PART 1

To:

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PART 2

An SEA Screening Report is attached for the plan, programme or strategy (PPS) entitled:

Solway Tweed River Basin Management Plan – second cycle

The Responsible Authority is:

Scottish Environment Protection Agency, Environment Agency

COMPLETE PART 3 OR 4 OR 5

PART 3

Regulation 9 of the Environmental Assessment of Plans and Programmes Regulations 2004 allows for screening in certain circumstances and our view is that:

[X] **an SEA is not required** because the PPS is a minor modification (Regulation 5(6)(b)) that is unlikely to have significant environmental effects.

PART 4

[ ] The PPS does not require an SEA under the Regulations. However, we wish to carry out an SEA on a voluntary basis. We accept that, because this SEA is voluntary, the statutory 28 day timescale for views from the Consultation Authorities cannot be guaranteed.

PART 5

[ ] None of the above apply. We have prepared this screening report because:

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PART 6	
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PART 7	
Date	17 December 2013

Key Facts	
Responsible Authority	The Scottish Environment Protection Agency (SEPA) is the responsible authority. SEPA and the Environment Agency, have joint authority for leading and coordinating implementation of the river basin planning process in the Solway Tweed.
Title of PPS	Solway Tweed River Basin Management Plan (Solway Tweed RBMP) – second cycle
Subject	Water management
Purpose of the PPS / Requirement for the Plan	Preparation of the Solway Tweed RBMP is a requirement of the Water Environment (Water Framework Directive) (Solway Tweed River Basin District) Regulations 2004 which transposes the EC Water Framework Directive into domestic legislation. The first Solway Tweed RBMP was published in 2009 and set the framework for protecting and enhancing the water environment from 2009 to 2015. Some commitments made in the Plan extended to 2021 and / or 2027. The Solway Tweed RBMP must be reviewed and updated every six years i.e. in 2015, 2021 and 2027. This current review will be the first of these required updates.
Area covered	The Solway Tweed RBMP straddles the English-Scottish Border covering an area of 17,500km$^{2.}$ It incorporates much of the Scottish Borders, Dumfries and Galloway and the Eden and Esk valleys. Around 450,000 people live in the district. As well as supporting a wide range of internationally important habitats and wildlife, the district also supports a range of economic activities, including tourism, agriculture, forestry and manufacturing.
Summary of nature / content of PPS	The Solway Tweed RBMP contains a Programme of Measures to meet the overarching objectives which it must achieve. The purpose of this revision is to determine if the objectives have been met and if necessary revise the objectives and associated Programme of Measures.
Plan objectives	The overall objective of the Water Framework Directive is to bring about the effective co-ordination of water environment policy and regulation across Europe. To achieve this, effective RBMPs are required that identify environmental objectives which represent an appropriate balance between environmental, social and economic interests. Overarching objectives of the RBMPs are to: • prevent deterioration and enhance the condition (status) of aquatic ecosystems, including wetlands and groundwater; • promote sustainable water use;

	• reduce pollution; • contribute to the mitigation of floods and droughts. The objectives contained in the Solway Tweed RBMP and set out in Annex 1 of this report represent the best estimate of what is expected to be achieved by 2015, 2021 and 2027. They will act as the route map for prioritising work to improve the water environment. At the heart of the RBMP is the programme of measures to be undertaken to meet the objectives. These measures are the actions that will be taken to maintain or improve the quality of water bodies to the level required by the WFD. The purpose of this revision is to determine if the objectives have been met and if necessary revise the Programme of Measures. The measures which will be considered in the review are set out in Annex 2. All except two of the measures proposed to be included in the revision are already included in the Solway Tweed RBMP and were assessed in its associated SEA as detailed in the Strategic Environmental Assessment of the Draft Solway Tweed River Basin Management Plan - Environmental Report (ER 2009) (see Annex 3).

SEPA and the Environment Agency's views on the likelihood of significant environmental effects arising form the proposed revision of the Solway Tweed RBMP are set out in Table 1 below.

