

Caerphilly Local Flood Risk Management Strategy

Strategic Environmental Assessment / Sustainability Appraisal

Document 1a – Scoping Report Report of Consultation - Statutory Consultee Involvement

October 2012

Section of Scoping Report

General

Summary of comment and any Suggested Amendment

CCW welcomes and supports the efforts made by Caerphilly in engaging with this assessment process. This is a very thorough Report with many examples of good practice and much of the content is very comprehensive. We note, however, that in using a generic baseline that is non-specific to the Local Flood Risk Management Strategy, some of the objectives and indicators are not relevant or reactive to the plan under scrutiny. We suggest that this be taken into consideration as the process moves forward.

Officer Response

It is accepted that the baseline for the Scoping Report is broad, but it is not accepted that the Objectives and Indicators are neither reactive nor relevant to the LFRMS. The baseline outlines state of the environment against which the effects of implementing the LFRMS will be assessed. The Objectives and Indicators are set out in Topics, relating to the topic areas set out in the SEA Directive. Many of the Objectives and Indicators relate directly to the effects of flooding and these are directly reactive and relevant. However there are wider effects from flood events that could also lead to significant environmental effects, the primary case being implications for land use.

Flooding has effects beyond the direct impact that the flood event may have. The risk of flooding not only poses a threat to life and property, but also has a major impact in planning for future development to meet the needs of future communities. The risk of flooding on land precludes its use for major developments and restricts the potential to realise basic necessities such as employment and a home for the residents of a community. These effects can be far more significant than direct effects, especially on a social level, and must be considered through the SEA assessment process. It is accepted that some of the Indicators may seem to lack any direct link to flood risk, but it is the indirect effects that are being sought in these instances.

The issue of reactivity and relevance will be monitored through the assessment part of the SEA process and any issues raised in this respect will be referenced in the Environmental Report.

Recommendation

No change be made to the Scoping Report in this respect.

Section of Scoping Report

General

Summary of comment and any Suggested Amendment

As the work progresses, we would particularly encourage the consideration of flood risk management options that work with natural processes and provide multiple benefit, for example by working in synergy with the Water Framework Directive or environmental enhancement initiatives.

Officer Response

The comment is noted. As part of the assessment process the issue of synergistic, cumulative and secondary effects will be addressed. As part of this synergistic links to other documents/practices will be considered and, where pertinent, addressed through the Environmental Report.

Recommendation

The comment be noted.

Section of Scoping Report

General

Summary of comment and any Suggested Amendment

We are pleased to see your Authority have adopted the SEA framework and follow the WG FRM objectives in the guidance, recognising biodiversity and environmental issues.

Officer Response

The support for the approach to the SEA.

Recommendation

The support be noted.

Section of Scoping Report

General

Summary of comment and any Suggested Amendment

We also seek clarity on how 'Alternatives' are being considered and appraised

Officer Response

The SEA Directive requires that the LFRMS be assessed for significant environmental effects. It also requires that, as part of the assessment, reasonable alternatives are also considered. In terms of the LFRMS, alternative approaches to meeting the requirements of the Flood Risk Regulations 2009, i.e. to reduce the risk of flooding, have been considered.

The alternative approaches will be assessed against the Objectives set out in the Assessment Framework included at the end of each topic in the Baseline Characterisation Chapter of the Scoping Report. A detailed explanation of how the alternative approaches have been assessed, and the outcomes and results, will be set out in the Environmental Report, as outlined in paragraph 2.13 of the Scoping Report. As such it is not proposed to specifically address this issue through the Scoping Report.

Recommendation

No change be made to the Scoping Report in this respect.

Section of Scoping Report

General

Summary of comment and any Suggested Amendment

We seek clarity on how different timescales will be considered. A Local Strategy is a living document and its objectives should cover short, medium and long term timescales. Consideration of possible measures over this timescale should be included in the main SEA document. The Welsh Government guidance on Local Flood Risk Management Strategies (Nov'2011) advises that measures to achieve objectives should be considered over the short (0-20 years), medium (20-50 years) and longer term (50-100 years).

Officer Response

The LFRMS will need to include a section on monitoring and review its implementation, as this is required by the Regulations. Consequently specifically monitoring the LFRMS is not within the remit of the SEA. Therefore it is not appropriate for the SEA to consider possible measures for the LFRMS, as these should be considered by the LFRMS itself. The emerging Caerphilly LFRMS will include a section outlining potential measures to be implemented to realise the LFRMS Objectives.

The SEA will, however, need to assess the likely significant effects of the implementation of the strategy and, by implication, the potential measures set out within it. It is correct that the guidance on such strategies identifies time period for measures to be implemented, i.e. short (0-20 years), medium (20-50 years) and long (50-100 years). These timescales, however, raise an important issue for the SEA assessment and monitoring processes. The assessment process seeks to predict effects of implementing the strategy whilst the monitoring process seeks to monitor the state of the environment to identify if these, or other unexpected, effects are taking place. Both processes use the baseline state of the environment set out in the Scoping Report as the control against which the effects are considered.

