ canals, etc.	We will take this work into account when we develop more details within the projects to implement the Strategy.
Birmingham City Council - Archaeology	<p>Concerned that archaeology and the cultural heritage is under-represented in the assessment, and that the Desk Based Archaeology Report for the Tame catchment has not been adequately consulted. There is an over-emphasis on designated sites (scheduled monuments and listed buildings), which are a small proportion of the historic environment, rather than a consideration of all historic environment assets, whether or not designated.</p> <p>It is wrong to assume that the archaeological impact will be low in previously developed area, for example palaeoenvironmental deposits have been found alongside the Tame in Perry Barr.</p> <p>Mitigation measures for the impact of proposals on the cultural heritage are described in the tables as archaeological desk-based assessment followed by an archaeological watching brief during</p>	<p>We will be considering designated and non-designated archaeological impacts within our detailed assessments of proposed works to implement the Strategy.</p> <p>These assumptions have been made where we are proposing to undertake flood risk management works along the existing alignment, i.e. they would previously have been disturbed and therefore the risk of finding archaeology is lower than elsewhere. The term 'Low' is relative, and there is nowhere we consider there to be no risk of undiscovered archaeology.</p> <p>Your response describes the process we follow. We have amended our wording on mitigation within this SoEP to clarify this point.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>works. This will not always be adequate because the desk-based assessment may indicate that archaeological remains are of such importance that their preservation is required and therefore design details need to be modified, or that the extent, complexity and significance of archaeological remains is such that more detailed archaeological work is required.</p> <p>It is important to ensure that enhancement opportunities identified for one aspect do not have an adverse effect on another, e.g. setting back of river defences in Sandwell Valley and Perry Hall Playing Fields may be beneficial for some aspects but may be detrimental to archaeological remains.</p> <p>Proposals for signage and public interpretation should not be restricted to scheduled monuments and listed buildings, e.g. Perry Hall moat deserves interpretation. The signage and public interpretation should be incorporated into the proposed improvements in public path networks.</p>	<p>We undertake a detailed environmental assessment on any works proposed in order to identify and manage all environmental impacts. We will follow this procedure for any enhancement works.</p> <p>We have added these suggestions to our list of potential opportunities within this SoEP and will consider them further when developing our proposals to implement the Strategy and associated environmental improvement opportunities.</p>
Sandwell Metropolitan Borough Council – Nature Conservation	<p>The majority of Forge Mill Lake (75%) is owned and managed by Sandwell MBC as a designated local nature reserve and the council is keen to continue to manage the site for the maximum benefit to visitors and biodiversity. We would request the following:</p> <ul style="list-style-type: none"> • Reprofilng of north island to produce a more gradual gradient out of the water at the north end and around the two spurs to allow a succession of marginal vegetation to develop to provide habitat for wading birds. At the south end the island height to be raised to create a refuge for ground nesting birds in the event of flooding. A steep bank could be created here with holes to provide a nesting opportunity for sand martins. • Create an area of shingle on the island to provide a nesting site for terns. 	<p>Meeting held with Sandwell Metropolitan Borough Council (MBC) to discuss the proposals and likely mitigation required before this response was sent.</p> <p>We have added these mitigation suggestions to this SoEP and will consider these further when developing the detail of our proposals to implement the strategy. This will allow us to understand more about the potential impact on the footpath and other site uses to better determine the required mitigation.</p>

Response from	Issues raised	How we have dealt with issues raised
	<ul style="list-style-type: none"> • Reprofile the lake shore where possible to provide a more gradual gradient into the water, to improve the marginal vegetation and to benefit wading birds. • Extend the area of phragmites reed beds around the shore at the north end of the lake and around the north eastern side towards the RSPB reserve. • Create two or three floating islands in the deeper central area of the lake for habitat for nesting terns. <p>We also have concerns about lowering a further section of the path would result in it being blocked more frequently and longer by floodwater. Perhaps an elevated section that will allow floodwater to pass underneath should be considered. This is a well used path and part of the national Sustrans cycleway and needs to be Disability Discrimination Act compliant.</p>	
Middle Trent Angling Consultative Association	<p>The following points are made as this organisation's response to the proposed Strategy:</p> <p>It is our understanding that this SEA falls within the Humber River Basin Management Plan (RBMP) SEA and this should be recognised prominently in the introduction with a detailed section explaining how these actions meet the requirements of the Humber RBMP. The relationship with the Humber RBMP SEA should flow through the document.</p> <p>Repeatedly, mention is made that this is a River Tame catchment strategy. For this to be correct then all the tributaries of the Tame should be taken into account including the head waters of the Anker, Cole and Blythe. This has not been done, or at least if it has then reasons for excluding comment have not been given. It would</p>	<p>The SEA documented in the Environmental Report has solely been undertaken to understand the environmental implications of the draft River Tame Flood Risk Management Strategy. The SEA does take the Humber River Basin Management Plan (RBMP) into account, as well as many other Plans (see Environmental Report Appendix A), but its purpose is not to implement the RBMP. The environmental assessment considers how the Strategy preferred options may help achieve good ecological status, in line with the RBMP.</p> <p>We have amended the Strategy document in respect of the use of the word 'catchment' where it is applicable to do so.</p> <p>We considered the tributaries of the River Tame as</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>have made more sense for this strategy to have embraced the same area as the Tame, Anker and Mease Catchment Abstraction Management Strategy to give a proper catchment prospective. This would allow cross referencing with water resources and provide the basis for an integrated catchment management plan as will be required as we progress through the Water Framework Directive (WFD) cycles and recognized by Defra.</p>	<p>opportunities for flood storage in the options appraisal. We did not include the tributaries within the Strategy; the River Tame catchment is considered in the River Trent CFMP.</p>
	<p>Reach seven: Water Orton, Lea Marston and Kingsbury: The purification lakes at Lea Marston are owned by the Environment Agency and present are structures preventing the upstream movement of fish. The five year Environment Agency Midlands Region Fisheries Plan recognises these as being detrimental to the Tame and provision of fish passes here should be incorporated into this plan. No analysis has been undertaken into expanding Lea Marston as a flood storage area nor has there been comment into how the facility can be improved to cope with increased water quality issues as identified in Significant Water Management Issues for the Tame.</p>	<p>We did consider expanding Lea Marston to provide additional flood storage within the options appraisal. The lakes are not designed as a flood storage area, and are permanently wet to enable them to function as sedimentation lakes. Therefore, flood storage here is not a feasible option because there is minimal additional flood storage capacity.</p> <p>We are considering works to reduce the issues associated with sediment being washed out of the Lakes separately to this Strategy. We are also undertaking fish passage improvements project separate to the Strategy, which includes improving fish passage on weirs in Lea Marston Lakes. However, we have included improvements to fish passage in this SoEP to include weirs not included in the separate project. We are working towards good ecological status in line with the RBMP with all these actions.</p>
	<p>5.6.4 Fisheries: It is incorrect to state that there has been no stocking of the Tame since 2002 and further reference should be made to Environment Agency Fisheries. The Tame was last stocked, to our knowledge, in December 2008.</p>	<p>We have stocked the Tame with fish every year since the Strategy was consulted on, in response to pollution incidents and the resultant fish kills. We hope to reduce the need to do this in future by improving fish passage upstream. As this information does not change the</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>5.7.1 Water based recreation: There are no rights of navigation on the lower Tame, Anker, Blythe, Cole or Rea and no voluntary access agreements in place. Any kayaking (or the use of jet skis) that does take place is illegal. We believe that the source of this information is a book written as a guide to kayaking this area which deliberately ignores the law of trespass. When it was published the Environment Agency took legal action to force the author to retract those sections that advocated kayaking over Environment Agency owned land. This sentence should therefore be removed so as not to encourage illegal activities.</p>	<p>preferred environmental option and the preferred Strategy option we have not updated the SEA.</p> <p>We have added wording to clarify this error within this SoEP.</p>
Warwickshire Wildlife Trust	<p>Overall the Trust recognises that considerable thought has been put into the Strategy to date, and there are several good statements and objectives. We welcome the statements regarding improvements to biodiversity, however, the Trust would wish to see a much stronger stance on tackling biodiversity loss, within the needs of a flood risk strategy. It is essential that the need to reconnect rivers with their floodplains is recognised as a key way to manage flood and potential damage. Each reach should be assessed for options to fulfil this approach. Whilst there are considerable limitations along the river length due to past development and channelisation, there may be other options which have not been fully considered as yet. One aim should be to ensure that the river and floods can flow more naturally, wherever this is feasible.</p>	<p>We will look for environmental improvements that meet our targets, and those of partners where possible, and this will include biodiversity.</p> <p>We have explained the wide range of options considered to manage and reduce flood risk for each reach, and no further options have been suggested. As you suggest, this is constrained by past development and channelisation, and this means that at present the opportunity for biodiversity improvements within the urban areas are limited.</p> <p>We have a role influencing future planning proposals and will continue to advise that development be set back from the river over time. This would then allow some re-</p>

