



Llywodraeth Cymru  
Welsh Government

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# Strategic Environmental Assessment

Statement of Environmental Particulars

Flood and Coastal Erosion Risk Management:  
Development of a National Strategy for Wales

June 2011





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# 1. Introduction

## 1.1 Development of the National Flood and Coastal Erosion Risk Management Strategy for Wales

The Flood and Coastal Erosion Risk Management Strategy for Wales sets the framework for managing flood and coastal erosion risks and will help lead local flood authorities produce local strategies and decide what they and their partners need to do to manage local risks. The Welsh Government aims to develop a system for flood and coastal erosion risk management in Wales that:

- Embeds sustainable development as the key principle for informing decisions and which is reflected in an approach that promotes the wellbeing of people in Wales and addresses the needs of the economy and the environment.
- Is focussed on the needs of individuals, communities and businesses and which recognises that different groups have different needs and varying capacity to deal with flood risk and that the service they receive must be tailored accordingly.
- Promotes equality and does not exacerbate poverty.
- Is based upon an holistic understanding of the risks and consequences of all sources of flooding and areas of coastal erosion.
- Considers the full range of risk management responses.
- Facilitates long term resource planning.
- Allows prioritisation of investment resources and actions.

The Strategy is focused on the delivery of four overarching objectives:

- **Reducing the impacts** on individuals, communities and businesses from flooding and coastal erosion.
- **Raising awareness of and engaging people in the response** to flood and coastal erosion risk.
- **Providing an effective and sustained response** to flood and coastal erosion events.
- **Prioritising investment** in the most at risk communities.

A copy of the final strategy can be found at:

[wales.gov.uk/topics/environmentcountryside/epq/waterflooding/flooding/?lang=en&ts=4](https://wales.gov.uk/topics/environmentcountryside/epq/waterflooding/flooding/?lang=en&ts=4)

## **1.2 Need for and purpose of Strategic Environmental Assessment**

Under the Environmental Assessment of Plans and Programmes (Wales) Regulations 2004, the National Strategy required a Strategic Environmental Assessment (SEA) as part of its preparation. The purpose of the SEA is to 'provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development'. The SEA:

- Identifies, describes and evaluates the significant environmental effects of implementing the Plan and any alternatives;
- Identifies actions to prevent, reduce or as fully as possible offset any adverse effects;
- Provides an early and effective opportunity to engage in preparation of the plan – through consultation;
- Monitors the implementation of the plan to identify any unforeseen environmental effects and take remedial action where necessary;
- Reports all of the above in an environmental report.

The requirement for an SEA was identified following the consultation on the draft Strategy. The SEA was therefore carried out retrospectively and the resulting environmental report was published for consultation together with the draft strategy and was available between 10 May and 7 June 2011.

## **1.3 Purpose of the Statement of Particulars**

This Statement of Environmental Particulars is a statutory requirement under the Environmental Assessment of Plans and Programmes (Wales) Regulations 2004. It sets out how the findings of the Environmental Report 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.

For further details about how the assessment was undertaken and its findings, please refer to the Environmental Report.

## 2. How environmental considerations have been integrated into the Strategy?

Environmental considerations have been integrated into the strategy through the following ways:

- Strategy preparation – The strategy is focused on providing a framework for flood risk management, but sustainable development is a key principle that has underpinned its preparation. The context for this is provided by the Welsh Government’s vision for a sustainable Wales, set out in Box 2.1

### **Box 2.1 Welsh Government’s vision of a sustainable Wales**

Enhancing the long-term wellbeing of people and communities is central to our approach to sustainable development. To promote this we are committed to a sustainable future for Wales where we:

- live within our environmental limits, using only our fair share of the earth’s resources, for example by radically reducing our use of carbon-based energy and greenhouse gas emissions, moving towards becoming a zero-waste nation;
- support healthy, biologically diverse and productive ecosystems, by actively recognising and supporting our environmental assets including land, water and biodiversity;
- build a resilient and sustainable economy, including by fostering local economies and suppliers, supporting innovation, achieving the transition to a low carbon, low waste economy, and ensuring that Wales is the best location for business to locate, start up, grow and prosper;
- enjoy communities which are safe, sustainable, and attractive, where people enjoy good health, by having a much stronger connection with our local economies and communities;
- are a fair, just and bilingual nation in which citizens determine their own lives, shape their communities and achieve their full potential, by ensuring equality for all is a core value to all our work.

