



**SEPA Draft Corporate Plan
2008 – 2011
Strategic Environmental Assessment
Environmental Report**

SEA ENVIRONMENTAL REPORT – COVER NOTE – SECTION 1

To SEA.gateway@scotland.gsi.gov.uk

SEA ENVIRONMENTAL TEMPLATE – COVER NOTE – SECTION 2

An Environmental Report is attached for

SEPA's draft Corporate Plan 2008 - 2011

The Responsible Authority is:

The Scottish Environment Protection Agency

SEA ENVIRONMENTAL REPORT TEMPLATE – COVER NOTE – SECTION 3

Contact Name

For SEA:

For draft Corporate Plan:

SEPA SEA Gateway

Corporate Plan Consultation

Contact Address

Environmental Strategy
SEPA Corporate Office
Erskine Court
The Castle Business Park
Stirling. FK9 4TR

Same address

Contact Tel

01786 452431

01786 457768

Contact mail

sea.gateway@sepa.org.uk

corporate.plan@sepa.org.uk

SEA ENVIRONMENTAL REPORT TEMPLATE – COVER NOTE – SECTION 5

Date

Friday 25th April 2008

SEPA DRAFT CORPORATE PLAN

STRATEGIC ENVIRONMENTAL ASSESSMENT – ENVIRONMENTAL REPORT

CONSULTATION INFORMATION

Background

SEPA is a non departmental public body, established in 1996, under the Environment Act 1995. Environmental matters were devolved to the Scottish Parliament in 1999, so SEPA is accountable to the Parliament via Scottish Ministers. SEPA's main role is to protect the environment and human health. It does do this by controlling activities that can cause harmful pollution and by monitoring the quality of Scotland's air, land and water. SEPA publishes a wide range of environmental information and advises Scottish Ministers, regulated businesses, industry and the public on best environmental practice. SEPA is preparing a draft Corporate Plan which will set out the Agency's priorities and goals for the next three financial years 2008/9 to 2010/11. The plan will show how the Agency intends to progress both its aim and its seven long-term environmental goals (called outcomes) in these areas:

- An Efficient, Effective and Evolving SEPA (overarching outcome)
- Limiting and Adapting to Climate Change
- Protected Human Health and Communities
- Reduced Waste and Promoting Sustainable Use of Resources
- Improved Air Quality
- Improved Land Quality with Healthier Soils
- Improved Water Environments

SEPA has already produced a provisional strategy¹ covering the same years (2008/9 to 2010/11) and asked for views. The draft Corporate Plan will expand on this strategy, translating it into action and detailing how SEPA will deliver the strategy, giving the organisation's planned actions, priorities, targets and use of resources.

Consultation

This Environmental Report outlines the significant environmental effects that may arise from implementing SEPA's draft Corporate Plan. It is available for comment until Friday 6th June 2008. Comments should be made to the address or email below by this date. The draft Corporate Plan and this Environmental Report is available via SEPA's website at www.sepa.org.uk/consultation/index.htm . Hard copies are also available on request at the address, telephone number and email below, or available for inspection at SEPA's Corporate Office.

Contact Details

If you would like further details about this Environmental Report or would like to make comments, then you can do so by contacting:

Corporate Plan Consultation
SEPA Corporate Office
Erskine Court
The Castle Business Park
Stirling. FK9 4TR

Email – corporate.plan@sepa.org.uk
Tel – (01786) 457768

¹ www.sepa.org.uk/pdf/publications/corporateplan/corporate_strategy.pdf

SEPA DRAFT CORPORATE PLAN

STRATEGIC ENVIRONMENTAL ASSESSMENT – ENVIRONMENTAL REPORT

CHAPTER	CONTENTS	PAGE
Non Technical Summary		6
1. INTRODUCTION		15
2. CONTENTS AND MAIN OBJECTIVES OF THE DRAFT CORPORATE PLAN AND ITS RELATIONSHIP WITH OTHER, PLANS AND PROGRAMMES AND WITH ENVIRONMENTAL PROTECTION OBJECTIVES.	<p>Outline of Contents and Main Objectives of the Draft Corporate Plan</p> <p>Relationship of the Draft Corporate Plan with other relevant plans and programmes and environmental objectives</p>	17
3. ENVIRONMENTAL BASELINE	<p>Air</p> <p>Water</p> <p>Soil</p> <p>Biodiversity</p> <p>Population and Human Health</p> <p>Material Assets (Waste and Resources)</p> <p>Climatic Factors</p>	20
4. ASSESSMENT OF ENVIRONMENTAL EFFECTS OF THE DRAFT CORPORATE PLAN, INCLUDING REASONABLE ALTERNATIVES	<p>PART 1 - Assessment Method</p> <ul style="list-style-type: none"> • Scope of assessment • What was assessed ? • How was it assessed ? • Assumptions 	30
	<p>PART 2 – Assessment findings</p> <ul style="list-style-type: none"> • Assessment Summary – Overview • Assessment Summary – By Outcome • Alternatives 	34
5. SUMMARY OF MITIGATION MEASURES REQUIRED		44
6. MONITORING		46
7. SUMMARY AND NEXT STEPS		47
8. APPENDICES		

List of Tables and Figures

Table	Title	Page
1	Summary of SEA Steps	16
2	Key facts about SEPA's draft Corporate Plan	17
3	What parts of the draft Corporate Plan have been assessed ?	18
4	Assessment Checklist	30
5	Description of the assessment matrix	33
6	Summary of Contribution of Each Outcome to the SEA Objectives	35
7	Assessment of alternatives	40
8	Summary of mitigation actions	44
Figure	Title	Page
1	Summary of the state of the environment and observed trends	21
2	SEPA's CO2 emissions	41

SEPA DRAFT CORPORATE PLAN

STRATEGIC ENVIRONMENTAL ASSESSMENT – ENVIRONMENTAL REPORT

NON TECHNICAL SUMMARY

1. INTRODUCTION

The Draft Corporate Plan

1.1 The Scottish Environment Protection Agency (SEPA) has prepared a draft Corporate Plan which will set out the Agency's priorities and goals for the next three financial years 2008/9 to 2010/11. The plan will show how the Agency intends to progress both its aim and its seven long-term environmental goals in these areas:

- An Efficient, Effective and Evolving SEPA (overarching outcome)
- Limiting and Adapting to Climate Change
- Protected Human Health and Communities
- Reduced Waste and Promoting Sustainable Use of Resources
- Improved Air Quality
- Improved Land Quality with Healthier Soils
- Improved Water Environments

1.2 The draft plan can be viewed at: www.sepa.org.uk/consultation/index.htm .

Purpose of this Environmental Report

1.3 The draft Corporate Plan has been subject to a Strategic Environmental Assessment (SEA). The purpose of this Environmental Report is to fulfil the requirements of the Environmental Assessment (Scotland) Act 2005 by:

- Introducing SEA and its application to the draft Corporate Plan;
- Explaining the methods adopted for assessing the significant environmental effects of implementing the Corporate Plan;
- Setting out potential significant environmental effects of implementing the Corporate Plan; and
- Identifying where mitigation measures are required to prevent, reduce or offset as far as possible any adverse environmental effects.

Relationship with other Plans, Programmes and Environmental Objectives

1.4 Consideration of the relationship of the draft Corporate Plan with other plans, programmes, strategies and environmental objectives is an important part of SEA. Understanding these relationships assists the identification of environmental effects and understanding which plans may be best placed to implement any mitigation measures that are required. Appendix 1 sets out the plans and programmes relevant to the Corporate Plan.

2. ENVIRONMENTAL BASELINE

2.1 Chapter 3 of this Environmental Report summarises the state of Scotland's environment. This is required as part of the SEA. A detailed summary of Scotland's environment can be found in SEPA's 2006 State of Scotland's Environment Report: *Change Tomorrow Today*, which can be downloaded at www.sepa.org.uk/changetomorrowtoday/report/index.html. The general picture is summarised in Figure A below.

Figure A – Summary of State of the Environment and Observed Trends (SEPA, 2006)

Aspect	Summary of state	Trend	Explanation
	POOR ← → GOOD	↓ ↓ ↓ ↑ ↑	
Air			Overall air quality is improving but further improvements are needed to reduce adverse health effects and deaths brought forward by air pollution. Poor air quality also has the potential to damage ecosystems and water quality. Transport is an increasingly significant source of air pollution and increasing energy demand may lead to increased emissions. Emissions of nitrogen oxides and sulphur dioxide have fallen, and emissions of particulates and volatile organic compounds are showing a downward trend. However, there is a general increase in ground-level ozone concentrations, and a decline in stratospheric ozone levels over Scotland.
Land			Land quality in Scotland is reasonable, although there are significant knowledge gaps, especially about soils. Agriculture and forestry can lead to soil erosion and losses of nutrients but new policies are encouraging good practice in conserving soil organic matter and promoting biodiversity. Measures are being taken to enhance habitats and to counteract loss of species, and progress has been made with the regeneration of derelict and contaminated land. Soil erosion is a continuing problem and there are concerns about loss of soil organic matter and soil sealing by impermeable surfaces.
Water			Water quality in Scotland is generally good and is improving due to a reduction in end-of-pipe discharges. There have been major improvements in the quality of bathing, shellfish and freshwater fish waters. Diffuse pollution, for example from farmland and roads, is now the largest problem. Water is generally abundant but increased demand is likely to put pressure on levels in groundwater, lochs and rivers. Changes in river flow patterns may increase the risk of flooding and rivers in the east may experience lower flows in summer. Impacts on the physical structure of rivers, estuaries and coastal waters are widespread.
Waste and resources			Around 20 million tonnes of waste is produced each year, mostly from commerce and industry. Household waste continues to increase and fly tipping and litter remain problems. Waste disposal to landfill is falling and there is more recovery and recycling of waste. Emissions to the environment from landfills and thermal treatment plants are reducing and more landfill gas is being used to produce energy. Stricter controls on landfill operations mean that the environmental impact of sites is decreasing. Emissions of dioxins and nitrogen oxides from municipal waste incinerators have fallen.
Radioactivity			Levels of man-made radioactivity in the environment show a general downward trend. Concentrations in drinking water remain well below the limit set to protect human health. Some localised areas of contamination from man-made radioactivity remains. Averaged exposure to ionising radiation from man-made sources is less than one fifth of that from natural background radiation and medical uses represent the predominant source of man-made exposures. Exposure from radioactive emissions to the environment is less than 0.1% of all sources of ionising radiation. Overall, radioactive emissions from nuclear installations have fallen since 1996.
Hazardous chemicals			The use of hazardous chemicals has reduced but many are still used and the long-term effects are unclear. A number of 'hotspots' of chemical contamination persist but historic problems caused by heavy metals and persistent organic chemicals have reduced. Problems caused by hazardous substances in run-off from urban areas continue to have ecological impacts. There is increasing concern over the rising concentrations of some newly identified chemicals and over more subtle impacts like food chain contamination and accumulation of persistent chemicals. Further problems may become more apparent as knowledge and understanding of them grows.

Aspect	Summary of state	Trend	Explanation
Nutrient enrichment			<p>Nutrient enrichment of rivers, lochs and groundwater can damage ecosystems and is a significant problem in some areas. Effects on estuarine and coastal waters are limited. The area of semi-natural terrestrial habitats at risk from nitrogen deposition has declined slightly, but the potential for damage to specific habitats remains high. Emissions of nitrogen oxides to air show a downward trend. Ammonia emissions are the dominant source of nitrogen deposition and remain a major problem. Better targeting and supply of nutrients in fertilisers can prevent nutrient enrichment. Discharges of nutrients to water from sewage treatment works are being reduced.</p>
Acidification			<p>Acidification can damage ecosystems and is a potential problem across upland Scotland. There is evidence of ecological damage in Galloway, the Cairngorms and the western and central Highlands. Between 1986 and 1997 deposition of sulphur dioxide declined by 52%, and nitrogen oxides by 16%. Impacts on vegetation, soil and freshwater habitats show a slight decrease and there is some evidence that soils are becoming slightly less acidic. Some areas are showing signs of recovery but some watercourses remain devoid of acid-sensitive plants, invertebrates and fish. Recovery may take decades and climate change may slow or halt this.</p>
Human health			<p>The environment plays a significant part in the health and quality of life of individuals and communities in Scotland, but the relationship between environmental pollutants and health is complex and uncertain. Other factors also affect health and further work is required to investigate environmental impacts. There is growing evidence that environmental factors affect both our health and well-being and contribute to environmental injustice. Air pollutants such as nitrogen dioxide, sulphur dioxide and small particles make respiratory and cardiovascular illnesses worse and, in some circumstances, hasten death in vulnerable people.</p>
Biodiversity			<p>Intensive land use in the last 250 years led to significant declines in Scotland's biodiversity. In 2005 nearly 32% of habitats and 18% of species identified under the UK Biodiversity Action Plan were declining, although around 32% of habitats and 39% of species were either stable or showing signs of recovery. However, the impact of climate change is already evident with some species ranges being reduced, others extended and food chains being disrupted. This makes the attainment of the EU target to halt loss of biodiversity by 2010 challenging. Active management will be necessary to maintain many habitats and species in Scotland. The Scottish Biodiversity Strategy provides a framework for this.</p>
Climate change			<p>Climate change is already causing a number of impacts on Scotland, including changes in the growing, breeding and migration seasons, shifts in species abundance and diversity and changing weather patterns with the potential for more floods and droughts. Left unchecked, climate change will accelerate with significant consequences for Scotland's environment, economy and society. The use of fossil fuels and growing demand for energy will escalate emissions of carbon dioxide to potentially irreversible levels. Scotland needs to take action to tackle the problem and to prepare itself for the inevitable impacts.</p>

3. ASSESSMENT OF THE ENVIRONMENTAL EFFECTS OF THE DRAFT CORPORATE PLAN

3.1 An assessment was conducted which sought to test each part of the Corporate Plan against a set of objectives to test whether the Corporate Plan was likely to move towards them. This use of “SEA objectives” is common and provides for a systematic process of establishing whether the Corporate Plan is likely to have any significant environmental effects (positive and negative). The SEA objectives cover a wide range of environmental topics that are prescribed in the legislation. The objectives used in this assessment were:

OBJECTIVE – Will the Corporate Plan...