The LFRMS sets out extremely long time periods (0-100 years) for implementation of its measures and the length of this timescale poses a real problem for the SEA assessment and monitoring. For assessment purposes an objective is considered against the framework of Objectives and Indicators (Assessment Framework) to identify potential effects judged against the baseline level. However when considering changes in respect of medium and long term measures, it is highly likely that the baseline will have changed significantly and in ways that could not have realistically been predicted. The baseline 50 years into the strategy implementation is likely to bear little comparison with that set out in the Scoping Report and any effects identified against it are likely to be incorrect, especially in respect of their significance (which is a major consideration in the process). Therefore assessing and monitoring effects over the protracted period. Conversely using shorter timescales (such as those used on development plans - 0-5, 5-10, 10-15 years) to make the baseline more relevant will mean that some measures and objectives may not be assessed as they will not be commenced until after the end of the assessment period.

The reliability of the assessment and monitoring processes are key to the SEA as a whole and this issue questions it significantly. Input from CCW and EAW have been sought, though no solution to the position has yet been identified. Continued discussion with both parties will be undertaken in the future to seek a resolution of this issue.

The LFRMS is, however, required to be submitted to WG in January 2013, and, as a result, the assessment process cannot be delayed until this issue is resolved. Consequently it has been decided to base the assessment of predicted effects against the baseline in the Scoping Report, whilst the Environment Report will acknowledge the limitations over the medium and long terms.

Recommendation

The council will continue to liaise with CCW and EAW in seeking to resolve this issue.

The council will assess the likely significant effects of the implementation of the LFRMS against the baseline outlined in the Scoping Report on the timescales relevant to the LFRMS, i.e. Short (0-20 years), medium (20-50 years) and Long (50-100 +years), whilst the Environment Report set out the limitations over the medium and long terms.

Section of Scoping Report

General

Summary of comment and any Suggested Amendment

We would also ask for further details on monitoring i.e. under what frequency and circumstances e.g. changes to legislation, or a flood event or changes in data. This is essential to ensure that local flood risk management is responsive to changes that could include amendments to partner responsibilities, updates to legislation, alterations in the nature (or understanding) of local flood risk, or a flood event. It may be appropriate to align review of the Local Strategy with similar revision schedules for existing assessments and plans. For example, review of the National Strategy will occur on a six-yearly cycle to coincide with the Flood Risk Regulations 2009. Consideration should also be given to the review programmes of documents such as Catchment Flood Management Plans. This reporting on Local Strategies would need to input into the Water Management Act 2010 reviews, whereby a Local Authority should scrutinise/report on all flood risk management activities. Please note; under the Act, the Environment Agency must report on the management of all sources of flood risk and may use information about LLFAs progress towards developing and implementing their Local Strategies in this process.

Officer Response

The SEA directive requires that the state of the environment is monitored to identify if significant environmental effects are realised through the implementation of the LFRMS and, if so, the extent and nature of the effects. The assessment framework or Objectives and Indicators provides the framework to do this.

The SEA Directive does not, however, require that the Scoping Report, or any other SEA document, addresses the issue of monitoring strategy itself. This is a role for the Strategy document not the SEA. As such this will not be addressed through the SEA.

Recommendation

No change be made to the Scoping Report in this respect.

Section of Scoping Report

1.0 SEA/SA Determination

Summary of comment and any Suggested Amendment

CCW welcomes the clear and thoughtful SEA screening determination provided within this Report and supports the acknowledgement that the Local Flood Risk Management Strategy has the potential to affect the development potential of land, as well as the wider environment

Officer Response

The support for the determination is welcomed.

Recommendation

The support be noted.

Section of Scoping Report

2.6(iii) Background to Strategic Environmental Assessment

Summary of comment and any Suggested Amendment

In the vast majority of geological units across Wales, including your Authority, groundwater does not form underground ponds or stream. In general groundwater is held in the pore spaces between grains or in fissures and fractures within the rock mass. The only geology in Wales where the fractures are wide enough to potentially create karstic features (like conduits for flowing water and caves) is in the Carboniferous Limestone. We are aware that your Authority does have Carboniferous Limestone along the southern ridges, but the likelihood of karstic features forming is low.

Groundwater is rainfall and surface water that has percolated down through the soil and into the rock mass where it is held and moves through pores spaces, fissures and fractures. Given the geology across your area, groundwater contributes to base flow in rivers and forms springs discharges.

Officer Response

The reference to ponds or streams is meant to relate to the widespread incidence of former mine working where ground water collects and to locations where this mine water breaches the surface as springs. It is accepted that the current wording does not reflect this and should be amended accordingly.

Recommendation

Paragraph 2.6 (iii) be amended to read as follows:

“Ground water (water that has percolated into the ground, which can collect in the widespread former mine workings throughout the county borough, that discharges to the surface through springs and arisings located lower down the catchment).”

Section of Scoping Report

2.14 Background to Strategic Environmental Assessment

Summary of comment and any Suggested Amendment

CCW accepts that the number of indicators used to monitor the performance of the LFRMS against environmental parameters should be kept succinct. However, the number of issues required for consideration in the monitoring programme and the number of indicators used as monitoring tools should enable, and not constrict, the monitoring process. It is important to develop relevant and reactive indicators whenever issues are raised that require subsequent monitoring.

Officer Response

Paragraph 2.14 of the Scoping Report states *“However guidance indicates additional primary research is not necessary and only a limited number of indicators should be used to monitor the Strategy”*. This is an accurate statement that, as a result, should not be amended. However, whilst this is an accurate statement it does give the impression that the number of indicators should be limited.

CCW are, however, correct in their view that the Objectives and Indicators set out in the assessment framework should enable the monitoring process, which means that the indicators should be reactive, relevant and appropriate to provide a robust assessment. This means that the assessment framework should include all relevant indicators and should not be artificially constrained by a requirement to limit their number.