- The Strategy supports the development of solutions that work with natural processes and seek to provide environmental benefits. Compliance with environmental legislation, and working to contribute to achieving the objectives of the Water Framework Directive are amongst the key issues to be addressed by flood and coastal erosion risk management.
- A broad framework is presented for prioritising investments in flood and coastal erosion risk management. There is a clear commitment that investment decisions will follow a sustainable development approach. Specific factors to be taken into account include:
  - Wider benefits in relation to human health and wellbeing.

- Impacts of flooding on the operational capacity of critical infrastructure including road and rail networks, utilities providers and national security.
  - Impacts of flooding on the wider community.
  - Environmental costs and benefits derived from the work.
  - Impact on our wider cultural heritage.
  - Extent to which the investment is future-proofed in the context of increasing flood risk as a result of climate change.
- Stakeholder engagement – The Strategy has been prepared in consultation with appropriate expertise within the Environment Agency and the Welsh Government and other external stakeholders. As a result of the retrospective approach to the SEA, there have been two periods of consultation on the strategy.
  - Strategic Environmental Assessment – Through the SEA, environmental effects have been identified together with appropriate mitigation measures. The Strategy includes a commitment that strategies and plans prepared within the framework of the National Strategy will be subject to Strategic Environmental Assessment. Similarly, projects and schemes whether arising from local strategies or ‘stand alone’ will include the management of environmental risks to ensure that adverse effects are minimised and opportunities for additional benefits are identified. This will include undertaking Environmental Impact Assessments, where they are required

### 3. How has the environmental report been taken into account?

The Environmental Report found that the effects of the strategy would be predominantly neutral or positive. Flood risk management measures should result in positive impacts on people and their health. These effects could be further enhanced by the development of solutions that have multiple benefits. There should be similar benefits to both private and business properties. The planning of flood risk management strategies and schemes should take into account the anticipated effects of climate change. As a result the Strategy should also contribute to ability of the country to adapt to the effects of climate change.

The Environmental Report identified that significant benefits to biodiversity can result from flood and coastal erosion risk management measures. However, there can also be significant adverse effects. These occur particularly in coastal areas where the need to protect coastal communities combined with sea level rise caused by climate change, can result in ‘coastal squeeze’ and the loss of internationally designated intertidal habitat. A Habitats Regulation Assessment has been undertaken to consider these issues in more detail. This determined that it was not possible to rule out that

the Strategy would result in adverse effects on the integrity of European sites. As it is not possible to determine the location and extent of these impacts, Habitats Regulations Assessments will be required for local strategies and projects. These will determine the nature of the impact in a specific location and identify compensatory measures where adverse effects are unavoidable.

Given that sustainability considerations have been at the heart of the preparation of the Strategy, many of the measures identified to mitigate adverse effects or to build on the benefits of flood and coastal erosion risk management are incorporated into it. The Flood and Water Management Act also requires that the exercise of flood and coastal erosion risk management functions should make a contribution to sustainable development. The minister is required to issue guidance on how this is to be undertaken and this is currently in preparation. The Strategy has been revised to refer to the sustainable guidance and includes a commitment to incorporating mitigation and enhancement measures identified by the strategic environmental assessment, where possible. The Environmental Report has strengthened the need for these considerations to be incorporated into the development of strategies and projects arising from the National Strategy. Table 3.1 summarises the impacts, the proposed mitigation / enhancements and where this is addressed in the Strategy.