- Contribute to improving air quality and meeting national air quality objectives?
- Contribute to the protection and enhancement of waterbodies?
- Contribute to the reduction of flood risk?
- Contribute to the protection and enhancement of soil quality and function?
- Contribute to the reduction in rates of contaminated / derelict land?
- Contribute to a reduction in greenhouse gas emissions?
- Contribute to effective adaptation to the effects of climate change?
- Contribute to the protection and enhancement of biodiversity?
- Contribute to the protection of human health and enhancement of communities?
- Promote the use of renewable resources?
- Reduce energy consumption and promote energy efficiency?
- Reduce waste and encourage reuse and recycling?
- Contribute to the protection and enhancement of the landscape?

3.2 The results of the assessment are described in the completed matrices in Appendix 2. These results are summarised below and in table A on page 14.

Overview

- 3.3 Overall, the draft corporate plan performs very well and this Environmental Report has found that it will make a very significant contribution to the protection and enhancement of Scotland's environment. Given that SEPA's main role is to protect the environment and human health and given that the draft Corporate Plan aims to provide a framework for delivering that role, it is unsurprising that this Environmental Report has made such a positive finding.
- 3.4 The draft Corporate Plan will make a positive contribution to all of the SEA objectives in some way. In most cases, the draft Corporate Plan will make a significant positive contribution to the objectives. Accordingly, there is a clear synergy between the seven outcomes in the draft Corporate Plan and the range of environmental issues covered by this assessment. This suggests that the Corporate Plan does not have any significant omissions in terms of its coverage of environmental issues.
- 3.5 The draft Corporate Plan is particularly strong at providing a positive framework for delivery of improvements in air quality, water quality, management of flooding, soil quality, climate change, sustainable waste management and protecting human health. This reflects those issues with which SEPA deals on a day to day basis through its regulatory, influencing, data analysis and education activities. In addition, however, the draft Corporate Plan also makes strong recognition of the role SEPA plays in working in partnership with others to deliver wider environmental benefits beyond those that can be achieved through regulation alone. Accordingly, the draft Corporate Plan also scores well in terms of its contribution to the objectives concerned with biodiversity, derelict and contaminated land, promotion of renewable resources and energy use, where SEPA can play a role in association with others.

- 3.6 No adverse environmental effects have been recorded from actions in the draft Corporate Plan, which reflects the both the nature of the plan and the activities of SEPA. There will be environmental effects arising from SEPA undertaking its activities (eg emissions from travel and buildings, waste etc), which are addressed through the Agency's internal environmental policy (IEP). There are, however, some areas where there are uncertainties about the effect of the draft Corporate Plan. Most notably, this is in the area of balancing regulatory activities (which can require the use of energy intensive facilities to remove pollutants from emissions to air, water or soil) with objectives and actions in the draft Corporate Plan to reduce greenhouse gas emissions. Mitigation measures to consider this are identified.

By Outcome

3.7 EFFICIENT, EFFECTIVE AND EVOLVING SEPA OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

This "overarching" outcome and its associated actions will help SEPA to operate and regulate in a way that helps to drive towards greener outcomes. Many of SEPA's activities to protect Scotland's environment are enshrined within regulation and therefore finding ways to use that regulation more effectively and in a way that reduces the administrative burden on both regulated industry and on SEPA should lead to significant benefits over the long term. The benefits will likely be most clearly felt in those parts of the environment most closely protected by SEPA through regulation, such as air, water and soil quality, waste management and the health of people and communities.

3.8 LIMITING AND ADAPTING TO CLIMATE CHANGE OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

This outcome scored particularly well in terms of making a positive contribution across virtually all of the objectives. In particular, actions under this outcome are likely to make a significant contribution to the climate change mitigation and adaptation objectives as well as to the flooding objective. This is unsurprising as the main focus of this outcome is about ensuring that SEPA plays its part in reducing Scotland's greenhouse gas emissions, in promoting greater resilience to predicted effects of climate change and in working in partnership with the Scottish Government and others to establish and then work towards challenging climate change targets. It is likely that actions under this outcome will also make a significant positive contribution to protection of human health by enhancing flood warning and flood management activities.

3.9 PROTECTED HUMAN HEALTH AND COMMUNITIES OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

This outcome scored particularly well in terms of making a positive contribution across very many of the objectives. Of particular importance under this outcome are those actions related to SEPA's role in responding to emergencies and in dealing with environmental pollution incidents quickly and effectively. This is of primary importance in protecting people and the environment.

3.10 REDUCED WASTE AND PROMOTING SUSTAINABLE USE OF RESOURCES OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES, BUT WITH UNCERTAINTIES

This outcome scored particularly well in terms of making a positive contribution across very many of the objectives. Many of the actions are aimed at ensuring that Scotland continues its improving record in reducing the amount of waste going to landfill and improving rates of reuse and recycling. To achieve this, SEPA has a key role to play in both controlling the management of waste, promoting opportunities to reduce levels of waste generated and in promoting the development of a new, modern, network of waste management facilities that will allow Scotland to deal with its waste in a way sustainable, safe and efficient and which works towards the Scottish Government's aim of a zero waste society.

Moving to a zero waste society will require a range of new waste management facilities. These may have local environmental or community effects that will need to be managed through effective site planning and operational regulation. Reducing the amount of waste going to landfill through actions under the outcome will make a very significant contribution to climate change objectives as this should significantly reduce levels of methane, a powerful greenhouse gas that has 21 times more global warming potential than CO₂. Reducing the overall volume of waste will also lead to benefits for human health and communities also (eg through reduced emissions from fewer waste sites, reduced transport of waste etc).

3.11 IMPROVED AIR QUALITY OUTCOME

THIS OUTCOME WILL LIKELY MAKE A POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

Many of the actions under this outcome are focused towards addressing areas of poor air quality through regulation of industry, through working in partnership with other bodies (such as local authorities) to address specific problems and through development of SEPA's understanding of the air environment and its impacts on people. Overall, the actions included within this outcome will likely make a positive contribution to most objectives and a significant contribution to the air and human health objectives. By protecting and enhancing air quality there are also likely to be positive effects on the wider environment, including water (eg reduced acidification resulting from atmospheric deposition), biodiversity (eg effects of poor air quality on habitats and species) and climate (eg reducing overall emission levels may also lead to reduction in greenhouse gas emissions).

3.12 IMPROVED LAND QUALITY WITH HEALTHIER SOILS OUTCOME

THIS OUTCOME WILL LIKELY MAKE A POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

Scotland's soil resource is generally considered to be of reasonable quality, but it remains poorly understood in comparison with other environmental media. As a result of the relatively poor understanding of Scotland's soil and due to emerging policy in this area, there is a strong research theme to many of the actions under this outcome which will help SEPA to better understand the pressures being placed upon the soil environment and therefore about how to consider soils when undertaking its regulatory and other activities.

Overall, most of the actions included in this outcome will make a positive contribution to most objectives and a significant contribution to the soil quality and human health objectives. In addition, some actions will make significant contributions to the water and derelict land objectives.

3.13 IMPROVED WATER ENVIRONMENTS OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES, BUT WITH UNCERTAINTIES

The actions under this outcome have a wide range of challenges to address and this Environmental Report has found that in most cases the actions will make significant contribution to the protection of water quality and, therefore, to the protection of human health. Of particular importance are those actions that focus on developing sewerage capacity, on enhancement of poor quality waterbodies and on ensuring compliance with water environment legislation and licences. The completion and implementation of the River Basin Management Plans will be a particularly important way of bringing many of these actions together in a co-ordinated way and should have a very significant role in contributing to a wide range of the SEA objectives, including biodiversity, landscape and flood risk as well as water quality and human health.

4. MITIGATION MEASURES

4.1 As the Corporate Plan will largely lead to significant positive environmental effects, few mitigation measures to address adverse effects are envisaged. However, the following measures are identified which should be considered as the Corporate Plan is taken forward from draft stage.

Mitigation Identified	Why	By Whom and When
Useful to make more specific reference to SEPA's own environmental performance. Should consider identifying internal environmental policy actions across outcomes where appropriate.	To recognise the importance of SEPA as an exemplar in minimising environmental impacts of its activities.	As Corporate Plan is developed and finalised.
Potential for climate proofing of SEPA's regulatory activities to lead to conflict between environmental protection and climate change objectives. These should be reconciled by focusing on those regulatory activities where both effective environmental protection and climate change objectives can be achieved.	To ensure that both environmental protection and climate change objectives are aligned across SEPA's regulatory activities.	By SEPA when reviewing climate implications of regulatory activities and through implementation of Climate Change Plan, which details this action.
Consider keeping the 95% target for incident response under review with the aspiration that it is improved in future Corporate Plans.	Recognising importance of role in responding to environmental incidents in protecting the environment and the public	By SEPA as part on ongoing monitoring and review of Corporate Plan
Land use Development Plans should identify specific environmental effects arising from developments to which SEPA Corporate Plan may contribute – eg support for network of new waste management facility.	To ensure that local effects arising from such developments are fully assessed at the appropriate time (eg by SEA of Development Plans and/or EIA of projects)	By Local Authorities as Development Plans are prepared (and subject to SEA) and as developments are consented. By SEPA when developments requiring environmental licences are consented.
Revise some of the wording of the actions to more clearly identify their intentions (see specific recommendations in the matrices)	To improve clarity of document	As Corporate Plan is developed and finalised
Remove duplication of actions across many of the outcomes (see specific recommendations in the matrices)	To eliminate duplication and simplify document	As Corporate Plan is developed and finalised
Need to vigilant regarding potential for some of the actions to conflict with objective of reducing greenhouse gas	To ensure that both environmental protection and climate change objectives are	By SEPA when reviewing climate implications of regulatory activities and

emissions – eg where new abatement requirements are energy intensive.	aligned across SEPA's regulatory activities.	through implementation of Climate Change Plan, which details this action.
---	--	---

5. CONSULTATION

5.1 This Environmental Report and SEPA's draft Corporate Plan are out for consultation until Friday 6th June 2008. SEPA welcomes your comments. There are 7 consultation questions in the Environmental Report which you may use to help your response. These are:

- 1 Do you have any comments on the summary of the environmental baseline?
- 2 Do you have any comments on the assessment findings?
- 3 Do you have any comments on the alternatives considered and the findings of the assessment of alternatives?
- 4 Do you have any comments on the mitigation measures identified?
- 5 Are there any other mitigation measures that you would like to see added?
- 6 Are you content with the proposed approach to monitoring?
- 7 Are there other indicators that you consider should be included to assist with monitoring the environmental effects of the Corporate Plan?