Response from	Issues raised	How we have dealt with issues raised
		connection of the river with its floodplain within an urban setting.
	<p>Want to understand the impact of raising the flood bank at Whitacre Heath, any changes to length of flooding and timing of flooding identified by modelling work.</p> <p>The Trust wishes to discuss in more detail opportunities to address biodiversity losses due to flooding along the Tame Valley, for example loss of wader chicks because of flooding in spring, and mitigation measures to reduce these losses.</p>	<p>We met Warwickshire Wildlife Trust during consultation on the draft Strategy. We will have further discussions with the Trust when we know more about the likelihood of increased flooding downstream caused by works adjacent to Whitacre Heath.</p>
	<p>As lead partner in the Tame Valley Partnership, the Trust wishes to ensure that the actions proposed with regard to flood risk do not damage quality and level of current biodiversity, nor prevent enhancements in the future. The partnership will wish to work with the Environment Agency to achieve the best solutions to meet objectives for all organisations concerned.</p>	<p>We are a partner in the Tame Valley Partnership and are aware of the proposals. We have taken these into account in the Strategy and will continue to while developing detailed proposals to implement the Strategy.</p>
	<p>With regard to the flood risk, are the maps that are within the Strategy the revised modelling maps, allowing for the increased level of flooding events, or the previous versions?</p>	<p>Maps in the Strategy show the areas that currently flood (with and without defences) and the areas that will benefit from the Strategy preferred option. Some of the areas shaded green include the increased area we know will flood due to works up or downstream (e.g. reach five) that means we need to undertake mitigation work to manage the flood risk. The maps do not show any increase in flood extent in future due to climate change, or any areas downstream where there is uncertainty as to whether works to implement the Strategy will increase flood risk.</p>
	<p>Initial comments per section of Environmental report.</p> <p>2.3.5 Sources of information: The information from the Warwickshire, Coventry and Solihull Habitat Biodiversity Audit is not listed in the sources of data. This audit gives a Phase 1 habitat</p>	<p>We will take this level of detailed Phase 1 survey information into account at the project stage when developing further detail on the proposed works, as we do</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>survey of the whole sub-region, updated on a rolling programme. Whilst the existing data used captures the areas of high biodiversity levels, it is important to recognise the range of habitats present in the area which need appropriate management, and which could, with suitable management regimes, be enhanced to greater biodiversity value. Many areas are degraded due to previous poor management, impacts of pollution and urbanisation. It is strongly recommended that the HBA information is consulted and used in planning land management within the Valley.</p> <p>The level of detail given for sites of importance for biodiversity should be the equivalent of the note regarding all historical places being listed within 1km of river. Ensuring a good level of biodiversity is essential to the good condition of the river and its ability to fulfil ecosystem functions. All sites of biodiversity interest should be noted along the river length, not just those of high biodiversity value as currently.</p> <p>Whitacre Heath, and Ladywalk reserve should be included in the section on page 39-40, where other key sites are listed. It is not clear on what basis the sites that are noted here have been selected.</p> <p>Page 61 – Whitacre Heath – should refer to Warwickshire Wildlife Trust as manager of the site, as other organisations are referred to in particular site descriptions.</p>	<p>not consider it appropriate to consider at a strategic level.</p> <p>We consider that the level of detail given for biodiversity is consistent with that for the historical environment, and applicable to the strategic level being considered. The wording we included may have been misleading - we undertook a high level desk based assessment for heritage resources.</p> <p>The section summarises the other plans and policies we have considered while undertaking the SEA. The sites mentioned were in these plans. Whitacre Heath is considered within the Biodiversity baseline section. Ladywalk has been considered by the SEA, and is identified as a privately owned recreational space and within the potential environmental opportunities.</p> <p>We have noted the site managers for future use. However, as this will not affect the environmental preferred option or the strategic preferred option we have not updated the SEA.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>Re Brueton Park reference: Warwickshire Wildlife Trust should be noted as manager of nature reserve in Brueton Park.</p> <p>It should be noted that North Warwickshire Borough Council are actively developing a project to designate five Local Nature Reserves, most of which will have a link with the Rivers Tame or Cole.</p>	<p>We will consider any newly designated Local Nature Reserves when developing the proposals to implement the Strategy in more detail.</p>
	<p>Under section 5.6.1 the Trust would like to see the Tame Valley Wetland Project's name and vision stated clearly. The vision is: <i>"The Tame Valley Wetlands Project will create a large area for conservation by working with partners to restore, improve and create wetland habitats that have multi-functional benefits. The wetlands created and protected will be rich in wildlife, contribute to the achievement of local and national Biodiversity Action Plan targets, improve the Tame Valley for amenity, recreation and education, contribute to catchment flood management schemes, sustainable drainage systems and environmental stewardship schemes"</i>. (Please note that the exact wording of this vision and the project's aims and objectives are being reviewed and therefore may change slightly in the coming weeks).</p> <p>The project will also focus on public awareness of the Tame for its wildlife and recreational value and thus can also be linked into section 5.7.2. Community involvement and partnership working on a landscape scale is key to the project, as part of the Warwickshire Wildlife Trust's Living Landscapes approach, and the Trust aims to include as many landowners and organisations as possible. Please see below for ways in which partners can be included in the Flood Risk Management Strategy.</p>	<p>We are aware of the Tame Valley Wetland Project as we are a partner, and will be taking the project into account when working on projects to implement the Strategy. We have noted the comments, but as this will not affect the environmental preferred option or the strategic preferred option we have not updated the SEA.</p>
	<p>There is potential to develop opportunities for in-river</p>	<p>We will be considering in-river improvements further</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>enhancements, as part of river adaptations. It is important that dredging and increasing flow are not seen as the only options to address floods and flow of water.</p> <p>Reach seven. Option 3 (maintain existing flood defences) and 6 (localised improvements) are stated as the preferred options at present in reach seven. However, the Trust believes that options 4 (optimise existing storage areas) and 5 (increase flood storage) are also options that have great potential in this reach (see comments below on Whitacre Heath SSSI and Lea Marston lakes).</p> <p>The Strategy mentions that ‘channel maintenance’ will be a preferred option in some areas – what areas would this be carried out in, and to what extent would the river’s geomorphology be altered to the detriment of natural features and wildlife? The Trust would like to see more parts of the river re-naturalised, allowing for erosional and depositional processes and features to occur naturally where possible, both for the benefit of wildlife and for aesthetic reasons.</p>	<p>when developing the detail to implement the Strategy and will take these comments into account.</p> <p>We have considered the options you suggest. Section 6.3.2(g) of the Environmental Report explains that although they may be better environmentally, option 5 is not technically feasible and there are no existing storage areas for us to consider option 4. This is because the existing floodplain cannot be used for flood water storage as it will already be flooded. This may locally reduce flood levels for small flood events.</p> <p>The preferred option you are referring to is Option 3: to maintain the existing level of flood risk management for an area. This means that we will continue our management activities where we already undertake them. One aspect of this is channel maintenance. We have included clarification of the proposed future channel maintenance within the Strategy and also clarification on our role in channel maintenance with respect to blockages in the ‘responses to the draft strategy consultation’ section.</p> <p>We assess all our works to ensure that we do not deteriorate or prevent achievement of good ecological status in line with the Humber River Basin Management Plan. Geomorphology would be considered as part of this.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>In reach seven, where there are many important wetland sites, options 4 and 5 would be preferable (optimise and increase flood storage areas, i.e. enhance existing wetland areas and create new ones). It would be beneficial to remove man-made channel structures (see comments below on Eon-owned land) and allow the river to become better connected to its floodplain and the wetlands that it feeds. This would meet two of the Strategy's environmental objectives: to protect and enhance biodiversity and landscape character / visual amenity.</p> <p>The Trust feels the statement that 'the negative impact of the option is that agricultural land will remain within the floodplain' should be altered. This statement in effect separates agricultural land from the river, whereas in fact it will have been flooded over long periods of time and this process would have been part of the management of the land previously. Flooding should not be automatically be seen as a negative impact, although the Trust acknowledges that it can be so in certain circumstances.</p> <p>The Trust suggests this is re-phrased – 'The agricultural land will remain as part of the natural floodplain, helping to manage the flow of flood water.'</p> <p>Reach eight: The Strategy says that work in reach seven will increase flooding potential, but with the proposed new scrape creation at Whitacre Heath SSSI and Eon-owned land holding more water on the floodplain (see below), this may cancel out the increased risks downstream.</p>	<p>We will consider work to re-naturalise watercourses with our flood risk management works, as we get into more detail about works to implement the Strategy. We have added this to our improvements list within this SoEP. We will be looking for partners to assist us in this work. We have explained our options appraisal above in terms of the viability of options 4 and 5.</p> <p>We are not clear which section you refer to with this exact wording. We have considered the potential for negative impacts on agricultural land within the floodplain (e.g. damage to crops) within the SEA while being aware that flooding of the floodplain is a natural occurrence.</p> <p>Our investigations have indicated that, as a result of the works proposed at Whitacre Heath, there may be a marginal increase in flood risk downstream (in the remainder of reach seven and reach eight). We will review the scale of this impact in more detail as part of any future scheme. If this impact is likely to occur we will identify mitigation, and consider the impact of any scrape</p>