**Table 3.1: Addressing mitigation and enhancement in the National Strategy**

Environmental Topic	Summary of Mitigation / Enhancement Measures	Strategy response
Population and human health	<ul style="list-style-type: none"> <li>• Develop an understanding of the vulnerabilities, social inequalities and determinants of well being of affected communities.</li> <li>• Look for opportunities for FCERM to contribute to well being and the development of green infrastructure.</li> </ul>	<p>Factors to be considered when prioritising investments include:</p> <ul style="list-style-type: none"> <li>• The vulnerability of communities affected, their capacity to manage the impact of a flood event and the need to avoid exacerbating poverty.</li> <li>• Wider benefits in relation to human health and well being.</li> </ul> <p>References to achieving multiple benefits alongside the implementation of risk management measures have been strengthened within the Strategy.</p>
Biodiversity	<ul style="list-style-type: none"> <li>• Prioritise solutions that work with natural processes.</li> <li>• Identify synergies with Water Framework Directive measures to contribute to ecological status of water bodies.</li> <li>• Incorporate biodiversity enhancements where SUDs are implemented.</li> </ul>	<p>Making more use of the natural environment such as wetlands or salt marshes; the use of SUDs; and identifying opportunities for inundation and storage, are all identified as an integral part of future risk management and are considered to be more sustainable. There is a clear commitment that the Welsh Government will require that works are undertaken in harmony with the natural environment where practicable.</p> <p>The Strategy commits to compliance with the requirements of the Water Framework Directive and encourages the adoption of solutions that provide wider benefits to biodiversity, water quality and other factors. More specifically, the Strategy highlights the role that FCERM should play in contributing to the implementation of WFD measures and identifying opportunities for improvement in the status of water bodies.</p>
Soil and contaminated land	<ul style="list-style-type: none"> <li>• Take account of contaminated land when developing solutions.</li> <li>• Promote the use of land management approaches where these will also benefit soils. Including building links with agri-environmental schemes and woodland planting.</li> </ul>	<p>Land management is identified as one of the measures that should be considered that rely on natural processes.</p> <p>Contaminated land is identified as an issue that should be addressed by lead local flood authorities when developing local strategies and schemes.</p>
Water	<ul style="list-style-type: none"> <li>• Identify opportunities to include WFD benefits into solutions.</li> <li>• Working with natural processes should provide opportunities to enhance hydromorphological improvements and contribute to improving the ecological status of water bodies.</li> <li>• Building links with agri-environmental or woodland management schemes may help to promote the adoption of land management approaches.</li> </ul>	<p>The Strategy commits to compliance with the requirements of the Water Framework Directive. Working with natural processes is encouraged and where adopted this should help to contribute to hydromorphological improvements.</p> <p>The Strategy encourages a partnership approach to flood and coastal erosion risk management that should facilitate linking with other environmental enhancement initiatives.</p> <p>The Strategy highlights the role that FCERM should play in contributing to the implementation of WFD measures and identifying opportunities for improvement in the status of water bodies. This includes identifying opportunities where land management approaches can contribute to reducing flood risk and building links with agri-environment and woodland schemes.</p>