5.2 Comments should be made in writing or by email by Friday 6th June 2008 to either:

Draft Corporate Plan Consultation
 SEPA Corporate Office
 Erskine Court
 The Castle Business Park
 Stirling. FK9 4TR

Or by email to: corporate.plan@sepa.org.uk

NTS - Table A – Summary of Assessment Findings (from assessment matrices – See Appendix 2)

Outcome	Efficient SEPA Outcome		Climate Outcome		Health Outcome		Waste Outcome		Air Outcome		Soil Outcome		Water Outcome	
SEA Objective														
Air	+	++	+		++		++	?	++		o		o	
Water - Quality	+	++	+	+	++		++		+	+	++		++	
Water - Flooding		++		++		++		o	o	o		+	++	
Soil - Quality	+	++	+	+	++		++		+	+	++		+	
Derelict Land		+		o		+		+	o	+	++		+	
Climate - Mitigation	+	++		++		o		++	+	+			?	
Climate - Adaptation	+	++		++		++		o	o	o			+	
Biodiversity		+		+		+		+	+	+		+	++	
Health and Population	+	++	+	++		++		++	?	++		+	++	++
Promote Renewables		+		+	++		o		+		o	o	o	
Reduce Energy		+		+	++		o		+	+		o		?
Reduce Waste	+	++		+		o		++		o	o		o	
Landscape		o		+	?		o		+	?		o	+	+
OVERALL		++		++		++		++		+		+		++

SEPA DRAFT CORPORATE PLAN

STRATEGIC ENVIRONMENTAL ASSESSMENT – ENVIRONMENTAL REPORT

CHAPTER 1 - INTRODUCTION TO ENVIRONMENTAL REPORT

Introduction

1.1 SEPA is a non departmental public body, established in 1996, under the Environment Act 1995. Environmental matters were devolved to the Scottish Parliament in 1999, so SEPA is accountable to the Parliament via Scottish Ministers. SEPA's main role is to protect the environment and human health. It does do this by controlling activities that can cause harmful pollution and by monitoring the quality of Scotland's air, land and water. SEPA publishes a wide range of environmental information and advises Scottish Ministers, regulated businesses, industry and the public on best environmental practice. SEPA is preparing a draft Corporate Plan which will set out the Agency's priorities and goals for the next three financial years 2008/9 to 2010/11. The plan will show how the Agency intends to progress both its aim and its seven long-term environmental goals in these areas:

- An Improved, Efficient and Evolving SEPA
- Limiting and Adapting to Climate Change
- Protected Human Health and Communities
- Reduced Waste and Promoting Sustainable Use of Resources
- Improved Air Quality
- Improved Land Quality with Healthier Soils
- Improved Water Environments

1.2 SEPA has already produced a provisional strategy² covering the same years (2008/9 to 2010/11) and asked for views. The draft Corporate Plan will expand on this strategy, translating it into action and detailing how SEPA will deliver the strategy, giving the organisation's planned actions, priorities, targets and use of resources.

Purpose of Strategic Environmental Assessment (SEA)

1.3 The requirement for SEA comes from the European Directive on the assessment of the effects of certain plans and programmes on the environment – commonly known as the SEA Directive. This is implemented in Scotland through the Environmental Assessment (Scotland) Act 2005.

1.4 The purpose of SEA is to ensure that information on the environmental effects of a plan or programme is gathered and made available to plan-makers and decision takers as the plan is prepared and implemented with a view to promoting sustainable development. The key objectives of SEA are:

- To provide a systematic means of identifying, describing, evaluating and reporting on the environmental effects of a plan;
- To try and prevent, reduce and/or offset as far as possible any possible adverse effects of implementing a plan;
- To try and improve the environmental performance of a plan through its preparation.
- To ensure consultation and engagement with the statutory Consultation Authorities and the public;
- To monitor implementation of a plan for any unforeseen environmental effects and to take appropriate remedial action where necessary.

² www.sepa.org.uk/pdf/publications/corporateplan/corporate_strategy.pdf

Purpose of this Environmental Report

1.5 The purpose of this Environmental Report is to:

- Introduce SEA and its application to the draft Corporate Plan;
- Set out the method adopted for assessing the significant environmental effects of implementing the draft Corporate Plan;
- Identify where mitigation measures are required to prevent, reduce or offset any adverse environmental effects.

1.6 The key stages of SEA and a summary of progress relative to the draft Corporate Plan are briefly described in Table 1 below:

Table 1 - Summary of SEA steps

SEA Stage	Description of stage	Progress
Screening	Determining whether the plan or programme is likely to have significant environmental effects and whether an SEA is required	A screening report was published for consultation with the statutory Consultation Authorities ³ on 30 August 2007. This confirmed that SEPA would undertake SEA of the Corporate Plan.
Scoping	Deciding on the scope and level of detail of the Environmental Report, and the consultation period for it - this is done in consultation with the Consultation Authorities	A scoping report was prepared and sent to the Consultation Authorities on 30 August 2007. As SEPA is acting as a Responsible Authority, it must not consult itself as a Consultation Authority and therefore the Scoping Report was sent only to Historic Scotland and SNH. A copy of the Scoping Report is available on request. A summary of the outcome of the Scoping process is provided in Chapter 4 of this report.
Environmental Report	Publishing and consulting upon a report which describes the significant environmental effects which may arise from implementing the Corporate Plan, which identifies mitigation measures to address adverse effects and which compares alternatives that were considered during the plan's preparation	This report fulfils this stage. It sets out the significant environmental effects of the Corporate Plan and evaluates the options considered. This report is out for consultation until Friday 6 th June 2008
Adoption	Publishing an "SEA Statement" which explains how the Environmental Report and views expressed upon it have been taken into account for adopting the plan	This is prepared following the consultation period. SEPA must take into account this report and views expressed upon it during the consultation period.
Monitoring	Monitoring significant environmental effects after adopting the plan and taken remedial action where necessary	Chapter 6 of this report explains how we intend to monitor. Once the plan is adopted, these arrangements will be put into place.

1.7 This Environmental Report has been prepared to meet the requirements of Schedule 3 of the Environmental Assessment (Scotland) Act 2005. In addition, it has been prepared as far as possible using the Scottish SEA toolkit⁴. SEPA has also worked with Scottish Natural Heritage which is also progressing SEA of its Corporate Plan to similar timescales to share approaches and information where appropriate.

³ Under the Environmental Assessment (Scotland) Act 2005 these are Scottish Natural Heritage and Historic Scotland (on behalf of Scottish Ministers). SEPA is also a Consultation Authority, but under Section 3(2) does not perform this role when it is acting as a Responsible Authority.

⁴ Scottish Executive (2006) Strategic Environmental Assessment Toolkit - www.scotland.gov.uk/Publications/2006/09/13104943/0

CHAPTER 2

THE CONTENTS AND MAIN OBJECTIVES OF SEPA'S DRAFT CORPORATE PLAN AND ITS RELATIONSHIP WITH OTHER PLANS, PROGRAMMES AND STRATEGIES

This section of the Environmental Report is designed to meet the requirements of paragraphs 1 and 5 of Schedule 3 of the Environmental Assessment (Scotland) Act 2005. Namely, an outline of the contents and main objectives of the Corporate Plan and its relationship with other qualifying plans and programmes and a summary of those relevant environmental protection objectives set at international, community or member state level.

Background

2.1 SEPA has prepared a draft Corporate Plan which will set out the Agency's priorities and goals for the next three financial years 2008/9 to 2010/11. The plan will show how the Agency intends to progress both our aim and our six long-term environmental goals in these areas:

- An Efficient, Effective and Evolving SEPA
- Limiting and Adapting to Climate Change
- Protected Human Health and Communities
- Reduced Waste and Promoting Sustainable Use of Resources
- Improved Air Quality
- Improved Land Quality with Healthier Soils
- Improved Water Environments

2.2 Table 2 below sets out some key facts about SEPA's draft Corporate Plan

Responsible Authority	Scottish Environment Protection Agency
Title of Plan	SEPA's draft Corporate Plan
Plan Subject	Environmental protection and improvement
Period Covered	3 financial years 2008/9 to 2010/11
Requirement for the Plan	The Plan is required as SEPA's contract for the coming years and is agreed with the Scottish Government.
Frequency of Updates	Key aspects of the draft Corporate Plan will be revised annually. Full revised plan post 2011.
Plan area	The whole of Scotland.
Summary of content /nature of plan	The Plan sets out SEPA's work for the coming years. It identifies main areas of work, activities SEPA will undertake, and key objectives and targets agreed with the Scottish Government. The Plan is SEPA's formal contract with the Scottish Government and receives Ministerial approval.

Contents of SEPA's Draft Corporate Plan

2.3 SEPA's draft Corporate Plan sets out the outcomes and specific targets and measures for the Agency over the three year period 2008/9 to 2010/11. The draft plan can be viewed at: www.sepa.org.uk/consultation/index.htm.

2.4 The draft Corporate Plan is comprised of a number of components, including an Executive Summary, statements from the Chairman and Chief Executive, contextual information about the seven outcomes and the environmental issues covered by them, a table comprising priorities and key work areas and information about how SEPA will act in order to achieve the stated outcomes and targets. Not all of the components of the draft Corporate Plan need to be subject to

assessment as contextual and other supporting information is largely factual. What has been assessed in this Environmental Report is set out in table 3 below. Further details about the scope and level of detail of the assessment are provided in Chapter 4.

Table 3 – What parts of the draft Corporate Plan have been assessed ?

Content	Is this assessed in the SEA ?
Setting the Context for SEPA's Work: The Government's Priorities for Scotland	No, this section provides a summary of the relationship between SEPA, its Corporate Plan and the Scottish Government's priorities
Setting the Context for SEPA's Work: The State of Scotland's Environment	No, this section provides a summary of the key challenges facing SEPA from the state of Scotland's environment. Information about the current state of the environment is, however, used to explain the environmental baseline in this Environmental Report.
Executive Summary and SEPA's Key Targets 2008 -11	No, this summarises the actions in each of the outcomes which are assessed in detail (see below)
Outcome Chapters (all actions in tables and all actions in section headed "How Will We Do This?"). <ul style="list-style-type: none"> • An Efficient, Effective and Evolving SEPA • Limiting and Adapting to Climate Change • Protected Human Health and Communities • Reduced Waste and Promoting Sustainable Use of Resources • Improved Air Quality • Improved Land Quality with Healthier Soils • Improved Water Environments 	Yes, all of the outcomes and all of the actions identified within each of the outcomes have been assessed. Each outcome in the Corporate Plan is comprised of three parts (a) a description of the context for each outcome (this is not assessed), (b) a list of SEPA's priority actions in a table under four common headings (all of these are assessed individually) and (c) a list of actions which identify how the priorities in the table will be implemented (all of these have been assessed individually).

Relationship with other Plans, Programmes & Objectives

2.5 Consideration of the relationship of the draft Corporate Plan with other plans, programmes, strategies and environmental objectives that it may influence or be influenced by is an important part of SEA. Understanding these relationships assists the identification of significant environmental effects and allows understanding of which plans may be best placed to implement any mitigation measures required.

2.6 Appendix A sets out those plans and programmes considered to be relevant to the draft Corporate Plan and provides brief commentary on their relevance to the Corporate Plan. Given the wide geographic and subject scope of the draft Corporate Plan it is not meaningful to identify every possible plan or programme. Rather, the key plans only have been identified.

2.7 The five Scottish Government strategic objectives⁵ for a sustainable Scotland that is: wealthier and fairer; healthier; safer and stronger; smarter and greener are important for delivery of the SEPA draft Corporate Plan. While the draft Corporate Plan actions make a contribution to all of these, it is the themes for a "greener Scotland" that are most relevant. These are:

Climate Change;
Sustainable Places;
People and Nature;
Sustainable Consumption and Production; and
Countryside Culture

2.8 The Government's strategic objectives and their relationship with the draft Corporate Plan is explained more fully in Appendix 1.

⁵ Details at: www.scotland.gov.uk/About/purposestratobjis

CHAPTER 3

SUMMARY OF CURRENT ENVIRONMENT IN SCOTLAND

This section of the Environmental Report is designed to meet the requirements of paragraphs 2, 3 and 4 of Schedule 3 of the Environmental Assessment (Scotland) Act 2005. This requires SEPA to summarise the environmental characteristics of the area likely to be affected by the Corporate Plan and any existing environmental problems which are relevant to the Corporate Plan. The section entitled “forward look” provides a view of the likely evolution of the environment as required by paragraph 2 of Schedule 3.