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	<p>Will the proposal to ‘improve river flow’ in reach six compromise wildlife (i.e. reduce number of niches, areas of slow flow and potential for braided channels and other depositional features) and also potentially increase the risk of flooding downstream? How will this be assessed?</p>	<p>creation.</p> <p>The Strategy explains that the proposals in this reach are to remove or reduce the effect of channel obstructions like bridges and pipes in flood conditions causing flood water to back up and flood upstream areas. This section of river is heavily engineered therefore there is no potential for braided channels. We will assess and consult on the likely environmental impacts of any work, before it occurs to ensure wildlife and people are not compromised. Downstream flooding has been addressed above.</p>
	<p>It would be greatly beneficial if all new flood banks / other structures were to be constructed in a way that allows for wildlife, i.e. ensuring species’ populations are not isolated and habitats are not fragmented, and also if new niches could be created on these new features, such as grassy banks, areas of wet woodland or integrating holes / boxes into structures for bats and birds.</p> <p>Landscape (5.2): It would be beneficial for wildlife if there were a recommendation that all landowners (especially local government-owned public open spaces – see 5.7.2) with land backing onto the river or its tributaries were to leave a minimum of five metre and preferably 10 metre margin of bankside vegetation, sensitively managed to meet the needs of water vole and otter in particular. This would act as a buffer to help reduce water pollution into the watercourse and also to increase biodiversity and habitat for animals such as the BAP-listed species water vole and otter.</p> <p>Geomorphology (5.5.2): The Trust would be keen to carry out more</p>	<p>We will consider these suggestions for new structure design when developing in more detail on works to implement the Strategy. We will undertake an environmental assessment to ensure we understand and can reduce any negative impacts on wildlife.</p> <p>We will consider these suggestions and discuss with landowners where this is likely to be possible when developing in more detail on works to implement the Strategy.</p> <p>We are keen to work in partnership to make</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>river restoration projects along the Tame, especially on the section by Hams Hall (see e.on-owned land comments below). Areas in reach six would also benefit greatly from such projects.</p> <p>The Trust proposes more emphasis on habitat creation and improvement, especially of BAP-related wet habitats such as reedbed and wet woodland, and of the protection, surveying or re-introduction of BAP related species such as water vole, otter (including the creation of otter holts) and white-clawed crayfish, when considering flood control measures (5.6.3). Areas around the River Anker have one of the last remaining populations of water vole in the county, so this should be taken into account before undergoing any management in this area. Bourne Brook is also an important otter corridor. Otter passes should be put into sections of the River Anker in Nuneaton if work on the river is being done here (i.e. on weirs and other barriers), and indeed into any river sections. Through surveys undertaken by the Trust and volunteers over the last five years plus, it has been determined that all watercourses are being used by otters now. There is a need to ensure that all bridges have ledges to be used by otters in times of flood events, to reduce use of road crossings which is the chief cause of fatality of otters.</p> <p>5.6.2 Protected species: crayfish should be added to the list of protected species.</p>	<p>improvements to geomorphology and so will contact you in future to discuss these.</p> <p>We are proposing environmental improvements alongside the implementation of the Strategy to manage flood risk. We need to ensure that any environmental improvements we propose are helping to achieve the targets we have, and there will be some circumstances where we can work in partnership to achieve other organisations targets as well. Proposals also need to relate to the Tame Strategy area, which does not include the tributaries. We will be reviewing the proposed environmental improvements based on the details of the works to implement the Strategy, and will consider your suggestions at this time.</p> <p>We have not updated the SEA baseline with crayfish because we are aware that the present water quality is currently not good enough to support a viable population within the main River Tame, although they exist in some tributaries. We will consider their presence on a site by site basis in relation to our works. Work to improve water quality and channel naturalisation will hopefully mean they in future they can colonise the River Tame again.</p>