Environmental Topic	Summary of Mitigation / Enhancement Measures	Strategy response
Climatic factors	<ul style="list-style-type: none"> <li>Working with natural processes can also create opportunities for carbon sequestration (e.g. wetlands and woodlands).</li> <li>Minimise carbon cost of hard engineering schemes.</li> <li>Ensure climate change is accounted for in the development of solutions, including the capacity of SUDs.</li> <li>Consider whether contributions can be made to dealing with other effects of climate change, such as low flows.</li> </ul>	<p>Adapting to climate change is one of the key drivers behind the Flood and Water Management Act and the Strategy.</p> <p>The Strategy requires risk management authorities to explicitly include an assessment of the likely impact of climate change when making long-term decisions.</p> <p>While the carbon cost of some works is unavoidable the Strategy requires that lead local flood authorities take steps to ensure that these are minimised. This will include, for example, using materials with a lower carbon cost, considering where materials are sourced and how they are transported. Additional guidance on managing the carbon cost of works will be provided in the sustainable development guidance.</p>
Material assets	<ul style="list-style-type: none"> <li>Identifying opportunities for partnership funding.</li> <li>Taking account of long term influences on solutions, particularly with regard to climate change.</li> <li>Adopting lower cost resilience measures where more significant risk management measures can not be prioritised.</li> <li>Adopting catchment based land management approaches to reduce risk.</li> </ul>	<p>The Strategy states that the Welsh Government intends to impose robust partnership working on all the investments made in flood and coastal erosion risk management. There is an expectation that the government will, in some circumstances, only meet a share of the cost of investments.</p> <p>The extent to which an investment is future-proofed with regard to climate change is one of the criteria proposed to determine priorities for investment.</p> <p>Incorporating greater resilience into the design of developments and improving community resilience is regarded as one of the key features of future risk management within the Strategy.</p> <p>Consideration of catchment based land management approaches is encouraged within the Strategy.</p>
Cultural heritage	<ul style="list-style-type: none"> <li>Where it isn't possible to avoid significant flood risk, resilience measures can be considered for heritage assets with particular attention given to design.</li> </ul>	<p>The impact on our wider cultural heritage is identified as one of the factors that should influence the prioritisation of investment.</p> <p>The Environment Agency will be required to report on, amongst other things, the extent of the flood risk to cultural heritage.</p> <p>The Strategy does not refer specifically to the deployment of resilience measures on historic assets, but does encourage their wider consideration within flood and coastal erosion risk management.</p>
Landscape	<ul style="list-style-type: none"> <li>Promoting solutions that work with natural processes should minimise damage to the landscape and will, in many cases, enhance it.</li> <li>Use strategic environmental assessment (SEA) and environmental impact assessment (EIA) to ensure that the effects on the landscape are considered at the local strategy and scheme level.</li> </ul>	<p>The Strategy encourages the consideration of solutions that work with natural processes.</p> <p>The Strategy requires lead local flood authorities to use SEA in the development of local strategies. They are also required to consider the environmental risks associated with all works, using statutory EIA where this is required.</p>

## 4. How have opinions expressed during the consultation period been taken into account?

There have been two periods of consultation on the draft Strategy. The first consultation took place in July 2010 for a period of 12 weeks. The second took place over a further month, between May and June 2011, and was accompanied by the SEA environmental report. This section of the report only refers to the views expressed in relation to the Environmental Report, in the second consultation period, in order to meet the requirements of the Environmental Assessment of Plans Programmes (Wales) Regulations 2004. The first consultation response document to the Strategy can be found on the Welsh Government [website](#).

There were no transboundary consultations as there are no effects on other EU Member States. However, while the Strategy only applies to Wales, the statutory bodies in England were consulted to ensure that any potential cross border effects were taken into account.

Six consultation responses were received. Of these, two considered that the Environmental Report had adequately covered the key issues. More detailed responses were received from the Countryside Council for Wales (CCW), Environment Agency Wales, Gwent Levels Flood Defence Alliance and Caldicot & Wentlooge Levels Internal Drainage Board (IDB). The key issues these consultation responses raised are addressed below. Additional issues raised during the consultation are addressed in Annex 1.

### 4.1 Key issues

Table 4.1 sets out the key issues raised during consultation and sets out how these have been addressed, or provides a response, as appropriate.