The paragraph should be amended to reflect this position.

Recommendation

The following be added at the end of paragraph 2.14:

“To meet its objective the SEA must identify indicators that are reactive, relevant and appropriate to undertake a robust and meaningful assessment of the Strategy. As such the SEA will set out an appropriate and relevant set of indicators for the assessment process.”

Section of Scoping Report

2.21 Habitats Regulations Assessment

3.11 SEA process Part C – Environmental Report

Summary of comment and any Suggested Amendment

CCW would recommend that Habitats Regulations Assessment is undertaken in accordance with the process set out in the Annex to TAN 5 and in accordance with CCW guidance on the HRA of plans

Officer Response

It is acknowledged that HRA should be undertaken in accordance with TAN 5 and CCWs guidance on HRA of plans.

Paragraph 2.21 of the Scoping Report addresses the requirement to undertake a HRA of the Strategy. The final sentence of the paragraph can be construed to mean that the HRA is part of the SEA, which is not its intention. An amendment to the last sentence would clarify the situation.

Paragraph 3.11 seeks to set out the HRA process simply, purely for information purposes. It is acknowledged that the HRA is a stand alone assessment and does not form part of the SEA. As such the paragraph does not seek to set out the detailed process for the HRA, as this will be covered in the HRA Report. In simplifying the process the Scoping Report has referred to “screening” as the first part of the process. “Screening” covers the Assessing likely significant effects part of the process identified in Figure 1, Annex 6 of TAN 5. Whilst the term “screening” may not be the jargon term, the accompanying paragraph adequately identifies what the stage does and as such it is considered appropriate for its purpose. Consequently it is not intended to make any amendment to the paragraph.

Recommendation

No amendment be made in respect of paragraph 3.11 and the last sentence of paragraph 2.21 be amended to read as follows:

“Whilst HRA is not part of SEA, and is prepared under separate legislation to the SEA, it is often included within the suite of documents that comprise the overall SEA documentation.”

Section of Scoping Report

3.4 SEA process Part A – Scoping Report

Summary of comment and any Suggested Amendment

CCW notes the intention not to refine the environmental baseline until the setting of sustainability objectives. Baseline information provides the basis for predicting and monitoring environmental effects of a given plan and to focus the assessment towards those environmental topics where effects are considered most likely. CCW would therefore suggest that best practice would encourage the collation of baseline information that is relevant and reactive to the plan under scrutiny. It may not necessarily be helpful to collate a more generic baseline that could be unresponsive to the policies contained within the Local Flood Risk Management Strategy.

Officer Response

Paragraph 3.4 seeks to identify that the baseline characterisation of each topic area would not be limited to those matters that can directly be affected by the strategy under scrutiny because it may result in less obvious effects and implications being overlooked at assessment stage. That does not mean, however, that the baseline characterisation omits information that is relative and reactive to the strategy under scrutiny. In fact this information is included within the baseline characterisation along with more generic information.

The paragraph seeks to advise that the SEA, in identifying Objectives and Indicators, identifies Objectives and Indicators that are reactive and relevant to the strategy and does not identify Objectives or Indicators that are not. The last paragraph confirms this by stating “*The Sustainability Objectives are, therefore, the Environment Issues that can be affected or changed by the LFRMS.*”

Recommendation

No change be made to the Scoping Report in respect of this issue.

Section of Scoping Report

Figure 2 The Sustainability Appraisal Format

Summary of comment and any Suggested Amendment

Given that the SEA process requires consideration of both positive and negative effects, clarification of the meaning of 'the nature of effect' column would be welcomed. As presented in this example, Row 1 identifies 'major impact' but in the subsequent columns for 'assessment of effect' provides a positive score. The word 'impact' has negative connotations and should be avoided where effects are positive.

Officer Response

The "Nature of Effect" column relates directly to Annex II, paragraph 2 of the SEA Directive which states "Characteristics of the effects and of the area likely to be affected". As such the column sets out three important elements of the character of any effect, namely the significance or magnitude of the effect (first line), the probability of the effect (second line) and the area likely to be affected (third line). This is explained in preceding paragraph (3.8)

In a proper assessment the first line would read "Major" rather than "Major impact" as the word "impact" has been added to aid interpretation. Similarly in the second line the word "likelihood" has been added to "High" to aid interpretation. These added words will not be used in the assessment results tables. Given this the issue of a negative connotation in respect of the word "impact" will not arise in the assessment results and therefore it is not considered to be an issue.

It is acknowledged, however, that the SEA Directive uses the word "effect" rather than "impact" and such a change to the first line of the column would be appropriate to reflect this.

Recommendation

The first line of each box in the "Nature of Effect" column of Table 2 be amended by the deletion of the word "impact" and its replacement by the word "effect".

Section of Scoping Report

5 The Baseline Characterisation

Summary of comment and any Suggested Amendment

The Baseline data identified appears to inform the SEA is clearly identified and is therefore appropriate and comprehensive. We also suggest that the latest data, evidence and information are reviewed. We are able to provide our latest 'local authority' local evidence base and WFD supplements (2012), on request. There is also a neighbouring authority' evidence based pack available.

Officer Response

PG

Recommendation

Section of Scoping Report

5 The Baseline Characterisation *Population and Human Health*

Summary of comment and any Suggested Amendment

We suggest that a useful issue to consider would be the proportion of housing stock and essential infrastructure (hospitals/schools/water treatment works etc) within flood risk areas (as identified by the Environment Agency and/or the maps contained within TAN15). In addition, it might be useful to consider whether areas of deprivation coincide with flood risk areas.