Table 1 – Likely significance of effects on the environment

Criteria for determining the likely significance of effects on the environment	Likely to have significant environmental effects YES / NO	Summary of significant environmental effects (negative and positive)
1(a) the degree to which the PPS sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources	NO	The framework set by the Solway Tweed RBMP is designed to facilitate an improvement to the water environment. The ER 2009 described the potential environmental effects of the Solway Tweed RBMP as largely positive. The proposed revision will not alter the framework set by the Solway Tweed RBMP.
1(b) the degree to which the PPS influences other PPS including those in a hierarchy	NO	The Solway Tweed RBMP may lead to projects being progressed on the ground through other associated PPS, or PPS which are influenced by the RBMP. The proposed revision will not alter the influence of the Solway Tweed RBMP in this respect.

1(c) the relevance of the PPS for the integration of environmental considerations in particular with a view to promoting sustainable development	NO	The Solway Tweed RBMP is intended to ensure an effective balance between: • the protection of the water environment; • sustainable economic development; and • the interests of those who depend upon the water environment for their quality of life. As such sustainable development considerations are embedded in the plan. This aspect of the plan will not be changed by the review.
1(d) environmental problems relevant to the PPS	NO	The Solway Tweed RBMP targets areas and issues where there are significant environmental problems with regard to the water environment. The review of the plan will further develop the aspirational measures contained in the Solway Tweed RBMP and address environmental issues on the ground. As such the proposed revision will not significantly alter this aspect of the plan.
1(e) the relevance of the PPS for the implementation of Community legislation on the environment (for example, PPS linked to waste management or water protection)	NO	The Solway Tweed RBMP is relevant in terms of implementation the Water Framework Directive. The proposed revision will not alter the original purpose / priorities of the plan in this respect.
2 (a) the probability, duration, frequency and reversibility of the effects	NO	The proposed revision of the Solway Tweed RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (b) the cumulative nature of the effects	NO	The proposed revision of the Solway Tweed RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (c) transboundary nature of the effects (i.e. environmental effects on other EU Member States)	NO	The proposed revision of the Solway Tweed RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (d) the risks to human health or the environment (for example, due to accidents)	NO	The proposed revision of the Solway Tweed RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (e) the magnitude and spatial extent of the effects	NO	The proposed revision of the Solway Tweed RBMP will be a minor modification and will not

(geographical area and size of the population likely to be affected)		significantly change the potential environmental effects set out in the ER 2009.
2 (f) the value and vulnerability of the area likely to be affected due to- (i) special natural characteristics or cultural heritage; (ii) exceeded environmental quality standards or limit values; or (iii) intensive land-use.	NO	The proposed revision of the Solway Tweed RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (g) the effects on areas or landscapes which have a recognised national, Community or international protection status	NO	The proposed revision of the Solway Tweed RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.

TABLE 2 – SUMMARY OF ENVIRONMENTAL EFFECTS

SEPA and the Environment Agency are of the opinion that the proposed revision of the Solway Tweed RBMP will not generate any new or additional significant environmental effects. In order to reach this conclusion SEPA and the Environment Agency have undertaken a screening exercise to assess whether the measures proposed to be considered in the revision will result in significant environmental effects beyond those assessed and detailed in the ER 2009. The results of this exercise are detailed in Annex 4.

In summary the conclusions from the screening exercise are that:

1. The proposed revision to the Plan will improve the evidence base, reasons for failure and the measures required, the costs and benefits to the water environment and wider society. However, the environmental pressures, measures and associated outcomes are similar to those faced in the first cycle. The main change will be to seek a greater degree of aspiration through the RBMPs to secure greater improvement to the water environment.
2. The proposed revision will not change the underpinning Water Framework Directive objectives of the existing Solway Tweed RBMP to prevent deterioration and enhance the condition (status). The significant environmental effects which may potentially occur as a result of the Solway Tweed RBMP have already been assessed and detailed in the ER 2009.
3. All but two of the measures it is proposed to consider in the revision were included in the Solway Tweed RBMP. The principle of the measures, except the proposed two new measures has therefore already been subjected to SEA and the results set out in the ER 2009. The two new measures which will be considered relate to new research and policy improvements; any significant effects from this type of activity will be secondary and is difficult to predict at a strategic level (as described in Appendix F paragraph 1.1.1 of ER 2009). It is not expected that the proposed revision will lead to significant environmental effects at a strategic level which have not already been identified and explored in the previous assessment.