**Table 4.1: Key issues raised during consultation**

<b>Consultee</b>	<b>Summary of comments</b>	<b>Response</b>
CCW	Reference should be made to the need to undertake a Habitats Regulations Assessment.	A Habitats Regulations Assessment (HRA) has been undertaken and the results are summarised in section 3 of this report. The impacts addressed by the HRA were also included in the environmental report. The Strategy has been revised to record that a Habitats Regulation has been undertaken.
CCW	Concern that the SEA appeared to indicate that alternatives were available, but were dismissed without being assessed.	Given the need to comply with the requirements of the Flood and Water Management Act and other environmental legislation, and also that the SEA was being undertaken retrospectively, we were unable to identify any alternatives that would result in materially different environmental effects.
CCW & Environment Agency Wales	Concerns that the assessment of effects appears to have been based on whether conflicts exist with legal objectives targets or duties and that the wider significance of effects have not been considered.	The assessment criteria included in the environmental report demonstrate that the assessment took account of the effects on the wider environment. The assessment provides an indication of when we considered the impacts to be significant at a national scale. To provide some transparency as to how this judgement has been made we have provided three indicators of the characteristics of a significant impact (one of which refers to legal objectives, targets and duties). We note that there have been no concerns raised over the findings of the assessment in relation to this issue.
CCW	Concerns that adverse impacts on biodiversity are likely to outweigh the benefits and that issues relating to public funding are likely to influence the potential for adverse effects.	The assessment indicated that adverse effects are likely to outweigh the benefits if measures are not taken to mitigate or offset the impacts. Whilst in the past, flood risk management measures have largely been publicly funded, the Strategy indicates that others are likely to have to share costs in the future. As a result there is likely to be an additional challenge in terms of ensuring biodiversity benefits are included as part of flood or coastal erosion risk management measures.
Environment Agency Wales	The flood plain is in itself a flood defence and therefore should be considered as a material asset.	We agree with this statement. The Strategy refers to TAN 15 that has the overall aim of directing development away from the flood plain. The indications are that protection of the flood plain has improved. This does not affect the outcome of the assessment and does not require an alteration to the Strategy.
Environment Agency Wales	Risk management measures should not result in a deterioration in the WFD status of a water body unless justification can be given in line with the requirements of Article 4.7 of the Water Framework Directive.	We agree with this principle and Strategy has been revised to incorporate it.
Environment Agency Wales	Concern that flood risk management measures in one location can result in an increase in flood risk in another.	We agree that the appraisal of flood or coastal erosion risk management measures should consider any changes in flood or coastal erosion risk on 3 <sup>rd</sup> parties, other assets or features of environmental value, and the mitigation measures required to address this. The Strategy has been revised to ensure that lead local flood authorities are required to ensure local strategies and schemes comply with this principle.
Environment Agency Wales	The SEA should recognise that there may be local effects on soil through the construction of flood risk management measures (for example, flood defences, or the disposal of contaminated soil/ land), and these should be identified and mitigated for as part of lower-tier plans and strategies	We agree on the need to address these issues in assessments of lower tier plans, strategies and schemes. However, there are no implications for this assessment and no changes to the Strategy are required.

Consultee	Summary of comments	Response
Environment Agency Wales & CCW	The SEA should recognise that the release of methane from peat and other organic soils (as part of FCERM activities) may contribute to climate change, and this should be mitigated.	The release of other greenhouse gases in addition to carbon should be recognised. The SEA identified the need to minimise the carbon cost of hard engineering schemes. However, this should be expanded to account for the release of other greenhouse gases. The Strategy has been revised to require lead local flood authorities to take account of and minimise the contribution of flood and coastal erosion risk management measures to climate change.
Environment Agency Wales	The SEA should acknowledge that research is emerging which demonstrates that catchment-based solutions can be effective in delivering flood-risk management.	The strategy supports, and the SEA has recommended, that land management solutions should be adopted as a means of achieving multiple benefits from flood and coastal erosion risk management. The references to the research provided by the Environment Agency have been included in the Strategy to ensure that these are accessible to all lead local flood authorities and risk management authorities.
Environment Agency Wales	Mitigation measures identified in the SEA should inform the National Strategy. Roles and responsibilities for their delivery should also be made clear.	The mitigation measures identified by the SEA, together with those proposed by consultees have been considered by the Welsh Government. Where appropriate, the Strategy has been amended to incorporate them. Clarification on roles and responsibilities was one of the outcomes from the first period of consultation and this has been addressed in the revision to the Strategy.
Gwent Levels Flood Defence Alliance	SEA should have dealt more thoroughly with the issue of coastal squeeze and the justification for compensatory habitats for maintaining sea defences affecting coastal squeeze losses.	The issue of coastal squeeze, maintaining sea defences, inter-tidal habitat losses, and the need for compensatory habitats is addressed in the Habitats Regulations Assessment of the Strategy. This report can be accessed from: <a href="http://wales.gov.uk/topics/environmentcountryside/epq/waterflooding/flooding/?lang=en&amp;ts=4">wales.gov.uk/topics/environmentcountryside/epq/waterflooding/flooding/?lang=en&amp;ts=4</a>
Caldicot & Wentlooge Levels IDB and Gwent Levels Flood Defence Alliance	There needs to be a stronger integration of flood risk management requirements with the land use planning system. TAN 15 is considered to be out of date and currently inadequate to protect areas at risk from flooding from development.	Data within the Strategy indicates that TAN 15 is successful in reducing the number of planning decisions that are taken against Environment Agency advice and there are no plans to review the guidance at present. However, should robust quantitative evidence be provided that TAN 15 is not proving to be successful at ensuring that new development is adequately protected from flood risk then the Welsh Government will consider the need for a review.
Caldicot & Wentlooge Levels IDB and Gwent Levels Flood Defence Alliance	Some flood and coastal erosion defences protect internationally and nationally important nature conservation sites.  Concern that the effects of coastal squeeze on internationally designated sites are not considered in their full historical context.	We agree that some defences are effective at protecting important nature conservation sites on the landward side of defences and this is recognised in the Environmental Report.  The Strategy, Environmental Report and Habitat Regulations Assessment are not able to consider impacts on specific nature conservation sites as a result of the lack of spatially related information. Lower tier plans, strategies and projects will consider the effects in the context of 'natural' historical change. Nevertheless, the Habitats Directive does oblige the Welsh Government to maintain the integrity of internationally designated sites (the Natura 2000 network). Where assessment of lower tier plans / strategies / projects determines that adverse effects on site integrity are considered to be unavoidable, and no feasible alternative solutions exist, this will require the provision of compensatory measures, and demonstration of reasons of overriding public interest.