3.1 Introduction

- 3.1.1 Set out in this chapter is a summary of the state of the environment for the key areas that the Corporate Plan will cover. Due to the wide geographic and issue coverage of the Corporate Plan, it is not appropriate to go down to a great level of detail in this baseline. In 2006 SEPA published its State of Scotland’s Environment Report *Change Tomorrow Today* which provides lots of detail about prevailing environmental conditions, trends and problems. The State of the Environment Report also comments on the likely evolution of the environment over the coming years and this is summarised in this Environmental Report under the heading “forward look”. Rather than repeat this work in this baseline, a summary of each topic has been provided and links to the report provided. *State of Scotland’s Environment Report 2006* can be downloaded at: www.sepa.org.uk/changetomorrowtoday/report/index.html

3.2 Air

- 3.2.1 Overall air quality in Scotland is improving with statistics showing it is generally good. However, further improvements are needed to reduce the adverse health effects and the number of deaths brought forward by air pollution in urban areas. In rural areas, poor air quality still has the potential to damage ecosystems and to contribute to acidification and nutrient enrichment.
- 3.2.2 The main sources of air pollution include transport, energy generation, industry, waste and agriculture. With reductions in large-scale industrial emissions, transport is rapidly becoming an increasingly significant source. The continual increase in demand for energy may also give rise to increased emissions.
- 3.2.3 In relation to specific pollutants, emissions of nitrogen oxides and sulphur dioxide from large industrial sources have fallen. The decrease in domestic coal use has also led to significant reductions in emissions of sulphur dioxide. Emissions of particulates and volatile organic compounds are showing a general downward trend. These improvements contrast with a general increase in ground-level ozone concentrations, with potential to harm humans, crops and ecosystems. In addition, a decline in stratospheric ozone levels over Scotland has the potential to increase levels of exposure to harmful ultraviolet radiation.
- 3.2.4 The Chapter on air quality in State of Scotland’s Environment 2006 report is available at: www.sepa.org.uk/publications/state_of/2006/main/b_air.html
- 3.2.5 Nutrient Enrichment - The downward trend in emissions of nitrogen oxides to air is linked to reductions in the amounts of nitrogen deposited on nutrient-sensitive plant communities. Ammonia emissions are the dominant source of nitrogen deposition and remain a major problem, particularly for nutrient-sensitive vegetation. Further information about nutrient enrichment is available at: www.sepa.org.uk/publications/state_of/2006/main/c_nutrient.html

Figure 1 – Summary of State of the Environment and Observed Trends (SEPA, 2006)

Aspect	Summary of state	Trend	Explanation
Air			<p>Overall air quality is improving but further improvements are needed to reduce adverse health effects and deaths brought forward by air pollution. Poor air quality also has the potential to damage ecosystems and water quality. Transport is an increasingly significant source of air pollution and increasing energy demand may lead to increased emissions. Emissions of nitrogen oxides and sulphur dioxide have fallen, and emissions of particulates and volatile organic compounds are showing a downward trend. However, there is a general increase in ground-level ozone concentrations, and a decline in stratospheric ozone levels over Scotland.</p>
Land			<p>Land quality in Scotland is reasonable, although there are significant knowledge gaps, especially about soils. Agriculture and forestry can lead to soil erosion and losses of nutrients but new policies are encouraging good practice in conserving soil organic matter and promoting biodiversity. Measures are being taken to enhance habitats and to counteract loss of species, and progress has been made with the regeneration of derelict and contaminated land. Soil erosion is a continuing problem and there are concerns about loss of soil organic matter and soil sealing by impermeable surfaces.</p>
Water			<p>Water quality in Scotland is generally good and is improving due to a reduction in end-of-pipe discharges. There have been major improvements in the quality of bathing, shellfish and freshwater fish waters. Diffuse pollution, for example from farmland and roads, is now the largest problem. Water is generally abundant but increased demand is likely to put pressure on levels in groundwater, lochs and rivers. Changes in river flow patterns may increase the risk of flooding and rivers in the east may experience lower flows in summer. Impacts on the physical structure of rivers, estuaries and coastal waters are widespread.</p>
Waste and resources			<p>Around 20 million tonnes of waste is produced each year, mostly from commerce and industry. Household waste continues to increase and fly tipping and litter remain problems. Waste disposal to landfill is falling and there is more recovery and recycling of waste. Emissions to the environment from landfills and thermal treatment plants are reducing and more landfill gas is being used to produce energy. Stricter controls on landfill operations mean that the environmental impact of sites is decreasing. Emissions of dioxins and nitrogen oxides from municipal waste incinerators have fallen.</p>
Radioactivity			<p>Levels of man-made radioactivity in the environment show a general downward trend. Concentrations in drinking water remain well below the limit set to protect human health. Some localised areas of contamination from man-made radioactivity remains. Averaged exposure to ionising radiation from man-made sources is less than one fifth of that from natural background radiation and medical uses represent the predominant source of man-made exposures. Exposure from radioactive emissions to the environment is less than 0.1% of all sources of ionising radiation. Overall, radioactive emissions from nuclear installations have fallen since 1996.</p>
Hazardous chemicals			<p>The use of hazardous chemicals has reduced but many are still used and the long-term effects are unclear. A number of 'hotspots' of chemical contamination persist but historic problems caused by heavy metals and persistent organic chemicals have reduced. Problems caused by hazardous substances in run-off from urban areas continue to have ecological impacts. There is increasing concern over the rising concentrations of some newly identified chemicals and over more subtle impacts like food chain contamination and accumulation of persistent chemicals. Further problems may become more apparent as knowledge and understanding of them grows.</p>

Aspect	Summary of state	Trend	Explanation
Nutrient enrichment			Nutrient enrichment of rivers, lochs and groundwater can damage ecosystems and is a significant problem in some areas. Effects on estuarine and coastal waters are limited. The area of semi-natural terrestrial habitats at risk from nitrogen deposition has declined slightly, but the potential for damage to specific habitats remains high. Emissions of nitrogen oxides to air show a downward trend. Ammonia emissions are the dominant source of nitrogen deposition and remain a major problem. Better targeting and supply of nutrients in fertilisers can prevent nutrient enrichment. Discharges of nutrients to water from sewage treatment works are being reduced.
Acidification			Acidification can damage ecosystems and is a potential problem across upland Scotland. There is evidence of ecological damage in Galloway, the Cairngorms and the western and central Highlands. Between 1986 and 1997 deposition of sulphur dioxide declined by 52%, and nitrogen oxides by 16%. Impacts on vegetation, soil and freshwater habitats show a slight decrease and there is some evidence that soils are becoming slightly less acidic. Some areas are showing signs of recovery but some watercourses remain devoid of acid-sensitive plants, invertebrates and fish. Recovery may take decades and climate change may slow or halt this.
Human health			The environment plays a significant part in the health and quality of life of individuals and communities in Scotland, but the relationship between environmental pollutants and health is complex and uncertain. Other factors also affect health and further work is required to investigate environmental impacts. There is growing evidence that environmental factors affect both our health and well-being and contribute to environmental injustice. Air pollutants such as nitrogen dioxide, sulphur dioxide and small particles make respiratory and cardiovascular illnesses worse and, in some circumstances, hasten death in vulnerable people.
Biodiversity			Intensive land use in the last 250 years led to significant declines in Scotland's biodiversity. In 2005 nearly 32% of habitats and 18% of species identified under the UK Biodiversity Action Plan were declining, although around 32% of habitats and 39% of species were either stable or showing signs of recovery. However, the impact of climate change is already evident with some species ranges being reduced, others extended and food chains being disrupted. This makes the attainment of the EU target to halt loss of biodiversity by 2010 challenging. Active management will be necessary to maintain many habitats and species in Scotland. The Scottish Biodiversity Strategy provides a framework for this.
Climate change			Climate change is already causing a number of impacts on Scotland, including changes in the growing, breeding and migration seasons, shifts in species abundance and diversity and changing weather patterns with the potential for more floods and droughts. Left unchecked, climate change will accelerate with significant consequences for Scotland's environment, economy and society. The use of fossil fuels and growing demand for energy will escalate emissions of carbon dioxide to potentially irreversible levels. Scotland needs to take action to tackle the problem and to prepare itself for the inevitable impacts.

- 3.2.6 Reductions in emissions of acidifying gases, means there have been significant reductions in acid deposition across the UK. Sulphur dioxide deposition declined by 52% between 1986 and 1997, while deposition of nitrogen oxides declined by 16% over the same period. The relative importance of nitrogen as a contributor to acidification has increased.
- 3.2.7 Acidification is a potential problem across large areas of upland Scotland due to its ability to damage ecosystems, but evidence of ecological damage is mainly confined to fresh waters in Galloway, smaller areas of the Cairngorms and the western and central Highlands.
- 3.2.8 As a result of reduced acid deposition in Scotland, impacts on vegetation, soil and freshwater habitats have shown a slight decrease in some areas. There is some evidence to suggest that soils are becoming slightly less acidic. The extent of acid-sensitive vegetation affected by acidification has declined, with some areas showing signs of recovery. Some recovery is also evident in certain rivers and lochs. However, acidification is still causing other watercourses to be devoid of acid-sensitive plants, invertebrates and fish.
- 3.2.9 The recovery of soil, vegetation and water from acidification does not match the reduction in acid deposition. Recovery is predicted to take decades and some habitats may never return to their original state. Over such long timescales, recovery may be slowed or even reversed by climate change.
- 3.2.10 Further information about acidification can be found at:
www.sepa.org.uk/publications/state_of/2006/main/c_acidification.html

Air - Forward Look

- 3.2.11 Understanding the state of air quality in Scotland will improve as information on emissions from SEPA regulated processes is recorded in the Scottish Pollutant Release Inventory. It is anticipated that there will be a reduction in emissions from regulated processes but that any reduction in emissions from vehicles will be off-set by an increase in vehicle use.
- 3.2.12 However, more or better data does not necessarily mean a better environment. As monitoring and knowledge improves it is likely that more data will highlight certain issues which will need to be addressed and areas for attention, as has been experienced under the Air Quality Strategy. We now have 11 Scottish Air Quality Management Areas, more than ever expected, and this number may increase.
- 3.2.13 The major challenge is likely to be meeting new European air quality objectives, as well as reduced limits on certain other pollutants.
- 3.2.14 Transport is likely to be an increasingly important issue. New 'cleaner' diesel engines appear to be resulting in elevated emissions of nitrogen dioxide causing new air quality problems. Other unforeseen issues such as this may occur, as well as trade-offs between air quality and climate change in the transport and industrial sectors.
- 3.2.15 Ground-level ozone is now a problem across the northern hemisphere, with recent monitoring identifying pollution that has been emitted in the Far East and that has crossed the United States to the UK and Ireland. This will require hemispheric action and will increasingly impact on Scottish air quality.
- 3.2.16 With a continuing decline in acid deposition, at least in the short term, further recovery in soils, vegetation and freshwaters is expected, although some habitats may never return to their pre-acidification state. In the longer term, the pace of recovery may be slowed or even reversed by

climate change. For example, increased rainfall could lead to an increase in acid deposition even though concentrations of acidifying gases in the atmosphere may have declined.

3.2.17 Emissions of substances within Europe which contribute to acidification in Scotland are set to decrease with implementation of the Large Combustion Plant Directive and the National Emission Ceilings Directive. The challenge will be achieving emission reductions from other sources, particularly if vehicle use increases at a greater rate than reductions in vehicle emissions.

3.3 Water

3.3.1 Water quality in Scotland is generally good and continues to improve due to a reduction in end-of-pipe discharges. There have been major improvements in the quality of bathing, shellfish and freshwater fish waters. Diffuse pollution originating from farmland and urban areas is a significant issue and is now the largest source of pollution.

3.3.2 Water is generally abundant but demand requires better management to maintain levels in groundwater, lochs and rivers. Changes in river flow patterns may increase the risk of flooding in some areas and there are indications that rivers in the east may be experiencing lower flows in summer. Impacts upon the physical structure of rivers, estuaries and coastal waters are widespread.

3.3.3 The Chapter on water quality in the State of Scotland's Environment report is available at: www.sepa.org.uk/publications/state_of/2006/main/b_water.html

3.3.4 Nutrient enrichment of rivers, lochs and groundwater is a significant problem in some areas of Scotland, particularly those with intensive agriculture or high population density, due to its potential to damage ecosystems. Effects of nutrient enrichment on estuarine and coastal waters are limited. Better targeting and supply of nutrients in fertilisers is needed to prevent nutrient enrichment. Discharges of nutrients to water from sewage treatment works are being reduced. Further information about nutrient enrichment is available at: www.sepa.org.uk/publications/state_of/2006/main/c_nutrient.html

Water – Forward Look

3.3.5 SEPA is beginning a new system for managing the water environment: River Basin Management Planning involves promoting the sustainable use of water whilst ensuring that the resource is protected for use by others. SEPA expects that this planning process, together with new monitoring responsibilities and new powers to control abstractions and impoundments, will deliver major improvements in the water environment. For the first time, comprehensive controls will be available to manage the impacts of abstractions, impoundments and engineering activities. The major challenges are likely to be tackling the impacts of intensive land management to avoid diffuse pollution and habitat damage and promoting sustainable flood management by influencing the planning process to avoid developments within areas liable to flooding.

3.3.6 Integrated measures taken under Water Framework Directive, Nitrates Directive and Urban Waste Water Treatment Directive are expected to progressively reduce nutrient enrichment of water and land. Developments in Land Management Contracts should lead to improvements in nutrient management of soils. The major challenges are likely to be tackling diffuse pollution and reducing emissions of ammonia.

3.4 Soil

3.4.1 Land quality in Scotland is generally considered to be reasonable, although there are significant gaps in our knowledge, especially relating to soils.

3.4.2 The way in which land is used and managed is a major factor in determining its quality. Agriculture and forestry can lead to soil erosion and losses of nutrients to the water environment

- but new policies are encouraging good practice in conserving soil organic matter and promoting biodiversity.
- 3.4.3 Measures are being taken to enhance habitats and to counteract loss of species and improvements have also been made in the regeneration of derelict and contaminated land in previously industrialised areas.
- 3.4.4 Soil is a significant component of land but remains poorly understood. Soil erosion is a continuing problem in Scotland and there are concerns about loss of soil organic matter and soil sealing by impermeable surfaces associated with buildings and roads.
- 3.4.5 The Chapter on soil quality in the *State of Scotland's Environment* report is available at: www.sepa.org.uk/publications/state_of/2006/main/b_land.html
- 3.4.6 The area of semi-natural terrestrial habitats at risk from nitrogen deposition has declined slightly, but the potential for damage to specific habitats remains high. Agricultural production relies on the supply of nutrients to meet crop requirements, but poor application methods and oversupply of fertilisers can lead to nutrient enrichment. Further information about nutrient enrichment is available at: www.sepa.org.uk/publications/state_of/2006/main/c_nutrient.html .