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	<p>5.6.3 The Trust proposes a stronger stance on positive action to address biodiversity losses, to meet the target of Halting loss of Biodiversity. The Trust would wish to see the Environment Agency being more pro-active regarding its role in delivering Local BAP targets, as it is a lead partner for many water related targets, and is the key organisation which can address the relevant issues and take action.</p> <p>Biodiversity (5.6.5): The Trust would like to see more statements regarding the negative effects of invasive species, and a programme for attempting to reduce the impact of these (i.e. Mink, American Signal Crayfish and Himalayan Balsam). Himalayan Balsam not only reduces biodiversity, but it can also add to the risk of flooding and increase bankside erosion. This species is a real problem on the Tame and its tributaries such as the Cole and Blythe SSSI, and a strategy or partnership between landowners to try to tackle this problem that was recognised in this Flood Risk Strategy would be very useful (it could be something linked into the Tame Valley Wetland Project Partnership). Another issue is the effect of misconnections on water quality and biodiversity, and whether these can be identified and reduced, especially during flood control work (i.e. on culverts).</p>	<p>We are proposing to make environmental improvements as part of the Strategy, with partners, and will consider these comments when reviewing the environmental improvements at a more detailed level as previously mentioned.</p> <p>We are responsible for managing invasive species in the same way as is explained in the Strategy section 'responses to the draft Strategy consultation' for vegetation growth. Management of invasive species lies with the riparian owner. We would be willing to assist with any partnership to reduce invasive species on the Tame.</p> <p>We will work with partners to reduce poor water quality where we can through the project work we undertake to reduce flood risk. We currently provide advice on good practice on planning applications, and this will continue. However, none of these issues are part of the Strategy to manage river flooding and therefore we have not amended our SEA or Strategy.</p>
	<p>Whitacre Heath SSSI: The proposal to increase the flood defence at Whitacre Heath by 0.5metres could be dovetailed with a potential new wetland creation project at the reserve. On-site spoil created from a series of new scrapes could be used (subject to soil testing) for the work to increase the flood defence. The depth and extent of these scrapes could be flexible depending on the volume of spoil that the</p>	<p>We will take this possibility into account and have further discussions with you when we are looking in more detail at works in Whitacre Heath. We have addressed the query regarding increased flood storage using scrapes above.</p>

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	<p>Environment Agency required. This new wetland area would also act as a flood control measure by acting as flood storage, especially in times of high discharge, reducing discharge and increasing lag time downstream.</p> <p>The Strategy mentions that the option at the moment would have 'moderate benefits for biodiversity' in that it will ensure no adverse effects on the SSSI. However, if the existing proposals link in with the Trust's proposed wetland creation, then there would be a significantly greater benefit for biodiversity both at Whitacre Heath SSSI and for wildlife along the Tame Valley as a whole. The site could become very valuable for breeding waders (the main reason for designation of the site as SSSI), other animals such as invertebrates, and potentially even for the Otter and Water Vole in the future.</p> <p>Additional benefits from the raising of the flood bank include the opportunity to improve access to the site, especially to enhance the condition of pathways through use of the spoil; to create a smoother path on the top of the flood bank, create disabled access route to top of bank and to at least one hide, and to create a safe holding area for grazing animals in time of flood. However, the Trust needs to discuss the impact of more flooding, and likely timing of year of flooding with the agency. The Trust does not wish the biodiversity quality of the site to decline due to the work being proposed. Other enhancements may be possible to address potential issues, such as rafts for nesting birds, scrape and island creation, and enhancement of the wet woodland to retain flood water.</p> <p>Lea Marston Lakes: Lea Marston Lakes description may need updating as according to</p>	<p>We will assess the detailed impacts of our works at the project stage and will take the opportunities for using spoil, creating habitat and improving access into account. We have added this as an environmental opportunity in this SoEP.</p> <p>We have added these opportunities to this SoEP. We will take these opportunities into account and have further discussions with you regarding partnership working when we are looking in more detail at works in Whitacre Heath.</p> <p>Our investigations have indicated that, as a result of the works proposed at Whitacre Heath, there may be a marginal increase in flood risk within the remainder of reach seven. We will review this in more detail as part of any future scheme, and consider the implications of any increased flood risk along with mitigation requirements within our detailed environmental assessment.</p> <p>We have discussed Lea Marston Lakes above.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>the Environment Agency, the lakes no longer fulfil their original function as purification / de-sedimentation lakes. A possible new use for these, which would hopefully have wildlife and public access and interpretation at its centre, could be integrated into the Strategy.</p> <p>Option 4 could be considered here in order to optimise the water storage area at the lakes by continued de-sedimentation, or by creating / linking up a larger area of wetland. Alternatively, part of this area could be allowed to silt up for the benefit of wildlife, i.e. through the creation of large reedbeds and areas of wet woodland, which would in turn alter the conveyance of the river to help reduce flood risk.</p> <p>The options should be fully researched to consider the impacts of proposed changes and to maximise BAP habitat and species gains.</p>	
	<p>Other potential sites / projects:</p> <ul style="list-style-type: none"> • There is a possibility that Eon-owned land backing on to the Tame around Hams Hall could be used for landscape enhancement (i.e. wet grassland creation / flood storage area). At present the river is constrained by concrete. It has been suggested that this concrete should be removed and the river re-graded and banks re-naturalised, allowing the river to create a more natural course and also to part-flood this Eon land. This would not only be of benefit to wildlife and the network of wetlands in the region, but could also reduce flood risk by slowing river flow especially in times of flood, and creating a new storage area (options 5 and 6). • The Tame Valley Wetland Project is identifying areas along the river that require grazing, with the view to securing funding for a possible roving grazing stock that visits a 	<p>We have added these opportunities to this SoEP and will consider the possibility of removing the concrete lining of the channels in this location when we are looking in more detail at implementing the Strategy.</p> <p>The River Tame floodplain is so wide, that even for low return period flood events the sites in the floodplain in this location are flooded. In order for storage options to work in this area, we would need areas of high ground that currently do not flood that we could excavate to make them flood. This would be additional flood storage to the existing floodplain. However, these areas do not exist on the Tame. It is unlikely that small scale works would reduce flood risk on the Tame, except in low return period</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>number of sites under several partners' control. This potential land use improvement may be of relevance for this Strategy.</p> <ul style="list-style-type: none"> • Remove concrete reinforcing, re-grade and naturalise the River Tame's banks near the confluence with the River Blythe SSSI. • Kingsbury Water Park: <ul style="list-style-type: none"> - Grebe Pool and Tame bend: Potential project to pull back and widen the bend in the River Tame (Grid Ref: SP208974) to encourage deposition and the formation of a gravel bar, to improve the in-stream habitat for invertebrates and fish spawning. Also to create a fish refuge by linking an existing pond adjacent to the river, to the Tame and create a 0.5ha reedbed along the eastern and southern edges of Grebe pool contributing to LBAP targets and enhancing this area for wetland fauna. - Mitchell's Pool (and also Cliff Pool): Potential project to improve connectivity between the River Tame and the pool, by lowering the riverbank opposite the pool by 1.5metres and creating a reedbed, contributing to LBAP targets and enhancing this area for wetland fauna. <ul style="list-style-type: none"> - Hemlingford Water: Potential project to link Hemlingford Water to the River Tame and create new reed fringe habitat along its edges. <p>River Blythe SSSI: Regarding the issue of unfavourable condition due to poor water quality and invasive species there should be positive proposals as to how this will be addressed. A Do nothing option should not be the solution for this river. Invasive species issues need to be addressed across the whole catchment in a programmed and sustained operation. The current situation of</p>	<p>flood events.</p> <p>We will bear this information in mind when looking at our proposals in more detail. We have added this opportunity to this SoEP and will consider this opportunity when working on the detail of implementing the Strategy.</p> <p>We have added these opportunities to this SoEP will bear them in mind when looking at our proposals in more detail.</p> <p>We included the River Blythe SSSI within the baseline information for the Strategy. We do not consider them to be affected by any strategy proposals to alter flood flows as they are outside of the 1 in 100 year flood extent for the Tame. Hence why the site is not considered within the</p>