<b>Consultee</b>	<b>Summary of comments</b>	<b>Response</b>
Caldicot & Wentlooge Levels IDB and Gwent Levels Flood Defence Alliance	Concerns regarding historical expectations of flood and coastal erosion risk management and involvement in future risk management decisions.	The Strategy states that the Welsh Government will impose 'robust partnership working' to investments in flood and coastal erosion risk management. Each partnership will include representation from local communities affected by proposals. The Strategy also welcomes views on their precise makeup and size.
Caldicot & Wentlooge Levels IDB and Gwent Levels Flood Defence Alliance	Concerns regarding the difficulty in obtaining insurance in areas at risk from flooding.	The Strategy indicates that the Welsh Government communicated with the Association of British Insurers on flood risk issues. In 2009 an agreement was signed with this organisation that, amongst other things, required the insurance industry to continue to provide insurance cover for the majority of households at risk of flooding. Wales is part of the UK territory group that has been established to look at the future accessibility of insurance post 2013.
Caldicot & Wentlooge Levels IDB	Concerns that the SEA has not adequately addressed the issue of flood defence works carried out by bodies and organisations other than the Environment Agency.	The Strategy is a requirement of the Flood and Water Management Act. This sets out a revised structure for the oversight and responsibility for flood risk management. Under this structure some flood defence works will be carried out by lead local flood authorities. Other defences erected by third parties will continue to require flood defence consent and / or planning permission, will require an assessment of the effect on flood risk, consideration of environmental issues as necessary, and will be subject to consultation with the Environment Agency Wales.

## 5. Reasons for adopting the Strategy in its final form

The Welsh Government has taken into account the:

- Consultation responses to the strategy
- The changes made to the strategy in response to the consultation
- The findings of the SEA and the responses to the consultation on the Environmental Report
- The acceptance of the findings of the Habitats Regulation Assessment by the Countryside Council for Wales and the Welsh Government

Based on these, the Welsh Government has decided to adopt the Strategy.

## 6. Monitoring

Measures are required to monitor the effects of the Strategy. While it is possible to monitor the environmental factors referred to in the Environmental Report, it will be difficult to attribute any changes as a direct outcome of the strategy. Nevertheless, it is reasonable to monitor key environmental indicators to determine whether any adjustments to strategy may be necessary in the future to improve the environmental outcomes.

The Welsh Government together with the Environment Agency Wales will monitor the implementation of the strategy, ensuring that local strategies, and other documents are consistent with the national strategy.

The Strategy states that the Welsh Government intend to set targets and performance indicators in relation to, amongst other things:

- Defence against flooding and coastal erosion
- The wider adaptation and management of flood risks, particularly surface water flooding.

The Environment Agency, Wales has been tasked by the Welsh Government with monitoring and reporting on the actions of other risk management authorities to implement the Strategy. Information to be included in these reports will include:

- The extent of flood and coastal erosion risk in Wales, including the number of people and properties.
- The extent of the risk to the environment in Wales, cultural heritage and the potential economic impact.