Officer Response

The Flood and Water Management Act 2010 defines local flood risk as:

- 1 **ordinary watercourses** (a watercourse that ***does not form part of a main river***, includes a lake, pond or other area of water, which flows into an ordinary watercourse)
- 2 **surface runoff** (rainfall or other precipitation which is on the surface or ground and has not entered a watercourse drainage system or public sewer)
- 3 **ground water** (water that has percolated into the ground and may form underground ponds or streams, which may discharge above ground but lower down the catchment).

It is clear from this definition that the Strategy should not consider main river flooding, which is the basis of the flood zone maps in TAN 15. As a result it would be inappropriate to consider dwellings or critical infrastructure within these areas as the Strategy would have no authority over it.

The issue of the number of dwellings in the flood risk areas identified in the LFRMS is addressed under the Water Topic (paragraph W6 refers) although work undertaken since the preparation of the Scoping Report has revised the estimate of dwellings and people and the Scoping Report should be amended to reflect this.

The general issue of the effects of flooding on infrastructure is set out in the Material Assets Topic of the Scoping Report. However no reference is made to the number of critical services within the local flood risk areas in this Topic. It is accepted that this is an important piece of information for the topic and, as the basis of the LFRMS is to reduce risk, this would also be a suitable indicator in the assessment framework.

Recommendation

The last 2 sentences of Paragraph W6 be amended to read as follows:

“Within this area an estimated 7238 properties (16,141 people) are potentially at risk from deep flooding up to 0.3m in a high-risk (1 in 200 year chance) event. This includes properties within the principal towns of Caerphilly, Risca, Blackwood and Rhymney”

And that the following be added to the end of paragraph M6

“As part of the LFRMS work 69 critical services have been identified as being located within areas identified as being at risk of flooding.”

And the following Indicator be added to the Assessment Framework in the Material Assets Topic

Indicator	Target	Source	SA Area
(h) The number of Critical Services in areas at risk of flooding that have not been the subject of Flood Risk Management measures.	Year-on-year reduction in the number of critical services at risk.	CCBC Data	Environmental

Section of Scoping Report

5 The Baseline Characterisation *Population and Human Health*

Summary of comment and any Suggested Amendment

As written, the baseline information and population/human health objectives and indicators are not relevant or reactive to the Flood Risk Management Strategy under scrutiny. As such, they may not provide a useful indication of the effects of the Plan's implementation on human health and population issues.

Officer Response

It is not agreed that the Objectives and Indicators as written are not relevant or reactive to the LFRMS. The baseline characterisation has not been limited to those matters that can directly be affected by the strategy under scrutiny, because it may result in less obvious effects and implications being overlooked at assessment stage. One of the main indirect implications of the LFRMS is the potential to sterilise land through flood risk or through sustainable flood defence/drainage measures. Sterilisation of land can have significant issues in respect of employment and housing and other basic life essentials, through restricting land upon which such uses can be developed. The indicators included in this topic relate to this issue and provide relevant and reactive measures on this basis.

It is acknowledged that the Assessment Framework in the Population and Human Health Topic does not include an indicator related to human health. It should be noted, however, that the Material Assets Topic includes the issues of sewer and CSO flooding, addressing potential contamination related risks to public health. It should also be noted that Water Topic considers issues of flooding and properties flooded and addresses potential risks to health as a consequence. Paragraph 5.6 advises that there are many issues that relate to more than one Topic area, but in order to minimise duplication and reiteration, as well as duplication and unfair weighting of indicators in the assessment process, issues will only be addressed under one Topic. As a result it is considered that the issue of flood risk and risk to human health is sufficiently covered in other Topic areas and there is no requirement for additional indicators on this issue..

It is considered, therefore, that the Baseline Characterisation and subsequent Objectives and Indicators provide an appropriate, relevant and reactive framework for assessing direct and indirect effects of implementing the LFRMS.

Recommendation

No change be made to the Scoping Report in respect of this issue.

Section of Scoping Report

5 The Baseline Characterisation *Air Pollution*

Summary of comment and any Suggested Amendment

CCW welcomes the given objective 'to reduce air pollution emissions' but would suggest an additional objective and indicator should be added in respect of air pollution impacts/effects on sensitive environmental receptors, habitats and species

Officer Response

Although air pollution will have a greater impact on sensitive environments, habitats and species. In the context of the LFRMS it is unlikely to be of sufficient significance to consider further.

Recommendation

No change be made to the Scoping Report in respect of this issue.

Section of Scoping Report

5 The Baseline Characterisation *Air Pollution*

Summary of comment and any Suggested Amendment

It is suggested that an additional objective and relevant indicator be added in respect of 'tranquillity'

Officer Response

The strategy, in dealing with local flood risk management, will be one of many factors that affect levels of tranquillity in urban and rural areas. The opportunity will exist to develop or increase tranquillity as part of flood management measures and this should be stated in the text. The addition of an objective and indicator is not considered appropriate because it would not be reactive to the specific context of the plan under scrutiny.

Recommendation

An additional paragraph be added at the end of the Air Pollution Baseline Characterisation to read as follows:

"A12: Air pollution, through noise, particulates or light can affect both rural and urban areas, with a combined tranquillity measurement a balance of positive and negative factors. The flood strategy offers opportunities to develop areas of tranquillity in both rural and urban areas."