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	<p>widespread invasive species which are damaging the native flora and fauna is at least partially a result of flooding, as this brings seeds to new areas. Native flora will stabilise banks and prevent erosion more effectively than invasive species e.g. Himalayan Balsam.</p> <p>The Trust proposes that the strategy states special measures for biodiversity, as stated for fisheries.</p>	<p>SEA. As the Strategy does not consider the tributaries of the Tame, therefore improvements to this site are not within the scope of the Strategy.</p> <p>We are unclear what special measures you are suggesting we include for biodiversity, however, we believe we have considered all aspects of the environment consistently and fairly within the SEA.</p>
	<p>Page 64: Green infrastructure – should be identified, developed and enhanced, and sensitively managed, (not ‘preserved’).</p> <p>With regard to development of recreational activities, these should be stated as being developed in balance with other needs, especially biodiversity. For some sites and for some species, a higher level of human access and more active use of sites may be detrimental. Each proposal re increased use must be carefully considered with regard to the impact on biodiversity.</p> <p>NOTE: Wherever Whitacre Heath is noted, this should be stated as Warwickshire Wildlife Trust reserve Whitacre Heath e.g. on page 87</p> <p>It would be helpful to have the location map of the reach shown at start of the section about each reach.</p>	<p>We note your comment and will bear it in mind in our future work, but as this does not affect the choice of preferred options or the impact, we have not updated the SEA.</p> <p>We note your comment, and we will consider this potential impact within our detailed assessment of any proposals to improve recreational access.</p> <p>We note your comment, but as this does not affect the choice of preferred options or the impact, we have not updated the SEA.</p> <p>This information is available within the Strategy, which should be read in conjunction with the Environmental Report and SoEP. We have therefore not duplicated this information.</p>

Response from	Issues raised	How we have dealt with issues raised
<p>Birmingham and Black Country Wildlife Trust</p>	<p>At the outset, the Wildlife Trust believes that actions to deliver flood risk management should be seen in the wider context of ecosystem services and function and the importance of landscape-scale responses to the issues of preparedness and adaptation to climate change and the need for landscapes, and the biodiversity within them, to be resilient. This is the case within all landscapes, urban and rural. Actions to deliver flood risk management are capable of delivering many benefits across economic, social and environmental agendas. We think that the document would benefit from the identification and consideration of this context.</p> <p>We believe that the document and resulting flood risk management actions should contribute to protecting, managing and enhancing biodiversity along the River Tame in Birmingham and the Black Country. Not only that, the document and resulting actions should focus and deliver benefits for people and wildlife that improve environmental quality and the quality of life. Particular focus for biodiversity actions should be:</p> <ul style="list-style-type: none"> • to contribute to the delivery of actions and targets for Priority Habitats and Species in the context of both regional and local Biodiversity Action Plans, reporting delivery to the relevant action plan. • to contribute to the protection, management and enhancement of local wildlife sites (in Birmingham and the Black Country these are known as Sites of Importance for Nature Conservation and Sites of Local Importance etc. and by engaging with Local Sites Partnerships in order to facilitate this. • to contribute to the delivery and management of Accessible Natural Greenspace and Local Nature Reserves where the 	<p>We agree that ecosystem function and landscape scale management of flood risk are important. We have considered these as part of our options appraisal, including where joint benefits can be achieved, and our Strategy provides a way of reducing the risk that climate change brings. We have not amended the Strategy context because we believe these issues have already been considered.</p> <p>We believe that the preferred Strategy options, along with improvements proposed within the SEA, currently does what you suggest.</p> <p>We have added these to this SoEP and will consider your suggestions for biodiversity actions when we review our proposals for environmental and social improvements alongside the details of works to implement the Strategy. Where we can assist others in achieving their targets, we are willing to work in partnership to achieve more.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>public can experience and enjoy the natural world.</p> <p>A number of biodiversity and people and wildlife projects, at both landscape and more local scales, are currently being developed or delivered along the River Tame by a range of partners and partnerships. In Birmingham and the Black Country, there is considerable potential for Environment Agency activity profile. Some of these involving the Wildlife Trust are:</p> <ul style="list-style-type: none"> • the Tame Valley Partnership which following its refresh in December 2008 covers a large-scale landscape following the course of the River Tame from its headwaters in the Black Country and through Birmingham east and northwards to the more rural landscapes of Warwickshire and Staffordshire. • Black Country Living Landscape which is about to start its Access to Nature Community Involvement Programme funded by a £400,000 grant from BIG Lottery and Natural England. Biodiversity action through the involvement of local communities in the Black Country. • the River Tame Walkway, where the Wildlife Trust is already working with Environment Agency on a review of the feasibility study for establishing a long-distance footpath route along the River Tame from two sources in the Black Country to its confluence with the Trent at Alrewas. • Park Hall Nature Reserve, an area of flood-plain and scarp woodland alongside the River Tame near Water Orton, which the Wildlife Trust leases from the Environment Agency. <p>We think that the River Tame Flood Risk Management Strategy needs to build on the above potential to contain actions which may bring about multi-benefits not only to the flood management of the</p>	<p>We will bear in mind the work that you are proposing to undertake or are undertaking when we review our proposals for environmental and social improvements alongside the details of works to implement the Strategy, and when we plan engagement with the local communities.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>river itself but also to the communities and biodiversity that lie along it. We would be keen to work with the Environment Agency to engage local people and communities about the issues and objectives of the River Tame Flood Risk Management Strategy in Birmingham and the Black Country.</p>	
	<p>On a more technical note, the Trust is disappointed to note that reference to the Environment Agency's own wider context, the Humber River Basin Management Plan, appears to be absent. Actions to alleviate flood risk, plus achieve other benefits as above, surely help in delivering the RBMP.</p>	<p>River Basin Management Planning and the Water Framework Directive were considered in the SEA in 'Relevant Plans and Strategies' and objectives related to biodiversity, and water. The final Humber River Basin Management Plan was not published at the time of the draft Strategy being consulted on. We have identified some opportunities that could result in improvements to the ecological status of the Tame (in line with the RBMP) within the projects to deliver the Strategy. This will be further reviewed during the project stages.</p>
	<p>Also, the context of the Environment Agency Water Resources Strategy Midlands Action Plan appears to be absent.</p>	<p>We did not include this document in the review of Plans and Strategies because we are not proposing to alter water quantity or distribution along the River Tame.</p>
<p>National Farmers Union</p>	<p>The upper reaches of the Tame are predominantly urban so their responses focuses in reaches seven, eight and nine which flow through agricultural land.</p> <p>Economics: The plan should stress the importance of agricultural land within the catchment. A sustainable agricultural industry in the UK is critical. Defra announced a package of food policy measures in August 2009 that analyse in detail the security and sustainability of the UK food supply. This shows the UK is food secure today, the ongoing challenge is to maintain and improve the sustainability of the UK food supply. The EA must help create the conditions necessary for competitive, sustainable domestic food production.</p>	<p>We have considered the strategic impact of flooding through the SEA objective to protect and enhance land quality. Our SEA took into account the CFMP which also considers the agricultural land within the catchment and identifies high level flood risk management actions, with which the Strategy is consistent. We will consider the more localised economic impacts of flooding to agricultural land and associated infrastructure that you</p>