4. Many of the measures set by the plan will require further detailed development and subsequent action by others to deliver them. There is some uncertainty how effectively measures will be implemented and therefore also some uncertainty on the likely significant effects on the environment. However effects are predicted to be similar to those identified in the 1st Cycle and will be largely positive in nature. Any adverse effects will be mainly spatially specific/localised and would be better picked up at a project level though existing controls such as project-level environmental assessment.

5. Mitigation measures were established in the ER 2009 which largely relied on delivery through existing regulatory regimes. As such mitigation of potential adverse effects is already embedded in the RBMP. No additional significant adverse effects are expected as a result of the revision, however should adverse effects emerge then it is reasonable to conclude that existing mechanisms within the RBMP and existing regulatory mechanisms will ensure that appropriate mitigation is implemented in a timely manner.

SEPA and the Environment Agency are of the view that the revision to the Solway Tweed RBMP does not require a Strategic Environmental Assessment. Confirmation of this view is sought from the Consultation Authorities within 28 days of submission of this screening opinion under Section 9 of the Environmental Assessment of Plans and Programmes Regulations 2004.

Annex 1 – Solway Tweed RBMP Objectives

Overall objectives for improving the status of water bodies in the Solway Tweed RBD are summarised in Table 1 below. The objectives represent the best estimate of what is expected to be achieved by 2015, 2021 and 2027. They will act as the route map for prioritising work to improve the water environment. The Solway Tweed RBMP contains a Programme of Measures to meet these objectives.

Table 1: Overall objectives for improving the status of water bodies in the Solway Tweed River Basin District

	Number and percentage of water bodies at good status			
	2008	2015	2021	2027
Surface Waters (all)	259 (45%)	302 (52%)	353 (61%)	536 (92%)
Groundwater	60 (82%)	60 (82%)	63 (86%)	68 (93%)

As part of each six yearly update of the plan the objectives are reviewed to assess what can be achieved earlier than anticipated; or where updated classification (based on more information or improved standards) now shows that as things are worse than expected the improvement may take longer than planned or require additional measures. Although some additional measures may be introduced, the core of the plan will not change. As such the impacts of the changes to the plan would represent no more than a minor modification of those assessed during the first Strategic Environmental Assessment.

Annex 2 - Measures to be considered in the review of the Solway Tweed RBMP

Measure	Explanation	Link to existing measures / delivery mechanism	In 2009 Plan and/or SEA ?
Rural diffuse pollution			
Resources	Increasing engagement with farmers to help them identify what they can do, and where, to reduce pollution risks. Experience to date indicates that the provision of on-the-ground advice is the most important factor in determining whether the right actions are taken in the right places.	Reduce diffuse source inputs: campaign / awareness raising and promotion of best practice	Yes
Financial support	Re-prioritising how we target the funding support we provide to farmers so that it better helps farmers take the actions over and above basic good environmental practice. For example, to control pollution from nutrients in some water bodies, options such as creating woodland buffers or wetlands to help intercept pollutants may be needed. .	Reduce diffuse source inputs: Economic incentives	Yes
Resources	Building on and extending our partnership approach to working with land managers to ensure we best utilise the knowledge and resources of public funded bodies and ensure coordinated and integrated advice and support, e.g. catchment schemes established by Scottish Water and English Utility companies.	Reduce diffuse source inputs: campaign / awareness raising and promotion of best practice	Yes
Reduce inputs	Exploring options with the UK Government, Environment Agency, and relevant stakeholders, e.g. to reduce phosphorus additives in livestock feed	No equivalent delivery mechanism	No
Training and education	Embedding understanding of how to mitigate diffuse pollution risk in education and training courses for land managers. This will foster good practice for the next generation of farmers and those undertaking further training and education.	Reduce diffuse source inputs: campaign / awareness raising and promotion of best practice	Yes
Chemicals of national concern			