The Welsh Government uses sustainability indicators to monitor progress on the implementation of sustainable development within Wales. These, among other things, demonstrate trends in environmental and social factors that have a direct link, or a close relationship, to flood and coastal erosion risk management. When considering progress against these indicators the Welsh Government will give consideration to the contribution flood and coastal

erosion risk management can make to improving these environmental outcomes and take this into account when the Strategy is reviewed.

The indicators that are of particular relevance are:

- **Indicator 19a:** Trends in Biodiversity Action Plan species and habitats
- **Indicator 19b:** Trends in wild birds population index
- **Indicator 20a:** Proportion of land under agri-environment agreement (by scheme), or which is organic or which is in conversion to organic
- **Indicator 21:** Percentage of features on Natura 2000 sites in favourable or recovering condition
- **Indicator 26:** The number of historic assets deemed to be at risk
- **Indicator 27a:** Percentage of people stating that they could access a park or open space easily
- **Indicator 27b:** The percentage of the population meeting each of Countryside Council for Wales size/distance criteria for access to natural greenspace
- **Indicator 29a:** Percentage of total length of footpaths and other rights of way which were easy to use by the public
- **Indicator 29c:** Change in number and extent of tranquil areas as defined in Countryside Council for Wales mapping work.
- **Indicator 29d:** The percentage of adults living in Wales who frequently use the outdoors for informal recreation
- **Indicator 31a:** Annual cost of damage due to flooding
- **Indicator 31b:** Probability of flooding of assets at risk
- **Indicator 31c:** Percentage of new development permitted in the floodplain.

Furthermore, as the requirements of the Water Framework Directive is an important driver for the improvement of the water environment, the Welsh Government will consider appropriate indicators to monitor the contribution of flood and coastal erosion risk management activities to achieving Water Framework Directive objectives.



## Annex 1: Other issues raised during consultation

Consultee	Summary of comments	Response
Environment Agency, Wales	Environment Agency would welcome the opportunity to work with the Welsh Government on any guidance produced to help organisations to develop related plans and strategies.	The Welsh Government will ensure that the Environment Agency is engaged in the development of further guidance relating to the Strategy.
Environment Agency, Wales	Suggested the use of indicators from the State of the Environment Report to monitor changes in environmental trends relating to flood risk management.	We have adopted this suggestion and relevant indicators have been included in the monitoring section of this document (section 6). When the Strategy is reviewed the Welsh Government will consider whether changes are required to the way in which flood and coastal erosion risk management contributes to environmental outcomes.
Environment Agency, Wales	The Environment Agency noted and accepted the arguments for scoping some issues out of the Strategic Environmental Assessment.	No response required.
Environment Agency, Wales	Requested that the term 'resilience' was defined to clarify that this did not refer to construction of new infrastructure.	The interpretation of the term 'resilience' is correct. This refers to property level measures that are designed to protect an individual property from flooding or to facilitate the rapid recovery and reoccupation of a property following a flood event.
Environment Agency, Wales	In the assessment of the 'do nothing' scenario the Environment Agency considered that due to important biodiversity sites benefiting from flood defences, the significance of the impact should be neutral rather than significantly positive.  Similarly, they considered that the effects on soils should be changed from neutral to a significant negative effect.	The impacts of the do nothing scenario are difficult to determine and are a matter of judgement. We agree that there are important nature conservation sites that currently exist due to the presence of flood defences. Our view is that the benefits to biodiversity resulting from the restoration of natural processes would outweigh these negative effects. However, we acknowledge that this is a fine judgement.  We agree that we did not record positive impacts in relation to the 'do nothing' scenario (e.g. natural nutrient replenishment of soils through fluvial processes) that would appear to have the effect of offsetting those that are negative. However, we did not consider that the negative effects would be of sufficient scale to be nationally significant. Nevertheless, this is a judgement and we acknowledge that the conclusion of significant negative effect could be equally valid.
Countryside Council for Wales (CCW)	Would have been useful for statutory context for SEA to have been referred to in the non technical summary.	We agree with this comment. While the non technical summary will not be re-issued, we have referred to the statutory context within this document.