Soil – Forward Look

- 3.4.7 Progress is being made at UK and European levels towards establishing a more consistent set of indicators with which to assess and monitor soil and land condition. New requirements under the Common Agricultural Policy and developments in Land Management Contracts should lead to improvements in soil management and condition within farming. Further improvements are expected in the future as a result of the European Union Soil Thematic Strategy as well as through the planning system and new approaches to waste management.

3.5 Biodiversity

- 3.5.1 Increasing intensification of land use for agriculture, forestry and industry, urbanisation and population growth within the last 250 years all led to significant and rapid declines in the previously rich and diverse biodiversity of Scotland. In 2005 nearly 32% of habitats and 18% of species identified under the UK Biodiversity Action Plan were reported as still declining in Scotland, although around 32% of habitats and 39% of species were either stable or showing signs of recovery.
- 3.5.2 The impact of climate change is already evident with some species ranges being reduced, others extended and food chains being disrupted. This threat can be expected to get worse. Some form of intervention or active management will be necessary to maintain the status of many habitats and species in Scotland. The Scottish Biodiversity Strategy published in 2004 provides a framework for biodiversity conservation and enhancement.
- 3.5.3 The Chapter on biodiversity in the *State of Scotland's Environment* report is available at: www.sepa.org.uk/publications/state_of/2006/main/d_biodiversity.html .
- 3.5.4 SNH has prepared a suite of publications called Natural Heritage Futures to guide the future management of the natural heritage towards 2025. This series provides an overview of Scotland's natural heritage, focusing at the national level on coasts and seas, farmland, forest and woodlands, freshwater, hills and moors, and settlements. It then also provides more detailed assessments within 21 local areas covering the whole of Scotland. These data are available at: www.snh.org.uk/futures/Data/index.htm

Biodiversity – Forward Look

3.5.4 The European Union has set a challenging target of protecting and restoring the functioning of natural systems and of halting the loss of biodiversity in the EU by 2010. The Scottish Biodiversity Strategy has established a vision for the year 2030 whereby Scotland will be recognised as a world leader in biodiversity conservation. Our understanding of the situation is continuing to improve and at this stage it remains uncertain whether the target will be met. The impact of climate change is already becoming apparent, with observed changes in behaviour, phenology and species distribution, and will be a real challenge.

3.6 Population and Human Health

3.6.1 The environment plays a significant part in the health and quality of life of individuals and communities in Scotland, but the relationship between environmental pollutants and health is complex and uncertain. Other factors also affect health and further work is required to investigate environmental impacts. There is growing evidence that environmental factors affect both our health and well-being, and contribute to environmental injustice.

3.6.2 Air pollutants such as nitrogen dioxide, sulphur dioxide and small particles make respiratory and cardiovascular illnesses worse and, in some circumstances, hasten death in vulnerable people.

3.6.3 The Chapter on human health in the *State of Scotland's Environment report* is available at: www.sepa.org.uk/publications/state_of/2006/main/d_human_health.html

3.6.4 *Hazardous Chemicals* - The state of Scotland's environment with respect to hazardous chemicals is favourable compared with the UK overall and the rest of the Europe. The use of hazardous chemicals has been reduced through legislation but, despite this, many substances continue to be used and the long-term effects are not entirely clear. Furthermore, a number of 'hotspots' of chemical contamination persist and these are often associated with past industrial practices.

3.6.5 Many of the environmental problems caused in the past by heavy metals and persistent organic chemicals have been reduced. Problems exist with diffuse sources of hazardous substances, for example run-off from urban areas and these continue to have ecological impacts. There is increasing concern over the rising environmental concentrations of a number of newly identified chemicals such as chlorinated paraffins, perfluorinated compounds and polybrominated flame retardants.

3.6.6 The focus on environmental problems associated with hazardous chemicals is changing as more subtle impacts are observed such as food chain contamination and accumulation of persistent chemicals. There may well be problems associated with chemicals in everyday use that could become more apparent as our knowledge and understanding of them grows. Further information about hazardous chemicals is available at: www.sepa.org.uk/publications/state_of/2006/main/c_hazardous.html

3.6.7 *Radioactivity* - Levels of man-made radioactivity in the environment have shown a general downward trend over the last decade. Concentrations in drinking water remain well below the recommended limit set to protect human health. Some instances of localised contamination from man-made radioactivity remain.

3.6.8 Averaged exposure to ionising radiation from man-made sources in Scotland is less than one fifth of that from natural Background radiation. Of these man-made sources, medical uses represent the predominant source of exposure, with the exposure associated with radioactive emissions to the environment being less than 0.1% compared with that associated with all sources of ionising radiation.

- 3.6.9 Overall, radioactive emissions from nuclear installations in Scotland and the UK have fallen since 1996. Further information about radioactivity is available at: www.sepa.org.uk/publications/state_of/2006/main/c_radioactivity.html

Human Health – Forward Look

- 3.6.10 Our understanding of how the environment affects our health will improve as a result of planned studies and strategies put in place at a Scottish and European level. However, it is expected to be a long time before the links between health and the environment are fully understood due to the complexity of exposures.
- 3.6.11 Understanding the occurrence of hazardous chemicals in Scotland will improve in the light of ongoing studies. New areas of concern may emerge, depending on the extent of use of hazardous chemicals, and whether they are used in domestic, commercial or industrial situations. The new mechanism for the control of chemicals within the European Union (REACH) is anticipated to lead to a reduction in inputs of hazardous chemicals to the environment.
- 3.6.12 Concentrations of man-made radioactivity in the environment are generally set to further reduce and our understanding of the effect that these concentrations have on ecosystems is expected to improve. The main challenge will be dealing with wastes associated with the operation and decommissioning of nuclear installations, as well as any contamination which becomes apparent in localised areas associated with historical practices. Forthcoming developments in international radiation protection principles, in European legislation and in Government policy are likely to result in an improved framework for the regulation of radioactive substances.

3.7 Material Assets (Waste and resources)

- 3.7.1 Around 20 million tonnes of waste is produced in Scotland each year, mostly from commerce and industry. The amount of household waste produced in Scotland continues to increase. Fly tipping and litter remain a problem. The amount of waste disposed of to landfill is continuing to fall with substantial progress having been made in the recovery and recycling of waste.
- 3.7.2 There have been reductions in emissions to the environment associated with landfilling and thermal treatment. More landfill gas is being used to produce energy and stricter controls on landfill operations mean that the environmental impact of sites is decreasing. Emissions of dioxins and nitrogen oxides from municipal waste incinerators have fallen to low levels compared with those from other UK sources.
- 3.7.3 The Chapter on waste and resources in the *State of Scotland's Environment report* is available at: www.sepa.org.uk/publications/state_of/2006/main/c_waste.html

Material Assets (Waste and Resources) – Forward Look

- 3.7.4 The impact of waste on the state of the environment is expected to continue to fall as the requirements of various European Directives on waste are progressively implemented. Furthermore, as the Waste Framework Directive which is 30 years old, is under review, it is anticipated that there will be further incentives to further reduce the amount of waste produced and to raise waste recovery standards.

3.8 Climatic Factors

- 3.8.1 Climate change is evident in Scotland from observed trends in temperature, rainfall and snow cover. Climate change is causing changes in the growing, breeding and migration seasons, shifts in species abundance and diversity, higher river flows leading to flood risk, and sea level rise causing erosion. Left unchecked, climate change will accelerate causing damaging effects on

physical, biological and chemical processes with significant consequences for Scotland's environment, economy and society.

- 3.8.2 Continued reliance on fossil fuels and growing demand for energy, for transport and for housing will escalate emissions of carbon dioxide to increasingly dangerous and potentially irreversible levels. Scotland must play its part in rapidly adopting energy conservation and efficiency measures and low carbon energy solutions. Much of the change in climate over the next 30 to 40 years is already determined by past and present emissions, so it is important that Scotland prepares itself for the inevitable impacts.
- 3.8.3 The Chapter on climate change in the *State of Scotland's Environment report* is available at: www.sepa.org.uk/publications/state_of/2006/main/d_climate_change.html.

Climatic Factors – Forward Look

- 3.8.4 Climate change will accelerate and the impacts rapidly increase in severity if we continue with our heavy dependence on carbon-emitting energy sources. According to the latest climate change scenarios for the UK, temperatures in Scotland may rise by up to 4°C by the end of the century; winters may be wetter and summers drier, winter rainfall intensity may increase and snow cover may decrease. As average global temperature increases, so does the likelihood of infrequent, high impact events. These are unlikely scenarios that could have a dramatic effect at a regional or global level. For Scotland, one of the most significant would be the slowing down and switching off of the North Atlantic deep water formation in the Arctic Sea. The effect of this would be to reduce the flow of northward warm currents past the UK (popularly termed the Gulf Stream) and a reduction in our average annual temperature by up to 8°C.
- 3.8.5 Predicted climate change implications for Scotland:

Aspect*	Implications
Water resources	<ul style="list-style-type: none"> • More frequent and severe river flooding, affecting 77,000 properties • Increased likelihood of summer droughts leading to river water quality problems and disruption of water supply • Limitation to abstraction practices
Biodiversity	<ul style="list-style-type: none"> • Changes in abundance and distribution of species and length of growing season • Higher temperatures less favourable for native species • High intensity rainfall causing destruction to river habitat • Increased erosion and siltation with consequences for fish spawning • Disruption to food chain with potential catastrophic loss of species (e.g. island breeding sea bird populations)
Marine	<ul style="list-style-type: none"> • More frequent and coastal flooding affecting 93,000 properties • Higher sea level, increased wave height leading to coastal erosion and loss of habitat • Loss of traditional commercial fishery
Land surface	<ul style="list-style-type: none"> • Drying out of soils combined with higher intensity storm events causing landslides, with potential disruption of transport links • Accelerated decomposition of peaty soils resulting in increased emissions of carbon dioxide and methane, fuelling further climate change • Increased soil loss through water and wind erosion • Changes to agricultural practice and crops (e.g. longer growing season)
Human health	<ul style="list-style-type: none"> • Increased flood-related stress, illness and economic costs • Increased respiratory illness and heat-related distress • Fewer cold-related deaths
Water quality	<ul style="list-style-type: none"> • Periods of reduced river flow providing less dilution for discharges with increased sewage treatment costs • Increased treatment costs to provide water supplies

	<ul style="list-style-type: none"> Increased run-off impacting on bathing water quality
Air quality	<ul style="list-style-type: none"> Local and regional ozone air quality goals probably more difficult to achieve in the future An increase in summertime photochemical smog, linked to increasing temperatures and small reductions in cloud cover Likely that the frequency of wintertime air quality pollution events will reduce
Nutrient enrichment	<ul style="list-style-type: none"> Enhanced plant/algal growth due to increased temperature Increase run-off increasing nutrient loading in water
Weather	<ul style="list-style-type: none"> The weather will become more erratic and therefore less predictable, with a greater likelihood of extreme events.

3.8.6 Even if emissions ceased immediately, it would take decades to arrest current climate change trends due to the slow cycling rate of greenhouse gases in the atmosphere. Unless emissions are curbed sufficiently, there is an increasing risk that natural global carbon feedback processes will be thrown out of balance and further accelerate climate change. As global temperatures increase, tropical forests may start to die back and the oceans will warm and become less able to absorb carbon dioxide – both processes resulting in reduced uptake of carbon dioxide and hence higher atmospheric concentrations. Stabilisation of atmospheric concentrations of greenhouse gases at 450 parts per million by volume (ppmv) CO₂ equivalent would give a 50% chance of limiting global warming to less than 2°C above the pre-industrial era; this is considered to be the temperature above which dangerous climate change becomes likely.

3.8.7 Scotland's greenhouse gas emissions in 2003 were comparable with the UK average of approximately 2.9 tonnes of carbon per person. The UK Government has set a goal of reducing these emissions by 60% of 1990 levels by 2050. In contrast, without urgent adoption of energy conservation, efficiency measures and low-carbon energy solutions, global carbon dioxide emissions from energy use will be expected to increase by over 60% in the next 30 years. There is clearly a need for every person in every country to work towards minimising the emissions from their lifestyle, but the deepest cuts will have to come from the most developed nations such as ours.

CONSULTATION QUESTION 1 – Do you have any comments on the summary of the environmental baseline ?

CHAPTER 4.

ASSESSMENT OF ENVIRONMENTAL EFFECTS OF THE DRAFT CORPORATE PLAN, INCLUDING REASONABLE ALTERNATIVES

This section of the Environmental Report is designed to meet the requirements of paragraphs 6 and 8 of Schedule 3 of the Environmental Assessment (Scotland) Act 2005. Namely, an assessment of the environmental effects of the draft Corporate Plan, including an outline of the reasonable alternatives dealt with.

PART 1 - ASSESSMENT METHOD

4.1 Scope of Assessment

- 4.1.1 A process called “scoping” is required prior to the completion of an Environmental Report. This is a statutory stage of SEA and requires SEPA to consult with the Consultation Authorities on the proposed scope and level of detail of the SEA and on its proposed approach to the assessment.
- 4.1.2 A scoping report was submitted on 30 August 2007. The scoping stage confirmed which environmental receptors listed in Schedule 3 of the Act will be considered in the assessment. All SEA topics have been scoped into the assessment with the exception of cultural heritage issues. This was agreed with Historic Scotland through its response to the scoping consultation.
- 4.1.3 A full summary of the results of the scoping consultation and of how SEPA has dealt with points raised is provided in Appendix 3.