Reduce inputs	Improve mechanisms to prevent the entry of these substances into the sewer network and water environment, through, for example the more widespread implementation of sustainable urban drainage systems (SUDS).	Retrofit / improve existing SUDS / CAR 2005 GBR/National Planning Policy Framework	Yes
	Consider control of imported products containing these substances or gain international agreement on ceasing use in products where control or restrictions are not in place	No equivalent measure	No
	Work with roads authorities to look at targeted maintenance sweeping of roads and emptying of gully pots on roads with high uses	Not a measure – an opportunity spotting exercise	N/A
Physical condition			
	Taking forward a more integrated, partnership approach between responsible authorities and other public bodies that links our goals for biodiversity, woodland creation, fisheries, flood risk management; urban regeneration; and green-space and green network provision in and around our towns and cities.	Not a measure - this is a research aim	N/A
	Expanding the amount of engagement work aimed at identifying opportunities for, and securing partnership initiatives to deliver, improvements to the physical condition of water bodies.	Improve modified habitat / campaign, awareness raising and promotion of best practice	Yes
	Working with those responsible for the management of built structures in the water environment, such as road and rail crossing etc, to embed environmental improvements into the maintenance programme for those structures.	Not a measure - this is a research aim	N/A
	Increasing the amount of support and funding available for making improvements.	Improved modified habitat / economic incentive	Yes

Annex 3 – Summary of previous SEA

The ER 2009 details the SEA which was undertaken as part of the preparation of the Solway Tweed RBMP. A brief summary of the assessment process undertaken and its findings is set out below.

The Solway Tweed RBMP contains three categories of measures:

- national measures that are applied across Scotland and England;
- regional measures that occur across part of the river basin district; and
- local measures that are developed in response to a specific issue usually targeted at a particular water body or part of a water body.

These measures form the building blocks of the Solway Tweed RBMP and it is these measures which formed the basis of the SEA. Because SEA is concerned with identifying significant environment effects, the SEA concentrated on assessing the impacts of national measures. The SEA included a screening exercise for the list of regional measures and a small number of these were included in the full assessment.

This approach to the SEA ensured that it was meaningful and focused on the significant issues at the strategic level commensurate with that of the Solway Tweed RBMP.

The SEA assessed the potential significant effects which could result from three sets of measures:

1. Reference / Baseline measures – all existing measures, planned changes and in-the-pipe changes which represent the future state of the environment without the RBMP.
2. Draft RBMP measures – proposed new measures which form the basis of the RBMP for the purposes of implementing the WFD.
3. Continued Improvement measures – additional actions which were viewed as practical possibilities that could make progress to Continued Improvement in meeting WFD objectives over the next three river basin planning cycles to 2027.

The cumulative effects of these three sets of measures was also assessed, firstly for the interaction of the draft RBMP and the Reference / Baseline measures, and secondly for the interaction of the Continued Improvement measures with the measures in both the draft RBMP and the Reference / Baseline case.

The assessment found that:

- The Draft RBMP may potentially result in a large number of positive and significant environmental effects;
- The significant environmental effects due to the measures in the Reference/Baseline case, the Draft RBMP and Continued Improvement are broadly similar;
- All the options produce significant positive effects for biodiversity, flora & fauna, soil and for water;
- Because the measures in the Draft RBMP and Continued Improvement options apply in combination with Reference/Baseline measures, the benefits are likely to be greater for the Draft RBMP than for the Reference/Baseline and would be enhanced further by the measures in Continued Improvement.