Section of Scoping Report

5 The Baseline Characterisation *Cultural Heritage and Landscape*

Summary of comment and any Suggested Amendment

CCW welcomes the indicators and targets proposed, given that they relate and are reactive to the context of a flood risk management strategy. It is suggested however, that consideration is given to the use of the term 'water management' given that water management might apply to a number of actions (water supply and waste water treatment) as well as to management of water in the context of flood hazard.

Officer Response

Although water management (including water supply, demand and waste treatment etc) can affect flood risk it is recognised that the term is not flood risk specific. The broad term was used as the options proposed by the LFRMS are themselves broad. The indicators have been amended to remove this ambiguity

Recommendation

The Indicators be amended to read as follows:

- "a) *Numbers of flood water management related developments that are in a designated landscape area*"
- "b) *Numbers of flood water management related developments that are in a designated historic area*"
- "e) *Numbers of water management related developments that affect a designated historic site*"

Section of Scoping Report

5 The Baseline Characterisation *Cultural Heritage and Landscape*

Summary of comment and any Suggested Amendment

Clarification would be welcomed as to what is understood by 'important historic assets'

Officer Response

The term 'important historic assets' was utilised within the SEA documents as it provided sufficient width to cover all the potential impacts of the strategy. It is recognised that an adopted approach be identified and this has been included in the text as a concluding paragraph.

Recommendation

An additional paragraph be added at the end of the Cultural Heritage And landscape Baseline Characterisation to read as follows

"It has been demonstrated above that Caerphilly has a rich culture and heritage that will be affected by flooding and flood management. The wide diversity of these assets require a logical approach to decision making and guidance in reconciling the protection alongside economic and social needs is provided in documents such as CADW 'conservation principles publication."

Section of Scoping Report

5 The Baseline Characterisation *Water*

Summary of comment and any Suggested Amendment

CCW welcomes the detailed and careful consideration of the types of flood hazard within Caerphilly, such as mine water contamination and flash flooding. It is suggested that it might also be useful to consider flood hazard in the context of unconsolidated soils and spoil.

Officer Response

The comments are noted in respect of the support of the inclusion of mine water contamination and flash flooding. Unconsolidated soils have the potential to affect flooding, through land slippage and as such have been incorporated in the text.

Recommendation

The support be noted paragraph W7 be amended by the inclusion of the following text at the end of the paragraph:

“The impact of coal workings, through areas unconsolidated spoil and soil sites, creates potential sites of land slippage that may affect the flow and course of water; creating flash events and new areas of flooding.”

Section of Scoping Report

5 The Baseline Characterisation

Water

Summary of comment and any Suggested Amendment

We welcome the given objective on flooding, i.e. 'to minimise the number of flood events on Key Flood Risk Indicators' but suggest that additional objectives should be given in relation to the aim of minimizing not only the number of flood events but also the magnitude of those flood events. Care needs to be taken that in minimising the potential for flooding to occur, proposals do not increase the potential magnitude of any flood event.

Officer Response

It is recognised that flood alleviation works have a potential to affect the frequency and magnitude of the flood event and that this should be considered in assessing the impact of the strategy.

The officer considers that the objective to minimize the magnitude of flood events does not require the creation of new objectives. Specific data to quantify the event is not recorded and therefore secondary indicators would be used. These measures are recorded under other objectives, including

Population and Human health

(b) The number of residential dwellings ineligible for insurance cover

Water

(f) number of properties flooded

Recommendation

Paragraph W1 be amended by the inclusion of the following text at the end of the paragraph:

"These protection measures can prevent the potential flooding of settlements, however they may have a negative effect in that they increase the potential magnitude of a flood event."

Section of Scoping Report

5 The Baseline Characterisation *Water*

Summary of comment and any Suggested Amendment

We warmly welcome the target to reduce areas of non-permeable surface but would suggest that this should be strengthened by the provision of a specific, quantifiable target.

Officer Response

The target to reduce non-permeable surface could be strengthened by a specific quantifiable target. However it is the officer's opinion that the setting of this target would not be appropriate as there is no firm baseline to set a reduction against.

The target is for a year-on-year reduction, which can be monitored from the start of the plan.

Recommendation

No change be made to the Scoping Report in respect of this issue.

Section of Scoping Report

5 The Baseline Characterisation *Geology*

Summary of comment and any Suggested Amendment

CCW notes the reference to the abandonment of Troed y Rhiw Fwch but would welcome clarification as to whether the geological instability referred to might be exacerbated by water penetration of incompetent strata e.g. rotational land slip hazard.

Officer Response

The addition or removal of water from an area of geological instability can increase the likelihood or effect of a geological event. The location of Troed y Rhiw Fwch would decrease the likelihood of works affecting this feature although the affect of the plan on the geology should be noted in the scoping report.

Recommendation

Paragraph G4 be amended by the inclusion of the following text at the end of the paragraph:

“A pre-existing instability by its nature is prone to further failure. The addition or removal of water from this area has the potential to heighten this condition.”

Section of Scoping Report

5 The Baseline Characterisation *Geology*

Summary of comment and any Suggested Amendment

We welcome the acknowledgement that flood hazard is related to cover profile and interception/infiltration rates

Officer Response

The support for the content of the baseline characterisation.

Recommendation

The support be noted

Section of Scoping Report

5 The Baseline Characterisation *Geology*

Summary of comment and any Suggested Amendment

CCW would suggest that an additional 'soils' indicator' be added in respect of the need to protect, maintain and enhance/restore the function of peat and organic soils, not only in the context of their potential role in managing flood hazard but also in terms of their environmental and ecological value.