4.2 SEA Assessment Checklist

- 4.2.1 Schedule 3 of the Environmental Assessment (Scotland) Act requires that the likely significant environmental effects of implementing the draft Corporate Plan are identified and assessed. This extends to include short, medium and long term effects, permanent and temporary effects, positive and negative effects and secondary, cumulative and synergistic effects. To undertake this assessment, a simple checklist has been used which assesses each of the actions in the plan against a set of objectives which cover the range of topics scoped into the assessment (identified in table 4 below).
- 4.2.2 The use of a SEA checklist and objectives are not a requirement of Schedule 3, however their use is widely adopted as a tool for helping assessment of the significant environmental effects of a plan. In this assessment, the SEA objectives (set out as a series of questions) describe a set of desired outcomes and are designed to test whether the actions evaluated are likely to move towards or away from that objective.
- 4.2.3 A full description of how the checklist was used is provided in table 5 overleaf and copies of all completed matrices are set out in Appendix 2.

Table 4 –Assessment Checklist

SEA Topic	Objectives – Will each action in the Corporate Plan...
Air	Contribute to improving air quality and meeting national air quality objectives?
Water	Contribute to the protection and enhancement of waterbodies to WFD “good” status?

	Contribute to reduction of flood risk?
Soil	Contribute to the protection of soil quality and function ?
	Contribute to reduction in rates of contaminated and derelict land?
Climatic Factors	Contribute to reduction in greenhouse gas emissions?
	Contribute to effective adaptation to climate change?
Bio-diversity	Contribute to protect and enhance biodiversity and contribute to implementing the Scottish Biodiversity Strategy?
Human Health	Contribute to objectives for protecting and enhancing human health
Material Assets	Promote use of renewable resources?
	Reduce energy consumption and promote efficiency?
	Reduce waste and encourage reuse and recycling?
Landscape	Contribute to protect and enhance landscape ?

4.2.4 The matrix used to undertake the assessment is explained in table 5 overleaf. The completed matrices are set out in Appendix 2A – 2G.







4.3 Level of Detail of the Assessment

4.3.1 As noted in Chapter 2, SEPA's draft Corporate Plan is a very strategic document looking at the activities of a whole organisation covering environmental regulation across the whole of Scotland. Accordingly, the assessment was undertaken at a high level also. The draft Corporate Plan is comprised of several parts, which are described in Chapter 2. The following parts of the Plan were assessed in the Environmental Report:

- Actions under the outcome ***an efficient, effective and evolving SEPA;***
- Actions under the outcome ***limiting and adapting to climate change;***
- Actions under the outcome ***health and communities;***
- Actions under the outcome ***reducing waste & promoting sustainable use of resources;***
- Actions under the outcome ***good air quality;***
- Actions under the outcome ***good land quality with healthier soils;*** and
- Actions under the outcome ***good water environments***
- In addition, all actions listed under the “*how will we do this?*” heading for each outcome have also been assessed
- Further, the environmental effects of SEPA's activities as a whole (eg the effects of day to day activities of the Agency) are also assessed in summary.

4.3.2 Each action is assessed against each objective and given a score as to the predicted extent to which it will contribute to each of the objectives. The actions are grouped under the four common headings given in the draft Corporate Plan ((Understanding the State of the Environment, Protecting and Improving the Environment, An Influential Authority on the Environment and Better Regulation) and then an overall score for that group of actions given and comment made as required. At the end of the assessment of each outcome, an overall score about the likely contribution of that outcome to the objectives is given and comments made accordingly. An indication of any cumulative effects that are expected and of anticipated timescales is also provided.

4.3.3 The score ranges are shown overleaf. Occasionally, two symbols are shown to indicate that two scores apply (eg where likely to be a positive outcome but some uncertainty would score both a “+” and a “?”).

K E Y		Significant positive contribution to objective		No significant contribution to objective likely		Minor negative contribution to objective
		Minor positive contribution to objective		Unsure extent of contribution to objective		Significant negative contribution to objective

4.3.3 Cumulative and other types of effects that may arise from implementing the draft Corporate Plan are also indicated in the assessment matrices.

4.4 Iterative Changes Made to Date

4.4.1 This SEA was applied throughout the preparation of the corporate plan and early assessment findings were put back into the process of considering how the plan should develop. This is recommended as best practice. A number of things were altered as a result of this iterative process of assessment and plan development which are now included in the draft Corporate Plan. These are summarised below:

- Actions referring to SEPA's engagement in the spatial planning system have been included. This was in response to an early finding that none of the outcomes made reference to the activities connected to planning and land use despite this being a key tool available to SEPA to protect and enhance the environment and to protect communities from harm;
- More specific recognition of actions associated with flood warning and flood risk;
- More specific linkages with key corporate documents such as the SEPA Climate Change Plan;
- Ensuring that principles of better environmental regulation are applied across all outcomes and all activities rather than pigeon-holed to a single outcome;
- Identification of more specific actions rather than generic statements about activities;
- Improvements to the clarity of wording of actions.

Table 5 – Description of Assessment Matrix

A. This box identifies which SEA topics the checklist is covering and sets out the objectives used in the assessment

B. These are the actions in SEPA's corporate plan under each of the outcomes. These are tested against the objectives (box A) and scored (Box C) to evaluate whether they are working towards the stated objective.

C. This series of boxes evaluates the contribution that each action in the plan (and the targets identified under each action) will make to achieving the objective. The assessment is simple and high level and uses the scoring set out in the key below.

ENVIRONMENTAL TOPICS AND TARGETS	AIR	WATER	SOIL	CLIMATE	BIO-DIVERSITY	HEALTH & POPULATION	MATERIAL ASSETS	LANDSCAPE	OVERALL
<p>Objective 1: Reduce the number of... actions</p> <p>Objective 2: Increase the number of... actions</p>	+	+	+	+	+	+	+	+	+
<p>Objective 3: Reduce the number of... actions</p> <p>Objective 4: Increase the number of... actions</p>	++	++	++	+	+	++	+	?	++

D. This series of boxes records the overall score and explains the reason for the score given in C.

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OUTCOMES	TIME SCALE: MEDIUM / LONG	CUMULATIVE EFFECTS? YES, POSITIVE	MITIGATION ACTIONS REQUIRED
<p>SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THEIR RESPECTIVE OBJECTIVES</p> <p>Comments - Working with partners will likely result in positive environmental results across all objectives as the coordinated approach to environmental protection. SEPA's Better Regulation Strategy is aimed at ensuring that SEPA's resources are focused on the greatest environmental risk. This will lead to positive results for all objectives and will make a significant contribution in those areas where SEPA regulates to protect specific environmental risks. It is unclear how the strategy will impact on landscape as this depends upon individual regulatory decisions.</p>	<p>SUMMARY - The efficient SEPA outcome and its associated actions will help SEPA to operate and regulate in a way that helps to drive lower its overall outcomes. Many of SEPA's activities to protect Scotland's environment are achieved within regulation and the existing ways to use the regulation more effectively and in a way that reduces the administrative burden on both regulator and industry and on SEPA should lead to significant benefits over the long term. The benefits will likely be most clearly felt in those parts of the environment most closely protected by SEPA through regulation, such as air, water and soil quality, waste management and the health of people and communities. The focus on working in partnership to deliver environmental objectives and on internal efficiency should also make a positive contribution to many of the objectives, particularly in those areas where SEPA has a statutory responsibility. In particular, the ambition to become an exemplar and demonstrate by its through SEPA's actions will make a significant positive contribution and this is taken forward across the organisation.</p> <p>Some of the actions are procedural or behavioural (e.g. best value and customer focus) which will indirectly contribute to all environmental objectives but which may make a positive contribution to particular objectives outlined in the Corporate Plan. One area that could be enhanced in its "overarching" outcome is greater resilience to SEPA's own environmental risks resulting from its day to day business activities. This "inherent environmental policy" is linked in many of the actions but could be more clearly identified as a priority in its overarching outcome. A recommendation to this effect is made in the mitigation box.</p>		

E. This box summarises the overall effects of the actions which together make up each outcome.

++	Significant positive contribution to objective	-	Minor negative contribution to objective
+	Minor positive contribution to objective	--	Significant negative contribution to objective
0	No significant contribution to objective likely		
?	Unsure extent of contribution to objective		

F. This box describes mitigation options to prevent, reduce or as far as possible offset any adverse effects that have been identified. It is also used to record suggestions for making the plan better even where adverse effects have not been recorded.

PART 2 - ASSESSMENT FINDINGS – CONCLUSIONS

This part of the Environmental Report reports on the findings of the assessment. The completed matrices are set out in Appendix 2A – 2G and these provide all of the details about what the likely effects of each of the actions under each outcome are likely to have. **Please refer to these matrices for detailed information.** Below is a summary of the findings. These are summarised in three ways: firstly a strategic overview of the performance of the draft Corporate Plan as a whole; secondly a summary by outcome (ie summarising the likely effects of each outcome on the SEA topics) and then a summary of the alternatives to the draft Corporate Plan. This section of the report also provides details of SEPA's day to day environmental effects arising from SEPA performing its functions.

4.5 Overview

- 4.5.1 Overall, the draft corporate plan performs very well and this Environmental Report has found that it will make a very significant contribution to the protection and enhancement of Scotland's environment. Given that SEPA's main role is to protect the environment and human health and given that the draft Corporate Plan aims to provide a framework for delivering that role, it is unsurprising that this Environmental Report has made such a positive finding.
- 4.5.2 As table 6 overleaf shows, the draft Corporate Plan will make a positive contribution to all of the SEA objectives in some way. In most cases, the draft Corporate Plan will make a significant positive contribution to the objectives. Accordingly, there is a clear synergy between the seven outcomes in the draft Corporate Plan and the range of environmental issues covered by this assessment. This suggests that the draft Corporate Plan does not have any significant omissions in terms of its coverage of environmental issues.
- 4.5.3 The draft Corporate Plan is particularly strong at providing a positive framework for delivery of improvements in air quality, water quality, management of flooding, soil quality, climate change, sustainable waste management and protecting human health. This reflects those issues with which SEPA deals on a day to day basis through its regulatory, influencing, data analysis and education activities. In addition, however, the draft Corporate Plan also makes strong recognition of the role SEPA plays in working in partnership with others to deliver wider environmental benefits beyond those that can be achieved through regulation alone. Accordingly, the draft Corporate Plan also scores well in terms of its contribution to the objectives concerned with biodiversity, derelict and contaminated land, promotion of renewable resources and energy use, where SEPA can play a role in association with others.
- 4.5.4 No adverse environmental effects have been recorded from actions in the draft Corporate Plan, which reflects the both the nature of the plan and the activities of SEPA. There will be environmental effects arising from SEPA undertaking its activities (eg emissions from travel and buildings, waste etc), which are addressed through the Agency's internal environmental policy (IEP). There are, however, some areas where there are uncertainties about the effect of the draft Corporate Plan. Most notably, this is in the area of balancing regulatory activities (which can require the use of energy intensive facilities to remove pollutants from emissions to air, water or soil) with objectives and actions in the draft Corporate Plan to reduce greenhouse gas emissions. Mitigation measures to consider this are identified.

Table 6 – Summary of Contribution of Each Outcome to the SEA Objectives

Outcome	Efficient SEPA Outcome		Climate Outcome		Health Outcome		Waste Outcome		Air Outcome		Soil Outcome		Water Outcome	
SEA Objective														
Air	+	++	+		++		++	?	++		o			o
Water - Quality	+	++	+		+	++	++		+		+	++		++
Water - Flooding		++		++		++		o	o		o		+	++
Soil - Quality	+	++	+		+	++	++		+		+	++		+
Derelict Land		+		o		+	+		o		+	++		+
Climate - Mitigation	+	++		++		o	++		+		+			?
Climate - Adaptation	+	++		++		++		o	o		o			+
Biodiversity		+		+		+	+		+		+		+	++
Health and Population	+	++	+	++		++	++	?	++		+	++		++
Promote Renewables		+		+	++		o	+		o	o		o	o
Reduce Energy		+		+	++		o	+		+		o		?
Reduce Waste	+	++		+		o		++		o	o		o	o
Landscape		o		+		o		+		o		+		+

4.6 ASSESSMENT FINDINGS BY OUTCOME

4.6.1 EFFICIENT, EFFECTIVE AND EVOLVING SEPA OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

++

This “overarching” outcome and its associated actions will help SEPA to operate and regulate in a way that helps to drive towards greener outcomes. Many of SEPA’s activities to protect Scotland’s environment are enshrined within regulation and therefore finding ways to use that regulation more effectively and in a way that reduces the administrative burden on both regulated industry and on SEPA should lead to significant benefits over the long term. The benefits will likely be most clearly felt in those parts of the environment most closely protected by SEPA through regulation, such as air, water and soil quality, waste management and the health of people and communities. The focus on working in partnership to deliver environmental objectives and on internal efficiency should also make a positive contribution to many of the objectives, particularly in those areas where SEPA has

statutory responsibilities. In particular, the ambition to become an exemplar (and demonstrating this through SEPA's actions) will make a significant positive contribution as this is taken forward across the organisation.