The main SEA topics under which the draft RBMP options were assessed as having potential significant adverse impact were:

- Biodiversity, flora & fauna – through transfer of impacts from one location to another;
- Population and human health – through possible changes in water supply output;
- Water - through transfer of impacts from one location to another;
- Climate factors – through increased energy consumption and greenhouse gas emissions;
- Material assets – through increased waste production.

The ER proposed mitigation measures to address these negative effects which were updated in the SEA Statement; these are set out in the Table below.

Potential adverse effect	**Mitigation recommended in ER**	**How this has / will be taken into account (SEA Statement)**
Increased waste	Increases in waste production were identified as potential effects from a number of measures. The RBMP should ensure that consideration of waste generation and its disposal, is given due emphasis during planning. It should also ensure that best practice associated with measures includes the application of the waste hierarchy, whereby preferred options of re-use and recycling of materials are utilised over disposal to landfill.	The potential negative effects attributable to increased waste will be effectively managed through best practice and through existing legislative and regulatory regimes which comprehensively cover waste management. These include those on sludge disposal, incineration, waste management licensing, and landfill regulations
Increased energy use	Increases in energy use and associated emissions were identified from measures associated with additional treatment, storage and/or pumping of water	Mitigation of these effects will largely come through consideration of individual applications of measures. SEPA and the Environment Agency have been working with the Water Companies to consider climate impacts. A joint initiative has been established to ensure that carbon is accounted for (financially or quantitatively) in decision making as part of a 'net

	prior to discharge. There is little that the plan can do directly to reduce these impacts. However, promotion of renewable sources of energy, and of energy efficient infrastructure should be encouraged. Measures should also be implemented with consideration of national strategies on climate change.	environmental benefit' assessment in order to promote sustainable choices in protecting the water environment. In order to achieve this we will seek to develop a common approach to: • principles of carbon accounting; • risk and environmental benefit; • ongoing policy work, for example; – seasonal consents – consenting by reference to in river quality standards – carbon impact in setting new standards. Also, as a result of this finding, SEPA and the Environment Agency have undertaken a 'climate resilience check' of all RBMP measures. This evaluated the resilience of the measures to predicted climate change.
Deployable output	A number of measures could have a negative effect on the deployable output from impoundments (such as for hydro electric power generation).	Mitigation of such effects is likely to be particular to individual measures and their implementation. As part of their regulatory duties SEPA and the Environment Agency will consider these issues.
Relocation of environmental pressures	There is potential for environmental effects to be experienced by water bodies as an indirect consequence of a measure on another water body (eg where an effluent discharge is relocated or abstraction point moved).	While the risk of this is possible, this should be addressed by the fact that: • evaluation of the effects of measures at project level and as part of consenting processes (eg Controlled Activities Regulations in Scotland) will take place; • all water bodies will still be required to meet the standards set within the RBMP and should not be allowed to deteriorate.

The SEA process also considered opportunities for enhancement of the Plan. Given the environmental nature of the Plan there was found to be limited scope for this. The key mechanism in this respect was to ensure that due consideration be given to effects on population & human health, cultural heritage and material assets during the implementation of measures.

All but two of the measures proposed to be considered in the revision were included in this assessment.

Annex 4 – Assessment of previously predicted significant effects and forecast of any new significant effects