Officer Response

The Geology and geomorphology sets an issue and objective in respect of soils, which includes permeability, which is considered relevant in respect of flood alleviation. The relating indicators do not currently address the variety of soils beyond those for agricultural land or contamination, therefore not fulfilling the requirements of the objective. It is acknowledged that different soils can assist in flood alleviation and the report should be amended to reflect this. The report now includes soft-engineering proposals as addressed in the Water section, however a specific soils indicator is required.

Recommendation

A new indicator be included in the Assessment Framework for the Geology and Geomorphology Topic to read as follows:

Indicator	Target	Source	SA Area
d) <i>% of construction activities (relating to this Strategy) with a soil management plan in place</i>	<i>A year on year increase in activities that have a soil management plan in place.</i>	<i>CCBC</i>	<i>Environmental</i>

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

The county borough has 13 (not 10) nationally important sites (SSSIs).

Officer Response

Noted

Recommendation

The first sentence of paragraph B3 be amended to read as follows:

“The county borough also has 13 nationally important sites, Sites of Special Scientific Interest, designated for their biological and geological interest”

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

CCW welcomes and supports the acknowledgement of issues relating to flooding and invasive, non-native species.

Officer Response

The support for the content of the baseline characterisation is noted. The officer considers that in terms of localised flood management, invasive species can be a major factor in infrastructure management and the affect on biodiversity through their spread. As such it would be appropriate to have an indicator to monitor the effect of the plan on this issues.

Recommendation

The support be noted and the following sentence has been added to paragraph B3:

“Invasive species are also a contributor to flooding through disruption and damage to infrastructure such as blocking culverts and breaking structures.”

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

CCW notes that the objectives, indicators and targets relating to biodiversity do not currently relate to and are not reactive to the specific context of the plan under scrutiny, namely the Local Flood Risk Management Strategy.

Officer Response

A significant implication of the LFRMS is the alteration of water management, potentially increasing or decreasing current levels. It is however considered that the greatest impact is on species dependent on water and the indicators are modified to reflect this change.

Recommendation

The indicators be amended to read as follows:

- b) *Monitoring of specific species (GCN, dragon and damsel fly, water vole, otter and riverflies)*
- c) *Condition of monitored sites (sites to be confirmed)*
- d) *Area of biological SSSI or SAC lost to flood management development*
- e) *No net loss of area of land identified as LNR or SINC as a result of flood management development.*

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

The Authority has produced a thorough and integrated LFRM scoping report with regards to biodiversity issues. The WG FRM Environmental objectives identify the key requirements and we feel that the scoping report has covered these issues:

- 1) Reduce damage (or improve) designated sites
- 2) Improve naturalness (Reduce modification of channels)
- 3) WFD Objectives: improve WQ/Ecological status (or not to deteriorate) – including hydromorphology and diffuse pollution.

Officer Response

The support for the content of the baseline characterisation.

Recommendation

The support be noted

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

We also welcome the statement that FRM measures can present opportunities for habitat creation and enhancement. This objective should be carried through the LFRM, integrated into policies through the principles of ecosystem services.

Officer Response

The comment supports the content of the baseline characterisation and this support is noted. That this objective should be continued with the strategy, may be an outcome of the recommendations made by the SEA evaluation process.

The incorporation of this objective in the strategy can also occur through comments made through the period of public consultation on the strategy itself.

Recommendation

The support be noted.

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

There is particular reference and the objective to use SUDs, which we support

Officer Response

The support for the content of the baseline characterisation.

Recommendation

The support be noted.

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

We also recommend the inclusion or reference to the use of bio-engineering or soft engineering options within the objectives or issues text. Soft engineering options allows continuity of habitat, maintenance of biodiversity landscape and aesthetic value and contributes to achieving the WFD objectives such as no deterioration and improving naturalness. These options can be structurally sound and should always be assessed as an option in FRM duties. We recommend inclusion in section B5 and the table on page 57

Officer Response

The text is implicit in the use of soft engineering methods however it is considered that direct reference to soft engineering that can benefit both flood management and biodiversity/landscape.

Recommendation

The final sentence of paragraph B5 be amended to read as follows:

“Opportunities also exist to enhance and promote the spread of wildlife through developing sympathetic remediation projects. This is the use of bio-engineering or soft engineering, allowing continuity of habitat and providing biodiversity and landscape benefits. Examples of this are attenuation ponds and ditches, which may prove particularly beneficial for species including amphibians.”

And a new indicator be included in the Assesment Framework of the Biodiversity Topic to read as follows:

Indicator	Target	Source	SA Area
f) Use of soft engineering flood measures.	Area of soft engineering in flood management schemes	CCBC engineering	Environmental

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

Although links with WFD have been mentioned throughout the report and it is clear that WFD and the RBMP has been considered through the scoping report, we welcome the inclusion of a WFD principles related biodiversity objective (table page 51), along the lines of “no deterioration” of watercourses, restoration or a move towards “naturalness” and some sort of quantitative record of length of bioengineered revetment, or defences using green infrastructure etc.

Officer Response

The use of green infrastructure in flood management is more than the provision of flood defence works and can be a number of bio-engineered solutions. It is therefore considered appropriate to include flood defence works within the new indicator that has been recommended in relation to soft-engineering measures.