Some of the actions are procedural or behavioural (eg best value and customer focus) which will not likely *in themselves* lead to environmental effects but which may make a positive contribution as part of the suite of activities outlined in the Corporate Plan.

One area that could be enhanced in this "overarching" outcome is greater reference to SEPA's own environmental effects resulting from its day to day business activities. This "internal environmental policy" is implicit in many of the actions and is referred to as part of being an exemplar, but could be more clearly identified as a priority in this overarching outcome or more specific action spread across all outcomes.

4.6.2 *LIMITING AND ADAPTING TO CLIMATE CHANGE OUTCOME*

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

++

This outcome scored particularly well in terms of making a positive contribution across virtually all of the objectives. In particular, actions under this outcome are likely to make a significant contribution to the climate change mitigation and adaptation objectives as well as to the flooding objective. This is unsurprising as the main focus of this outcome is about ensuring that SEPA plays its part in reducing Scotland's greenhouse gas emissions, in promoting greater resilience to predicted effects of climate change and in working in partnership with the Scottish Government and others to establish and then work towards challenging climate change targets.

It is likely that actions under this outcome will also make a significant positive contribution to protection of human health by enhancing flood warning and flood management activities. Improving Scotland's ability to respond to flood risk through better flood warning, influencing the siting of new developments where flooding may be an issue and through effective emergency response are all aimed at protecting people from the dangers of flooding. This is particularly important as in addition to the initial shock and trauma experienced by flood victims, communities can remain affected by stress, health impacts and property blight for years into the future.

Although focused on climate change, many of the actions in this outcome will also make a wider contribution to the other objectives, particularly air, water, soil, biodiversity and resource/energy efficiency.

4.6.3 *PROTECTED HUMAN HEALTH AND COMMUNITIES OUTCOME*

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

++

This outcome scored particularly well in terms of making a positive contribution across very many of the objectives. Of particular importance under this outcome are those actions related to SEPA's role in responding to emergencies and in dealing with environmental pollution incidents quickly and effectively. This is of primary importance in protecting people and the environment.

There is a strong research theme to many of the actions under this outcome. This will help SEPA to better understand the pressures being placed upon the environment and therefore upon people's health. Of particular importance here are activities connected with better understanding links between pollution, SEPA's licencing of activities and human health, which should lead to direct benefits in aligning regulatory activities to protect health.

It is likely that actions under this outcome will also make a significant positive contribution to protection of human health by enhancing flood warning and flood management activities – in association with similar actions under the climate change outcome. Improving Scotland's ability to respond to flood risk through better flood warning, influencing the siting of new developments where flooding may be an issue and through effective emergency response are all aimed at protecting people from the dangers of flooding. This is particularly important as in addition to the initial shock and trauma experienced by flood victims, communities can remain affected by stress, health impacts and property blight for years into the future.

SEPA's planning liaison activities are also included under this outcome and these are aimed at ensuring that environmental protection and human health is protected by seeking to influence decisions about the scale, nature and location of new development. Reducing flood risk through this liaison process is a key objective and this should lead to a reduction of flood risk (from new development) in the long term assuming SEPA's advice is taken up by planning authorities.

Under this outcome there is also a focus on raising awareness about environmental crime and about ensuring compliance with licences and undertaking enforcement/prosecution where necessary. This again is an important part of SEPA's ability to play a direct role in protecting health and protecting the environment and accordingly makes a significant contribution to many of the SEA objectives in this assessment.

4.6.4 REDUCED WASTE AND PROMOTING SUSTAINABLE USE OF RESOURCES OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES, BUT WITH UNCERTAINTIES

++

This outcome scored particularly well in terms of making a positive contribution across very many of the objectives. Many of the actions are aimed at ensuring that Scotland continues its improving record in reducing the amount of waste going to landfill and improving rates of reuse and recycling. To achieve this, SEPA has a key role to play in both controlling the management of waste, promoting opportunities to reduce levels of waste generated and in promoting the development of a new, modern, network of waste management facilities that will allow Scotland to deal with its waste in a way sustainable, safe and efficient and which works towards the Scottish Government's aim of a zero waste society.

Moving to a zero waste society will require a range of new waste management facilities. These may have local environmental or community effects that will need to be managed through effective site planning and operational regulation. It is important that the environmental effects of the new facilities are fully assessed as part of their planning and development. This will need to occur through SEA of development plans, EIA of specific proposals as they come forward and through regulation by SEPA through waste management licencing and/or PPC.

Reducing the amount of waste going to landfill through actions under the outcome will make a very significant contribution to climate change objectives as this should significantly reduce levels of methane, a powerful greenhouse gas that has 21 times more global warming potential than CO₂. Reducing the overall volume of waste will also lead to benefits for human health and communities also (eg through reduced emissions from fewer waste sites, reduced transport of waste etc).

This outcome will also have benefits for landscape as it contains actions that may reduce the landscape effects of waste (eg from landfill sites or from fly tipping)

4.6.5 IMPROVED AIR QUALITY OUTCOME

THIS OUTCOME WILL LIKELY MAKE A POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES	+
---	----------

Scotland's air quality is generally good and is improving. However, there are pockets of very poor air quality, particularly in urban areas, which can contribute to poor health and even to premature death. Many of the actions under this outcome are focused towards addressing these areas of poor air quality through regulation of industry, through working in partnership with other bodies (such as local authorities) to address specific problems and through development of SEPA's understanding of the air environment and its impacts on people.

Overall, the actions included within this outcome will likely make a positive contribution to most objectives and a significant contribution to the air and human health objectives. By protecting and enhancing air quality there are also likely to be positive effects on the wider environment, including water (eg reduced acidification resulting from atmospheric deposition), biodiversity (eg effects of poor air quality on habitats and species) and climate (eg reducing overall emission levels may also lead to reduction in greenhouse gas emissions. Accordingly, the air outcome is recorded as having positive effects on these objectives also.

SEPA's planning liaison activities are also included under this outcome and these are aimed at ensuring that environmental protection and human health is protected by seeking to influence decisions about the location of new development bearing in mind existing air quality issues. Siting new development in a way that does not exacerbate and (ideally) reduces existing air pollution problems (eg from transport) is a key objective. This action should help address this issue.

There is a strong research theme to many of the actions under this outcome. This will help SEPA to better understand the pressures being placed upon the air environment and therefore upon people's health. Of particular importance here are activities connected with better understanding links between air pollution, SEPA's licencing of activities and human health, which should lead to direct benefits in aligning regulatory activities to protect health.

There is a risk of potential conflict between actions under this outcome and the action to climate proof regulatory activities. Where SEPA's regulatory activities require the use of (often) energy intensive facilities to remove pollutants from emissions to air, this may conflict with objectives in the climate change outcome to "climate proof" regulatory activities reduce greenhouse gas emissions. This will need to be effectively managed to ensure both objectives can be satisfactorily met. For further details, see mitigation)

4.6.6 IMPROVED LAND QUALITY WITH HEALTHIER SOILS OUTCOME

THIS OUTCOME WILL LIKELY MAKE A POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES	+
---	----------

Scotland's soil resource is generally considered to be of reasonable quality, but it remains poorly understood in comparison with other environmental media.

As a result of the relatively poor understanding of Scotland's soil and due to emerging policy in this area, there is a strong research theme to many of the actions under this outcome, with significant state of the environment reporting and monitoring planned. These actions although not leading to environmental effects in themselves will help SEPA to better understand the pressures being placed upon the soil environment and therefore about how to consider soils when undertaking its regulatory and other activities.

Overall, most of the actions included in this outcome will make a positive contribution overall to most objectives and a significant contribution to the soil quality and human health objectives. In addition, some actions will make significant contributions to the water and derelict land objectives. Significant initiatives such as partnership working via SEARS and supporting the Scottish Government in transposing the Soils Directive and taking forward the Scottish Soils Strategy will make a significant contribution over the long term.

There are some duplicated tasks under this outcome which could be removed or amalgamated.

4.6.7 IMPROVED WATER ENVIRONMENTS OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES, BUT WITH UNCERTAINTIES

++

Water quality in Scotland is generally good and has been improving, largely due to a reduction in point source pollution. Challenges do, however remain, particularly with respect to poor urban water quality, polluted run off from roads and from rural uses of land, demand for water for drinking and for commercial uses and the effects of climate change on water quality and river flows. SEPA is responsible for protecting the water environment in a manner which promotes sustainable water use.

Accordingly, the actions under this outcome have a wide range of challenges to address and this Environmental Report has found that in most cases the actions will make significant contribution to the protection of water quality and, therefore, to the protection of human health. Of particular importance are those actions that focus on developing sewerage capacity, on enhancement of poor quality waterbodies and on ensuring compliance with water environment legislation and licences. The completion and implementation of the River Basin Management Plans will be a particularly important way of bringing many of these actions together in a co-ordinated way and should have a very significant role in contributing to a wide range of the SEA objectives, including biodiversity, landscape and flood risk as well as water quality and human health.

The Glasgow Strategic Drainage Plan will have significant effects in terms of improving water quality and enabling the release of new areas for development which will enhance ability to regenerate parts of the city. This plan is being subject to a SEA separately and the specific effects arising from this action are recorded there.

As with other actions under other outcomes, there is a strong research theme, with significant state of the environment reporting and monitoring planned. These actions although not leading to environmental effects in themselves will help SEPA to better understand the pressures being placed upon the water environment and to consider this when undertaking its regulatory and other activities.

CONSULTATION QUESTION 2 – Do you have any comments on the assessment findings ?

4.7 ALTERNATIVES

4.7.1 The draft Corporate Plan is to a very great extent influenced by activities imposed on SEPA by legislation or policy – for example, our regulatory activities are prescribed in over 100 pieces of legislation. In addition, the Corporate Plan actions are quite general and

alternatives to them may not be realistic. The Scottish Government SEA toolkit is clear that alternatives should not be generated for the sake of assessment and that only realistic alternatives should be considered. SEPA has concluded that the most transparent way of considering alternatives is to set out the effects of SEPA undertaking an action and the effects of it not.

Table 7 – Assessment of Alternatives

Outcome	Draft CP (see 4.6.1 to 4.6.7 above)	Effects of Alternative (ie SEPA not having draft Corp Plan)
Effective SEPA	++	Without a Corporate Plan, the focus on delivering an excellent value organisation characterised by high performance, customer focus, flexibility and effectiveness would be diluted, which would lead to a reduced ability to protect and enhance Scotland's environment. Some positive actions would still occur through regulatory activities and other initiatives, but this would be uncoordinated and unfocused on the need to promote efficiency. In particular, this outcome provides a framework for partnership working which will assist SEPA's efforts in protecting the environment. This would be lost without the corporate plan. The adoption of comprehensive target setting for each action in the corporate plan will also allow for effective long term monitoring, which would not occur without a co-ordinated approach. Similarly, the actions associated with data collation and dissemination across all of the outcomes would be less co-ordinated without the corporate plan.
Climate Change	++	The Scottish Government is proposing to set challenging new targets for reducing greenhouse gas emissions in Scotland. Having a new outcome in the draft Corporate Plan with specific reference to climate change reinforces SEPA's established Climate Change Plan and provides a framework for its delivery across all of SEPA's actions to contribute to the Scottish Government's target. This would be lost without the plan, which may compromise SEPA's efforts to do its bit towards the Government's target either through regulating greenhouse gas emissions and through reducing its own emissions. In particular, co-ordinated actions across SEPA's licencing activities for protection of air, water, land and human health would be lost. Although many of the climate actions would happen through the Climate Change Plan, the benefits co-ordination would be lost.
Health & Communities	++	A lack of action through the Corporate in this regard would likely have a significant detrimental effect, particularly upon those vulnerable to environmental pollution or flooding. This would therefore lead to detrimental effects on human health. While SEPA's regulatory and advisory roles would ensure that this is still considered as part of decision making on individual regulatory decisions, incorporation of such activities in the Corporate Plan provides a co-ordinated framework for action across all outcomes. Crucially, it also provides a framework for effective emergency response which is fundamental to the protection of health and communities. Flood warning and information about flood risk is a key SEPA role and which plays an important part in keeping Scotland's people and property safe. Without a corporate plan which provides links between flooding and other areas of work such as planning liaison or to water policy, effective co-ordination may be reduced.
Waste & Resources	++	The Scottish Government has set out the aim for Scotland to become a Zero Waste Society. To achieve this, SEPA must provide an effective framework for action in formulating waste policy, supporting the development of appropriate infrastructure and in regulating waste sites. This can only be secured through an effective suite of actions embodied within the corporate plan and co-ordinated across the Agency. This would be lost if there were no Corporate Plan or no inclusion of waste

		actions within the Corporate Plan. This would potentially reduce SEPA's ability to support the Scottish Government's waste ambitions.
Air	+	SEPA has statutory duties to protect the environment from emissions to air. This would obviously be the case even if there were no corporate plan, but protecting air quality has significant interaction with the health of people, with water (through acidification), with land and with climate change. Accordingly protecting air quality needs to be placed in the context of its contributions to other actions and the corporate plan provides this. Accordingly, without the corporate plan, actions to protect air would be less co-ordinated and potentially less effective.
Land & Soil	+	SEPA has statutory duties to protect the environment from emissions to land and to address contamination. These duties would still take place without a corporate plan, but protection of land has significant interaction with other environmental factors, including water (diffuse pollution), protection of health, biodiversity and management of resources. Accordingly, the corporate plan is an effective vehicle for co-ordination. Specifically under this outcome, SEPA's activities with respect to the Single Environmental Service (SEARS) may be compromised in absence of the corporate plan.
Water	++	SEPA's actions with respect to water are wide ranging, including statutory duties to protect the environment from emissions to water. Although the new River Basin Management Plans will provide a comprehensive and co-ordinated approach to water management across Scotland, there is still a need for water protection actions to be co-ordinated across other policy areas. This is particularly the case for issues such as flooding which has inter-relationships with water, climate change, human health and biodiversity. Accordingly, if water actions were not included in the corporate plan, synergies with other policy areas may be lost which would be detrimental to SEPA's ability to address these inter-relationships.