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	<p>When flooding occurs on agricultural land there are knock on effects on the local economy, if agricultural operations cease and crops are destroyed or grazing capability lost the associated and ancillary industries suffer. In rural areas there is the potential for significant economic impact. This could include damage caused to infrastructure such as hedges and fencing, the clearance of waste deposited by floodwaters and the impacts of road access being cut off (particularly concerning for dairy farmers).</p>	<p>mention at the project stage.</p> <p>Our investigations have indicated that, as a result of the works proposed at Whitacre Heath, there may be a marginal increase in flood risk downstream (in the remainder of reach seven and reach eight). This increase is based on our high level assessment of the information we have now (for example approximate ground levels). We will review this in more detail as part of any future scheme, and discuss this with those affected. We will consider the implications of any increased flood risk along with mitigation requirements within detailed environmental assessment.</p>
	<p>Maintenance: River maintenance is key mechanism for controlling flood events. We are pleased that the Environment Agency will continue to carry out channel maintenance in reach seven, eight and nine. This will benefit rural communities and food production. Farmers understand that they also have maintenance responsibilities however they do need a co-ordinated and supportive approach to maintenance from the Environment Agency. Farmers often work alone and don't have access to the machinery and necessary Personal Protective Equipment required for carrying out riparian maintenance.</p>	<p>We will continue with the flood risk management activities that we currently undertake in these areas. Channel maintenance is only one aspect of this and can take many forms.</p> <p>We are keen to work with farmers in order to coordinate maintenance work and provide support where we can.</p>
	<p>Environment Agency Responsibilities: Under the Environment Act 1995, Section 7, the Environment Agency has a duty for any proposal relating to any functions of the Agency to have regard to the effect which the proposals would have on the economic and social well-being of local communities in rural areas.</p>	<p>We have undertaken an SEA which considers the social and environmental issues at a strategic level within the SEA. We have considered the economics related to flooding of agricultural land using Defra guidance. We will consider these issues in more detail when we develop the works to implement the Strategy.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>Links to the Trent CFMP: The CFMP policy wording for policy 6 has changed and should now read 'take action with others to store water or manage run-off in locations that provide overall flood risk reduction or environmental benefits, locally or elsewhere'.</p>	<p>We have not amended the SEA as the policy meaning has not changed, therefore this does not affect the outcome of the SEA.</p>
	<p>SuD: There is no mention of Suds. Many villages have developed rapidly in recent years with little thought given to the necessary drainage infrastructure and the productivity of agricultural land is suffering as a result. The plan should include a commitment to tackle surface water drainage issues in rural settlements in addition to larger urban areas.</p>	<p>The River Tame Flood Risk Management Strategy is to manage river flooding from the Tame. We will consider where implementation of the Strategy may affect existing surface water issues when we look at the works in more detail.</p> <p>The Environment Agency has a strategic overview role for flood risk management from all sources, including surface water in England. We support and work closely in partnership with local authorities, who are responsible for managing flood risk from surface water locally. The planning process should deal with surface water drainage on newly developed sites.</p> <p>Surface water issues are considered in Catchment Flood Management Plans, and local authorities are responsible for taking actions from this forward in surface water management plans for specific areas. We have therefore not included management of surface water in this Strategy.</p>
	<p>We would caution against the recommendation of large scale re-wetting schemes without prior consultation with landowners. Wetlands play an important role in the hydrological functioning of catchments but their exact role depends on the wetland type, location in the catchment and the functioning catchment. Wetlands</p>	<p>We will undertake further environmental assessment on the proposed improvements to understand the impacts and benefits. We could not undertake any work of this nature without landowner agreement and support.</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>are best at providing a function (e.g. flood storage, biodiversity etc) if they are designed as such. Flood storage areas are best when they are only subject to temporary flooding thereby optimising their flood storage capacity. Wetlands with high water tables have limited flood storage potential as high water levels severely compromise storage capacity. Breeding waders look for seasonal wet areas therefore permanently wet wetlands are unlikely to fulfil their habitat and life cycle needs.</p>	
	<p>Increased flood levels and flood durations can affect habitat established via participation in agri-environmental schemes - particularly arable options aimed at ground nesting birds such as lapwings. Also food security, once lost productive land and effective drainage systems are almost impossible to reinstate.</p>	<p>We have responded to this query above.</p>
	<p>Flood warnings: There is a lot of confusion over the current flood warning system. Many farmers and rural communities do not understand the difference between flood watch and flood warnings. With agricultural land potentially being flooding during a flood watch. This has led to significant animal welfare concerns in the catchment. The previous colour coded alerts were well understood.</p>	<p>We have recently updated and improved our flood warning system. This can now automatically advise people concerned about flooding to residential and commercial properties and agricultural land of the risk of an impending flood. More details are available in the Strategy.</p>
<p>Lichfield District Council</p>	<p>The relevant areas which fall within Lichfield District are the southern and western parts of Fazeley, North Tamworth, Comberford, Elford and the National Memorial Arboretum. Lichfield District Council supports the direction of the Strategy to reduce flood risk in the River Tame catchment. With regard to reach eight, the defences proposed at Fazeley are considered to be acceptable to provide a better standard of protection. When more detailed plans are available, consultation with Development control may be necessary to establish the requirement for planning permission. It is also understood that there may be issues relating to the Coventry Canal and floodwater overflows into this area but</p>	<p>We will consult the Council's development control department as we progress the proposals in more detail.</p> <p>We are discussing the issue with British Waterways and will look into this in more detail when we progress the</p>