Recommendation

The final sentence of paragraph B5 be amended to read as follows:

“Opportunities also exist to enhance and promote the spread of wildlife through developing sympathetic remediation projects. This is the use of bio-engineering or soft engineering, allowing continuity of habitat and providing biodiversity and landscape benefits. Examples of this are attenuation ponds and ditches, which may prove particularly beneficial for species including amphibians.”

And a new indicator be included in the Assessment Framework of the Biodiversity Topic to read as follows:

Indicator	Target	Source	SA Area
f) Use of soft engineering flood measures.	Area of soft engineering in flood management schemes	CCBC engineering	Environmental

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

We feel the recommended scoping captures the key biodiversity issues of the area but there is also an opportunity here to give a few examples of the species relevant to the area including European Protected Species such as otters, Atlantic salmon, eel, bullhead, and marsh fritillary butterflies. These are protected species and are important species within Caerphilly and are particularly sensitive to the potential impacts from the LMRF. There is reference to habitat connectivity network which we welcome as this is an important principle in the LFRM process.

Officer Response

The support for the biodiversity issues raised in the scoping report is welcome. It is accepted that the report could highlight certain species in the main document above those included within the appendix.

Recommendation

Paragraph B4 be amended by the insertion of the following text at the end of the third sentence:

“Key species within CCBC include otters, Atlantic salmon, eel, bullhead and the marsh fritillary butterfly. Opportunities may exist to combine flood management works with habitat improvement.”

Section of Scoping Report

5 The Baseline Characterisation *Biodiversity*

Summary of comment and any Suggested Amendment

It is pleasing to see that the management to prevent the spread of Invasive Non-Native Species such as Japanese Knotweed and Himalayan Balsam has been referenced in the report.

Officer Response

The support for the content of the baseline characterisation.

Recommendation

The support be noted.

Section of Scoping Report

5 The Baseline Characterisation *Climate Change*

Summary of comment and any Suggested Amendment

CCW would suggest that objectives and targets for climate change need to consider aspects of climate change adaptation as well as Caerphilly's net contribution to carbon dioxide emissions.

Officer Response

The baseline information sets out the principal issues under the Climatic Factors topic area. It identifies matters that contribute to climate change as well as matters relating to adaptation to climate change effects. It is accepted, however, that the issue of climate change adaptation is not covered as broadly as the causes of climate change. Given that increased risk of flooding is a direct result of climate change, it would be appropriate to address this issue further.

The Objectives and Indicators Table only addresses the issue of causes of climate change. It should be noted, however, that the issue of climate change adaptation is included in the Material Assets topic area, which addresses issues such as use of SuDS and development located in areas at risk of flooding. Many of the issues and matters considered within a SEA relate to more than one specific area and the Scoping Report expressly sets out to address each issue only once (paragraph 5.6 explains). Given that the issue of SuDS relates more directly to the Climatic Factors topic, it should be relocated within this topic area.

Notwithstanding the above, the Material Assests Topic Assessment Framework includes an indicator that addresses critical infrastructure flooding. In terms of the LFRMS the flood risk areas are identified by identifying critical services at risk of flooding. This indicator is aimed at addressing the issue of critical services at risk of flooding, rather than general infrastructure. Therefore the indicator should be amended to reflect the appropriate wording. Th eindicator should also be amended to makeit more relevant and reactive to the LFRMS.

The clarification of the indicator (outlined above), means that there is no indicator related to infrastructure, in particular transport infrastructure, at risk of flooding. Transport is a critical issue at times of flooding and an indicator, relevant and reactive to the LFRMS, should be included in the Assessment Framework.

Recommendation

Paragraph CF3 be amended by the addition of the following at the end of the paragraph:

“Given this, adapting to the effects of climate change will be particularly important. The effects of flooding will need to be addressed through measures such as sustainable drainage and the risk of flooding will need to be addressed to reduce disruption to

important infrastructure.”

The Assessment Framework in the Material Assets Topic be amend by the deletion of the following Indicators:

Indicator	Target	Source	SA Area
f) <i>Area of development utilising SuDS , OR</i>	<i>Year on year increase in the number of developments utilising SuDs??</i>	<i>CCBC & SAB Data</i>	<i>Environmental</i>
g) <i>Number of SuDS adopted</i>	<i>Year on year increase in the number of SuDs adopted.</i>	<i>CCBC & SAB Data</i>	<i>Environmental</i>

Indicator d) be amended to read as follows:

Indicator	Target	Source	SA Area
f) <i>The number of Critical Services in areas at risk of flooding that have not been the subject of Flood Risk Management measures.</i>	<i>Year-on-year reduction in the number of critical services at risk.</i>	<i>CCBC Data</i>	<i>Environmental</i>

The Assessment Framework in the Material Assets Topic be amend by the addition of the following Indicator:

Indicator	Target	Source	SA Area
g) <i>The length of primary transport infrastructure in areas at risk of flooding, which are not the subject of Flood Risk Management measures.</i>	<i>Year-on-year reduction in the length of primary transport infrastructure at risk.</i>	<i>CCBC Data</i>	<i>Environmental</i>

And the following Issue, Objective and Indicator be included in the Climate Change Assessment Framework

Issue	Objective	Indicator	Target	Source	SA Area
2 Climate Change Adaptation	To reduce the severity and magnitude of flood events	b) <i>Number of SuDS adopted</i>	<i>Year on year increase in the number of SuDs adopted.</i>	<i>CCBC & SAB Data</i>	<i>Environmental</i>

Section of Scoping Report

Appendix 1 – Review of Relevant Plans, Programmes and Policies

Summary of comment and any Suggested Amendment

This is an extensive review of key international, national and local plans, programmes and strategies. We suggest that additional reference is made to actions within the Actions Database that relate both to Caerphilly and to other adjacent areas which might be affected by the LFRMS. The Actions Database is a planning tool for organisations, including Local Authorities, involved with delivering the Wales Environment Strategy target to bring designated sites into favourable condition.