Consultee	Summary of comments	Response
CCW	In reference to the aims of the Strategy, there is no reference to the needs of Wales' natural heritage, natural goods, services and functions.	This is a comment directed primarily at the Strategy as this is where the aims of the Strategy are drawn from. While the needs of the natural environment are not directly referenced, the Strategy does state a clear aim to embed sustainable development in decision making and implicit in this is the need to protect the natural environment. Further guidance on taking sustainable development into account will be forthcoming that further describes how the needs of the natural environment should be taken into account.
CCW	A great proportion of the coast is sensitive, given their nationally and internationally protected status. The SEA should consider that all coast and estuary environments should be considered to be sensitive.	The SEA recognises the sensitivity of the coast and particularly those areas that are designated. However, given the lack of a spatial element to the Strategy, we do not consider that this change in approach would make a material difference to the conclusions of the assessment.
CCW	Required clarification on the meaning of "inappropriate" development.	This refers to development on land that has physical restrictions, such as flood or coastal erosion risk, or would have restrictions due to natural conservation, historic environment, or natural and built landscapes.
CCW	Suggested additional bullet points relating to landscape and soil, resulting from the review of policies, plans and programmes.	The issues raised have been taken into account in the assessment and are addressed by the criteria included in Table 3.1 of the Environmental Report.
CCW	Concern that the description of the baseline for biodiversity referred to legislation rather than the quality of Wales' natural heritage.	References to legislation were in the context of providing an indicator that the natural heritage within Wales is valued both nationally and internationally. The description of the baseline does go on to provide an overview of the extent and condition of the natural heritage within Wales.
CCW	Concern that in describing the relation of the biodiversity baseline to the National Strategy the report focuses on the legislation. Rather the focus should be on the challenge of protecting and maintaining biodiversity in the face of increasing flood and coastal erosion hazards.	We agree that the opening sentence is, perhaps, inappropriately phrased. However, the wider description of the issues addresses the challenge of protecting biodiversity while seeking to provide protection to people and property.
CCW	Further information should be provided in respect of transport and electricity transmission infrastructure. Surprised at the reference to boundary and garden walls in the context of flood defences.	The additional information required on the transport and electricity transmission infrastructure isn't stated and we consider that sufficient overview is provided in the Environmental Report. The references to boundary and garden walls refers to those locations where there may not be any formal flood defences and as a result boundary and garden walls (constructed for entirely different reasons) are effectively the flood defence.

Consultee	Summary of comments	Response
CCW	Clarification required on the term 'local' in the context that effects on local environmental issues were considered to be significant in the context of the assessment.	Given the lack of spatial information within the Strategy, it is not possible to identify or assess specific impacts in particular locations. The assessment therefore focuses on how the Strategy is likely to affect the environmental issues at a national scale and passes the assessment of effects at particular locations to SEAs and EIA lower tier plans and strategies.
CCW	Concern that levels of significance have not been determined within the assessment and refers to Annex II of the SEA Directive.	Annex II of the Directive provides criteria for determining whether effects are likely to be significant in the context of determining the requirement for an SEA. However, the Environmental Report states that different levels of significance have not been determined (e.g. slight, moderate, major) as the degree of uncertainty at this strategic level is too high to justify this level of precision.
CCW	Assessment criteria for material assets should include consideration of them being climate change proofed and adaptable.	The assessment criteria under 'climatic factors' accounts for adaptation to climate change. To have included the same criteria under 'material assets' would have resulted in double counting.
CCW	For landscape assessment, criteria for protecting, enhancing and maintaining local landscape distinctiveness should have been included.	Given the high level nature of the Strategy and the lack of spatial information we do not consider that it would have been practical to assess the Strategy using this criterion.
CCW	Notes that intertidal habitats are also important for invertebrate, fish and non-avian wildlife.	We agree with this point, but do consider that it alters the outcome of the assessment.
CCW	With reference to section 4.3, CCW is concerned that the assessment is based on conflicts with other policies and legislation.	This section of the report is concerned with the cumulative effects of the Strategy in combination with other policies, plans and programmes. The assessment was therefore identifying where the effects of the Strategy are likely to increase or conflict with other similar high level initiatives.