Environmental issues identified in ER 2009 (Section 3)	Relevant to the proposed revision? Yes / No	Any new issues? Yes / No	Significant positive effects identified in ER 2009 (Section 5) for: 1. Reference / baseline measures 2. Draft RBMP measures 3. Continued Improvement measures	Significant adverse effects of measures identified ER 2009 (Section 5)	Any changes forecast to effects due to revision? Yes / No
Biodiversity • Water quality, eutrophication, acidification and N and P levels in waterbodies; • Effects on habitats from flooding and droughts; • Habitat and biodiversity loss due to morphological changes; • Non-native species.	Yes	No	Measures to address diffuse pollution and point source pollution will improve water quality, reduce eutrophication and therefore have benefits for aquatic ecosystems. Water efficiency measures could potentially result in more water being available for aquatic ecosystems and for greater dilution of pollutants. Controlling the rate and timing of abstraction will reduce biological stress (especially during low flow periods) and also provides the additional benefit of a more “natural” hydrological regime. Measures to improve morphology will lead to direct improvements for aquatic and riparian habitats. Measures to deal with non-native invasive species will likely lead to direct biodiversity benefits in the areas affected.	Transfer of impacts from one location to another.	No
Population • Recreational use of water; • Tourism and National Parks; • Commercial activities;	Yes	No	Measures to reduce diffuse and point source pollution will help to protect human health through reducing pollutant loads to protected areas such as drinking waters and bathing waters. Water efficiency measures could potentially result in more water being available for the dilution of	Possible changes in water supply output. Transfer of impacts from one location to another.	No

• Bathing waters; • Shellfish waters; • Drinking water supply; • Fisheries.			pollutants and hence provide additional protection for protected areas. Some measures may improve access to waters in the RBD, particularly where measures to improve water quality will enable greater access for bathing or other recreational pursuits. Water improvements may increase amenity value of water bodies in the RBD.		
Water • Diffuse pollution; • Point source pollution; • Abstraction and flow regulation; • Alterations to morphology; • Non-native invasive species; • Sustainable water use.	Yes	No	Similar effects to those noted above for biodiversity, fauna and flora. All of the measures in the RBMP are designed to address a pressure that is adversely affecting a water body. Accordingly, all measures are designed to produce positive effects on water quality in the water bodies to which they apply.	Transfer of impacts from one location to another.	No
Air • No significant effects likely	No	No			No
Climate • Climate change mitigation / adaptation; • Flooding; • Droughts; • Carbon use.	Yes	No	Many measures will result in positive effects, particularly in relation to sustainable flood management, mitigation of floods and droughts, and to climate change adaptation. Greater efficiency in water use may reduce the volume of raw water that has to be treated, which may result in some energy and greenhouse gas emission savings.	Increased energy consumption and greenhouse gas emissions. Removal of engineering structures may increase flood risk.	No

			Measures relating to abstraction and flow regulation in particular may have positive benefits for the management of floods and droughts.		
Soils • Forestry or other types of plant cover; • Land vulnerable to erosion; • NVZs; • Other land use practices.	Yes	No	Improvements in water quality caused by measures that tackle diffuse and point source pollution may result in improved soil quality as fewer pollutants will be deposited on land. Measures relating to abstraction and flow regulation may also lead to benefits for soils by reducing erosion by floods or soil loss through drought. Measures to improve morphological conditions of channel banks, shorelines, riparian zones and wetland habitats will help to improve infiltration rates, reduce runoff and therefore contribute to reducing erosion.	Changes in sediment maintenance regime may impact on soils if disposal of contaminated sediment is not according to best practice.	No
Cultural Heritage • Nationally designated sites close to water bodies; • Marine archaeology.	Yes	No	The majority of measures are not likely to have significant effects on cultural heritage.	Removal of barriers / engineering structures may result in loss of historic features / recreation opportunities.	No
Landscape • Areas of designated landscape quality (e.g. NSAs); • Sites listed in the inventory of gardens and designed landscapes.	Yes	No	The majority of measures are not likely to have significant effects on landscape, although measures to improve downgraded waterbodies (especially where they have been modified) will have positive landscape effects at the local level.	Inappropriate design of works may affect landscape aesthetics.	No
Material Assets	Yes	No	Measures aimed at increasing water-use efficiency (e.g. leakage reduction) could result in	Increased waste	No

• The protection of water related assets including flood defences, ports and harbours; • WWTWs; • Sustainable use of water.			better use of water and as a result better use of other resources e.g. energy. As a result of the above, it is possible that this could delay the need for additional new infrastructure.	production. Ecological measures may reduce deployable output of reservoirs / renewable energy delivery.	