Response from	Issues raised	How we have dealt with issues raised
	<p>further information would be required to make comments.</p> <p>With regard to reach nine, there is concern over the increased risk of flooding in a small number of properties due to works upstream. However, we are assured by yourselves that a public consultation took place on 8th July with the concerned residents and the relevant Parish councils and whilst the increased risk is minor, that there may be scope for individual property protection.</p> <p>Lichfield District Council are willing to be involved in opportunity to create BAP habitats and areas of open space and recreation when more detail is available.</p>	<p>proposals.</p> <p>Our investigations have indicated that there is potential for works upstream to affect downstream areas. This increase is based on our high level assessment of the information we have now (for example approximate property threshold levels/ground levels). We will review this in more detail as part of developing any future works. If the flood risk is likely to increase due to our upstream works, we will work to mitigate the increase. This may take the form of individual property protection.</p> <p>We have noted the Council's willingness to be involved in improvement works and will contact the council in future to discuss opportunities.</p>
Tamworth Borough Council	Based on your explanation that the proposed works would not increase the risk of flooding elsewhere in Tamworth we can confirm that Tamworth Borough Council supports the principle of the Strategy. We support increased public access where appropriate and environmental and education projects. We are currently preparing its Local Development Framework Core Strategy and may include policies on flooding. Details of the proposed works will provide evidence of implementing these policies.	We will contact you when more details are known about the projects to implement the Strategy.
Sandwell Metropolitan Borough Council – Drainage	In respect to the culvert modifications works in the Titford Road area (Oldbury Arm). The river was culverted in the late 70s and 80s to prevent flooding by Severn Trent (Rivers) before the National Rivers Authority or the Environment Agency were formed. The predicted flooding shown south of the river is from a surface water sewer which connected at the invert level of the culvert. This flooding has been alleviated from a Severn Trent scheme about 3	We have not changed the proposals in the Strategy because our flood risk model shows there is potentially a flooding problem in this location. Will look into the information provided in more detail to determine whether any works are needed to manage flood risk in this location.

Response from	Issues raised	How we have dealt with issues raised
	<p>years ago. Titford Road and Swan Crescent have not flooded since. The predicted flooding to the north of the river does not happen. The flooded area is about 3.5m higher than Titford Road and if flooded would be up to first flood level of properties on Titford Road.</p>	
<p>Friends of Sheepwash Local Nature Reserve</p>	<p>Believe that there should have been more engagement with the local areas affected by holding more consultation events in areas along the length of the river such as Great Bridge and Wednesbury.</p> <p>Concerns about plans to allow large volumes of water from the river into pools during heavy rainfall, due to the high level of pollution coming from the Tame. Cited various incidents of pollution from the Tame and a nearby Brook.</p> <p>Pollution entering the lakes is a major concern to us for the common wildfowl found within the nature reserve, as only slight contamination can affect their waterproofing.</p> <p>Habitats on the lakes are threatened by sudden water level fluctuations. There is concern for the shallow island and floating bird nests being washed away, and impacts on fish of the polluted water and silt left behind. Would not want to see large obstacles erected in the reserve which form barriers to wildfowl accessing the river and lakes.</p>	<p>We are committed to consulting and engaging with local residents and interest groups. We held a public workshop on 19 June 2009 in Smethwick, which was advertised in the local newspaper as well in prominent local public spaces. We appreciate that this event may not have been as effective as we would have liked. Through the consultation, we are now more aware of the interested parties and will use this information to improve consultation in the future.</p> <p>Sheepwash Urban Park along with other flood storage areas along the River Tame was designed to take floodwater in order to reduce flood risk to people and property. We appreciate that the park has expanded over the years and has developed wildlife interest, it was designed and still functions as a flood storage area. Therefore, there will be water fluctuations at times of flood events. We are not proposing to alter the functioning of Sheepwash or Ocker Hill flood storage areas.</p> <p>We understand the concern about pollution reaching the nature reserve. We are working with other organisations and businesses to reduce pollution along the River Tame as part of achieving good ecological status on the river in line with the Humber River basin Management Plan. Where pollution does occur during a flood event, the</p>

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	<p>All the above concerns are applicable to Forge Mill Lake and Ocker Hill balancing Lake. Aware that all these sites are designed as balancing lakes, but they are also local nature reserves and sites of importance for nature conservation.</p> <p>Concern about blockages such as shopping trolleys being left in the river.</p> <p>Suggested that the Environment Agency should consider using its role as statutory consultee on planning proposals to object to houses being built near watercourses.</p>	<p>impact is reduced by dilution due to the volume of water.</p> <p>We are proposing environmental and social improvements as part of the Strategy.</p> <p>We would appreciate the public advising us of any pollution incidents or obstructions in the watercourse by calling 0800 807060 so that we are aware of them and can deal with them appropriately.</p> <p>We have a role in influencing planning proposals, including the appropriateness of development within the floodplain. The planning authorities make the final decision on whether development should proceed, considering our advice.</p>
Local resident	<p>Concerned that there is no provision to protect Comberford from flooding and it seems the situation is to be made worse by work being proposed by you upstream.</p> <p>Work upstream of Comberford should hold or delay water so that flooding downstream is avoided or reduced.</p> <p>Expressed concern about the lack of river maintenance, and the</p>	<p>We have identified through the Strategy that a flood risk management scheme to reduce flood risk to Comberford is not economically viable (the costs in undertaking the work are a lot more than the economic benefits of flood risk reduction). We recognise that there is a flooding problem in the village and will work with affected properties to reduce the impact of flooding, especially where upstream work makes flooding worse.</p> <p>We have considered storage upstream of Comberford in the options appraisal section of the Strategy and Environmental Report. We found that storage is not possible in areas that would benefit Comberford.</p> <p>We have included clarification of the proposed future</p>

Response from	Issues raised	How we have dealt with issues raised
	Environment Agency saying that keeping rivers clean is not important. Maintenance of conveyance is mentioned in the draft Strategy. Maintenance of the river at Comberford has not been undertaken in the last 47 years.	channel maintenance within the Strategy, and that we will only continue channel maintenance where we currently undertake it.
Local resident	Would like an explanation of the data that has informed the flood risk for the Strategy, as there seems to be a difference between the National Flood Risk Assessment, Environmental Agency flood zones, and Strategy data.	We have used a new hydrological and hydraulic model for the Tame to base the flood risk upon. This is the most accurate information available at that point in time.
Local resident	Suggests people stop building on floodplain	We have a role in influencing planning proposals, including the appropriateness of development within the floodplain, and this role will continue independently of the Strategy.
Local resident	Raised awareness of a flood route within the Kingsbury Waterpark: the Tame comes out of bank and merges with lakes within the park. It then diverts into the Birmingham to Fazeley canal, which acts as a flood flow route into Fazeley and floods properties there. Properties within Kingsbury Water Park were close to flooding from this flood route in July 2007 and Sept 08.	We will look in more detail at the flood route due to the River Tame flowing in to the Birmingham & Fazeley Canal and causing flooding downstream. Flood risk management works to reduce the flood risk to the cottages only is not economically viable. However, we will investigate this location in more detail in combination with works to prevent flood water entering the canal
Local resident	What order will the work in the nine reaches be undertaken? Whether works would start in reach one and move downstream. There is concern that this would lead to flooding of the lower reaches as the volume of floodwater increases. It would be better to start at reach nine and work upstream.	The Strategy explains how we propose to implement the Strategy through projects, and that the priority works will depend on funding and could be influenced by contributions. We will consider the potential for temporary and permanent increases in flood risk upstream and downstream before any works are programmed and subsequently undertaken. If it is not possible to prevent either permanent or temporary increases in flood risk we will consult with the communities and individuals concerned to identify appropriate ways to mitigate this.
Local resident	Concerned that work carried out on the inside of their property for	The Strategy does not identify this level of detail. We will