Officer Response

The Review of Relevant Plans, Programmes and Policies should incorporate all documents considered relevant to the SEA of the LFRMS.

Recommendation

The Review of Relevant Plans, Programmes and Policies has been updated to reflect the comments

Section of Scoping Report

Appendix 1 – Review of Relevant Plans, Programmes and Policies

Summary of comment and any Suggested Amendment

Recommend that you consider inclusion and review of other plans and programmes at International/European/National and Local levels. The following list does not appear to be included but will be relevant to your SEA Local Flood Risk Management Strategy (LFRMS) and should be considered by your Authority:

International Plans & Programmes

- UN Framework Convention on Climate Change

National Plans & Programmes

- Flood Risk Regulations 2009
- Land Drainage Act 1994
- Environment Act 1995
- Welsh Government Local Flood Risk Management Strategies; Local Strategy November 2011
- Welsh Government Adapting to Climate Change; Guidance for Flood & Coastal Management Authorities in Wales December 2011
- Welsh Government Flood Risk Management; Community Engagement Toolkit October 2011
- Welsh Government Guidance for the Transfer of Ordinary Watercourse Regulatory Powers for Lead Local Flood Authorities in Wales (including the Appendices) February 2012
- Current Planning Appraisal Guidance (PAG) Guidance
- Climate Change Act 2008
- Strategic Environmental Assessment and Climatic Change for Practitioners.
- CIRIA C687 Planning for SuDS
- CIRIA C690 Guidance for Water Cycle Management for New Developments
- CIRIA C697 The SuDS Manual

Local Plans & Programmes

- Preliminary Flood Risk Assessment (PFRA); Rhondda Cynon Taff CBC, Torfaen County Borough Council, Blaenau Gwent County Borough Council, Cardiff City Council
- Other relevant documents including local studies/modelling work

Officer Response

The Review of Relevant Plans, Programmes and Policies should incorporate all documents considered relevant to the SEA of the LFRMS.

Recommendation

The Review of Relevant Plans, Programmes and Policies has been updated to reflect the comments

Section of Scoping Report

Appendix 1 – Review of Relevant Plans, Programmes and Policies

Summary of comment and any Suggested Amendment

Reference is made to PPG 25 under the supporting documents. This Policy does not apply in Wales and should be omitted from this table (Page 73)

Officer Response

Noted.

Recommendation

This has been removed from the Review of Relevant Plans, Programmes and Policies

Section of Scoping Report

Appendix 1 – Review of Relevant Plans, Programmes and Policies

Summary of comment and any Suggested Amendment

We would suggest that in your iterations consideration is given to other EIA regulations;

- Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations SI 1999. No.293.
- Environmental Impact Assessment (Land Drainage Improvement Works) Regulations 1999. No.1783.
- Transport and Works (Applications and Objections Procedure (England and Wales) Rules 2000. No. 2190.
- Water Resources (Environmental Impact Assessment (England and Wales) Regulations 2003. No. 164
- Marine Works (Environmental Impact Assessment) Regulations. Statutory Instrument 2007. No.1518.

Officer Response

The Review of Relevant Plans, Programmes and Policies should incorporate all documents considered relevant to the SEA of the LFRMS.

Recommendation

The Review of Relevant Plans, Programmes and Policies has been updated to reflect the comments

Section of Scoping Report

Appendix 1 – Review of Relevant Plans, Programmes and Policies

Summary of comment and any Suggested Amendment

reference is made to the Water Industrial Act 1991. We assume this is the Water Resources Act 1991 and this should be amended accordingly

Officer Response

The Water Industry Act consolidates previous enactments relating to the water supply and the provision of wastewater services in England and Wales. The Water Resources Act 1991 regulates water resources, water quality and pollution, and flood defence and is the more relevant text.

Recommendation

The text has been amended to read 'Water Resources Act 1991'

Section of Scoping Report

Appendix 1 – Review of Relevant Plans, Programmes and Policies

Summary of comment and any Suggested Amendment

Furthermore, the Water Industry Act 1991 is also referred to on page 80 which we assume to be the Water Resources Act 1991.

Officer Response

The Water Industry Act consolidates previous enactments relating to the water supply and the provision of wastewater services in England and Wales. The Water Resources Act 1991 regulates water resources, water quality and pollution, and flood defence and is the more relevant text.

Recommendation

The text has been amended to read 'Water Resources Act 1991'

Section of Scoping Report

Appendix 1 – Review of Relevant Plans, Programmes and Policies

Summary of comment and any Suggested Amendment

In reference to TAN15 in Appendix 1 (page 71) we suggest a further implication for the LFRMS is that any development permitted in zone C will ensure that the risks and consequences of flooding are managed down to an acceptable level, over the lifetime of development.

Officer Response

The comments is noted.

Recommendation

The following text has been added to the implications for LFRMS under TAN15

“All development permitted in zone C will ensure that the risks and consequences of flooding are managed down to an acceptable level, over the lifetime of development.”