Response from	Issues raised	How we have dealt with issues raised
	access purposes has meant that the front door is now outward opening, and that this will affect the flood defence.	know more about this when we work on the details at the project stage. It is unusual for works to directly affect the front door of a property. If any works are required to an individual's property, we would contact the homeowner directly to discuss what may be required and work with them to achieve an acceptable solution.
Public workshops	Perry Barr and Witton - Does the Strategy include a review of the quality of gauging stations for records/warning? Is there a need for additional gauges for rivers/rain?	This was not considered as part of the Strategy. We review the quality of data informing our flood warning system on an ongoing basis. We are not proposing any additional gauging stations on the River Tame.
	Proposals for mitigation and improvements for Perry Barr and Witton: picnic areas along the river; places to enjoy the river; bird hides and vantage points to observe and enjoy the local wildlife; Tame Road/Brookvale Road could have a recreational area like benches for people to sit or use facilities of a park as a lot of residents don't have transport; something to attract birds, butterflies; information close to river to inform public about the wildlife on the river Tame and how their rubbish can affect it; put areas aside for wildlife.	We have included these opportunities within this SoEP, and will consider these proposals when we look in more detail at what works are required in this location to reduce flood risk. We will discuss any opportunities further with the local population.
	Perry Barr and Witton – want flood risk reduction works but concern walls will get graffitied, could get it graffitied by locals/professionals rather than by chance. Aston Villa Football Club could become involved in this area.	We have included these opportunities within this SoEP, and will consider these options along with others for mitigating the wall height when we look in more detail at what works are required in this location to reduce flood risk. We will discuss any opportunities further with the local population. We will need to secure contributions from beneficiaries to support the implementation of the Strategy. This will involve discussions with local organisations which we could work in partnership with to improve the flood wall.

Response from	Issues raised	How we have dealt with issues raised
	Perry Barr and Witton - An opportunity for improvement could be the refurbishment of Deyton Avenue Community Centre.	Unfortunately we are unable to include this as an environmental or social improvement opportunity as it does not help us achieve any of our targets set by Defra.
	Queries regarding the programme of works and the speed and timescales of getting a scheme built.	The Strategy explains how we propose to implement the Strategy through projects.
	Queries regarding phasing of the work and priorities, especially regarding works at Brook End.	We have addressed this above in response to 'local resident'.
	Queries regarding early warning of flooding to residents.	The Strategy gives more information on our flood warning service.
	Tamworth - Why was land on the flood plain built on i.e. the old paper mill/Alders (Tamworth); For years we have allowed building to take place on flood plains and this needs to stop.	We have a role in influencing planning proposals, including the appropriateness of development within the floodplain. The planning authorities make the final decision on whether development should proceed, considering our advice.
	Tamworth - Noted a misprint on page 26 re: the risk of flooding in the Brook End area (which should be 0.5%, not 1%) will be corrected in the final documentation.	We have corrected this in the Strategy.
	Reduction in requests to deal with flooding in private dwellings and reduced call outs to emergency services is welcomed.	We have noted this.
	Tamworth - Concern regarding downstream impacts and what further effect would take place further up river from Tamworth, even onto the Trent.	Our high level assessment (using approximate property threshold levels/ground levels) has indicated that, as a result of the works proposed at Whitacre Heath, there may be a marginal increase in flood risk downstream (in the remainder of reach seven and reach eight). We will review this in more detail as part of any future scheme, as well as considering ways to mitigation any increase in flood risk caused by our works.
	Tamworth - Fox Public House - reach eight - support construction of an embankment around area of Fox Public House, road needs to	We are going to look in detail at the issues raised for this location, and will consider these comments, when we

Response from	Issues raised	How we have dealt with issues raised
	<p>be raised to height of existing road from Tamworth, culvert by Fox Public House is initial problem it is too small to take the volume of water therefore water backs up and spills over the A51 leading from Tamworth to Fox PH then spills over A51 leading from Fox to Hopwas. Unless culvert is expanded this problem will keep happening regardless of other embankment; For a relatively small budget you could prevent future flooding for hundreds of homes on Riverside Tamworth (A51 road area).</p>	<p>develop the details of works to implement the Strategy. These issues have not altered the preferred option for managing flood risk, but may influence how the Strategy is implemented.</p>
	<p>Tamworth - Detailed queries about particular sites in and around Tamworth and the scope of flood risk management works proposed: There is a low spot in Fazeley Road Bank near Sutton Avenue; should raise wall / embankment from sunset close to the Fox PH; impact of work upstream of Fox inn; why are the castle ground flooding more frequently and does the strategy cover this; Brook end - bank needs mowing; would like improvements to the flood banks on Lichfield Road (from Bridge Junction Lichfield Street to Coton Van Hire; would like the defence line to include from Tame Drive Bridge to 'Coton Van Hire' Gagarin; Build up the cycle track a little higher; Replace the soak aways on Sutton Avenue (was grass, now tarmac); Put road drains on Sutton Avenue (reach eight), wheelchair access.</p>	<p>We are going to look in detail at the issues at these locations, and will consider these comments, when we develop the details of works to implement the Strategy. These issues do not alter the preferred option for managing flood risk, but may influence how the Strategy is implemented.</p> <p>We have an overview role in the management of surface water; the local authority is responsible for managing flood risk from surface water locally. The management of surface water flooding is not part of this Strategy to manage river flooding.</p>
	<p>Tamworth - Concern that to the rear of properties at Brook End, the very long weeds are collapsing into Stream will eventually block the stream, along with littering.</p>	<p>The Strategy has addressed these issues in the section 'responses to the draft Strategy consultation'.</p>
	<p>Improve people's awareness of flooding</p>	<p>Our website is a resource that the public can access in order to increase their understanding of flooding and their flood risk and our role in flood risk management www.environment-agency.gov.uk</p>

Related publications

River Tame Flood Risk Management Strategy (May 2011) – this is the final Strategy to manage flood risk along the River Tame for the next 100 years.

This document is available on our website:

Product code GEMIO511BTWT-E-E

River Tame Flood Risk Management Strategy: Environmental Report (May 2009) - this documents the likely impacts of the draft Strategy, how they could be mitigated, and opportunities for environmental improvements. The impacts and mitigation have not fundamentally changed since consultation during finalisation of the Strategy.

This document is available on our website under the following chapters:

Chapter 1 - Introduction and Background, Chapter 2 - Approach to SEA, Chapter 3 - Relevant Plans and Strategies, Chapter 4 - Consultation

Product code: GEMIO511BTWV-E-E

Chapter 5 - Key Issues, Constraints and Opportunities, Chapter 6 - Assessment of Environmental Effects and Evaluation of Impact Significance (part 1/2)

Product code: GEMIO511BTWW-E-E

Chapter 6 - Assessment of Environmental Effects and Evaluation of Impact Significance (part 2/2)

Product code: GEMIO511BTWX-E-E

Chapter 7 - Implementation and Monitoring Plan and Figures

Product code: GEMIO511BTWY-E-E

Glossary of terms and abbreviations, Appendix A: Relevant Plans and Policies, Appendix B: Consultation

Product code: GEMIO511BTWZ-E-E

Appendix C: Results of Option Screening, Appendix D: Summary of Options Appraisal - Individual Flood Cells

Product code: GEMIO511BTXA-E-E

Appendix E: Indicative Landscape Plans

Product code: GEMIO511BTXB-E-E

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