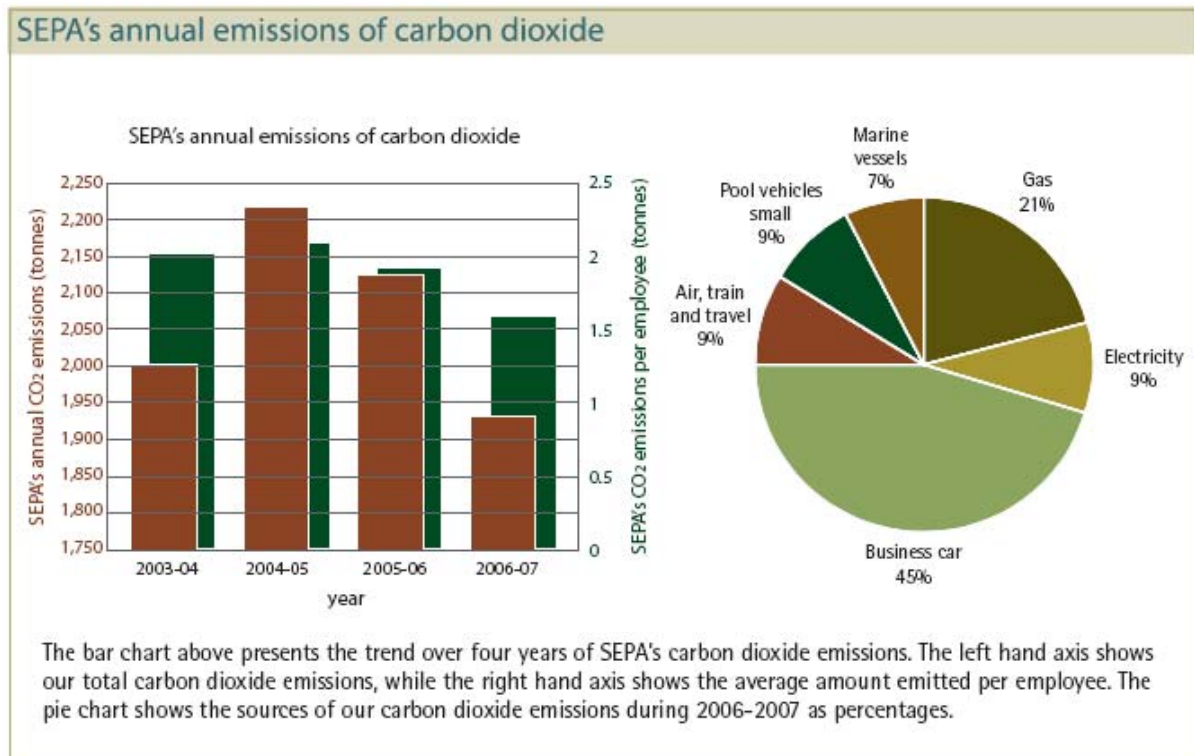
CONSULTATION QUESTION 3 – Do you have any comments on the alternatives considered and the findings of the assessment of alternatives ?

4.8 SUMMARY OF ENVIRONMENTAL EFFECTS OF SEPA'S DAY TO DAY BUSINESS

4.8.1 The above effects are those that are considered to be likely from delivery of the actions cited under each of the draft Corporate Plan's outcomes. In delivering these actions, and in the day to day operation of SEPA as a public agency of around 1300 staff, SEPA has its own environmental impacts. While the draft Corporate Plan does not regulate SEPA's own internal environmental impacts, it does set the framework for *Greening SEPA*, our internal environmental policy (IEP). The most recent annual report on the IEP targets is available at: www.sepa.org.uk/pdf/publications/ann_env_report/greeningsepa0607.pdf .SEPA previously achieved certification to the internationally recognised Environmental Management System Standard ISO 14001 in June 2005. The scope of certification is for all sites and all activities.

Energy

4.8.2 In 2006/7, SEPA's total reported equivalent CO2 emissions were 1,933 tonnes. This is from buildings, travel and from SEPA's marine survey vessels. This represents a 9% reduction compared to the previous year. SEPA has set a long term strategic target to reduce CO2 emissions by 20% of 1998/9 levels by 2010. By April 2007, a 25% reduction over this 1998/9 baseline had been achieved. Total CO₂ emissions for the past four years are set out in figure 2 below:

Figure 2 – SEPA's CO₂ emissions

- 4.8.3 *SEPA Estate* – SEPA has 28 buildings with staff at 22 sites, including 4 laboratories, each of which requires energy for heat and light and power for equipment. In addition, SEPA has other estate (e.g. river gauging stations), some of which require electricity. All of SEPA's offices use electricity purchased through a renewable tariff contract^[6].
- 4.8.5 *SEPA Travel* – In order to do its business effectively, SEPA staff need to travel. In many cases, this is by private car (e.g. for sampling or for emergency response). Business travel by car accounts for 45% of SEPA's reported CO₂ emissions. Other travel – air, rail and ferry – accounts for 9% of total CO₂ emissions. A new target to reduce air travel by 50% was set for 2007/8 to build upon significant reductions in this source of emissions made over recent years.
- 4.8.6 Initiatives to reduce energy use include installation of solar panels for remote sites such as gauging stations; the introduction of video conferencing facilities to all offices; replacement of electronic equipment with more efficient devices; the installation of a more efficient auxiliary generator on one of the marine survey vessels and the introduction of more efficient lighting at SEPA offices.

Waste and Resources

- 4.8.7 In the course of undertaking its business, SEPA uses other resources and produces waste, although these amounts are comparatively small. For example, in 2006/7 SEPA used just under 3400 sheets of paper per FTE. Waste is recycled in a number of ways, including a segregated waste management regime in all major offices that recycles: paper and card, glass, plastics, compostable material, fluorescent tubes, IT equipment, printer and copier toner cartridges and steel and aluminium cans.

^[6] Renewable tariff energy is derived from renewable energy sources such as wind, hydro and biomass.

Procurement

- 4.8.8 Some of SEPA's environmental effects are derived from the products and services that it purchases to undertake its business. A green purchasing strategy has been established. Positive steps include the purchase of 100% post consumer recycled and total chlorine free paper, new building leases need to reach a minimum "good" rating under the BREEAM^[7] classification and new white goods for offices must obtain the highest "A" energy efficiency rating.

^[7] *Building Research Establishment Environmental Assessment Method*

CHAPTER 5

SUMMARY OF MITIGATION MEASURES REQUIRED

This section of the Environmental Report is designed to meet the requirements of paragraph 7 of Schedule 3 of the Environmental Assessment (Scotland) Act 2005. Namely, a summary of proposed mitigation measures to prevent, reduce or as far as possible offset any adverse environmental effects. All mitigation actions identified have been recorded in the matrices set out in Part 2 of Chapter 4.

- 5.1 The following mitigation actions are identified in Table 8 below. These are derived from the assessment matrices.

Table 8 – Summary of Mitigation Actions

Mitigation Identified	Why	By Whom and When
Useful to make more specific reference to SEPA's own environmental performance. Should consider identifying internal environmental policy actions across outcomes where appropriate.	To recognise the importance of SEPA as an exemplar in minimising environmental impacts of its activities.	As Corporate Plan is developed and finalised.
Potential for climate proofing of SEPA's regulatory activities to lead to conflict between environmental protection and climate change objectives. These should be reconciled by focusing on those regulatory activities where both effective environmental protection and climate change objectives can be achieved.	To ensure that both environmental protection and climate change objectives are aligned across SEPA's regulatory activities.	By SEPA when reviewing climate implications of regulatory activities and through implementation of Climate Change Plan, which details this action.
Consider keeping the 95% target for incident response under review with the aspiration that it is improved in future Corporate Plans.	Recognising importance of role in responding to environmental incidents in protecting the environment and the public	By SEPA as part on ongoing monitoring and review of Corporate Plan
Land use Development Plans should identify specific environmental effects arising from developments to which SEPA Corporate Plan may contribute – eg support for network of new waste management facility.	To ensure that local effects arising from such developments are fully assessed at the appropriate time (eg by SEA of Development Plans and/or EIA of projects)	By Local Authorities as Development Plans are prepared (and subject to SEA) and as developments are consented. By SEPA when developments requiring environmental licences are consented.
Revise some of the wording of the actions to more clearly identify their intentions (see specific recommendations in the matrices)	To improve clarity of document	As Corporate Plan is developed and finalised
Remove duplication of actions across	To eliminate duplication and	As Corporate Plan is

many of the outcomes (see specific recommendations in the matrices)	simplify document	developed and finalised
Need to vigilant regarding potential for some of the actions to conflict with objective of reducing greenhouse gas emissions – eg where new abatement requirements are energy intensive.	To ensure that both environmental protection and climate change objectives are aligned across SEPA's regulatory activities.	By SEPA when reviewing climate implications of regulatory activities and through implementation of Climate Change Plan, which details this action.

CONSULTATION QUESTION 4 – Do you have any comments on the mitigation measures identified ?

CONSULTATION QUESTION 5 – Are there any other mitigation measures that you would like to see added ?

CHAPTER 6

MONITORING

- 6.1 SEPA will monitor the effectiveness of the draft Corporate Plan and its effects on the environment through monitoring progress towards targets for each outcome. These monitoring indicators and targets will be developed as the draft Corporate Plan is finalised. Given the draft Corporate Plan is focused upon protecting and enhancing the environment, it is SEPA's view that this monitoring regime can be used to monitor not just the performance of the plan, but also its effects on the environment. SEPA would, however, welcome any suggestions for additional monitoring of the environmental effects arising from the Corporate Plan.
- 6.2 In addition to the targets that will be set, and thereafter monitored for each action in the draft Corporate Plan, SEPA has set a suite of environmental performance targets for 2007-8 and longer term targets are currently being progressed and will be reported in the final Corporate Plan and in the SEA Statement. These targets will be reported upon annually through the publication *Greening SEPA*. They will also be updated through time.

CO2 Reduction

1. Reduce CO2 emissions by 20% of 1998/99 total by 2010;

Energy

2. In 2007/8, reduce use of electricity in buildings by 2% per FTE below 2006/7 levels;
3. In 2007/8, reduce use of gas in buildings by 2% per FTE below 2006/7 levels;
4. All new SEPA building will achieve a BREEAM "excellent" rating;

Waste (including water)

5. SEPA will target and reduce solid and liquid waste by actively using the hierarchy of prevention, reduction, reuse and recycling before disposal for all activities at all sites;
6. In 2007/8, reduce paper consumption by 5% per FTE below 2006/7 levels;
7. Accurately monitor water consumption at four laboratories and target reductions;

Transport and Travel

8. In 2007/8, achieve a 50% reduction in UK mainland flights compared to 2006/7;
9. In 2007/8, reduce combined CO2 emissions per FTE from all transport modes by 2% below 2006/7 levels;

Procurement

10. Influence all contracts with environmental criteria and record and report environmental gains;

Biodiversity

11. Each office with grounds to implement at least one identified opportunity for habitat enhancement in 2007/8

CONSULTATION QUESTION 6 – Are you content with the proposed approach to monitoring ?

CONSULTATION QUESTION 7 – Are there other indicators that you consider should be included to assist with monitoring the environmental effects of the Corporate Plan?

CHAPTER 7

NEXT STEPS

- 7.1 This Environmental Report will be placed on consultation, with the draft Corporate Plan for a period of six weeks closing on Friday 6th June 2008
- 7.2 Comments on this Environmental Report, or on the Corporate Plan should be sent, before Friday 6th June 2008 to:

Corporate Plan Consultation
 SEPA Corporate Office
 Erskine Court
 The Castle Business Park
 Stirling. FK9 4TR

Or by e-mail to: corporate.plan@sepa.org.uk

- 7.3 SEPA must take account of the Environmental Report and of any views expressed upon it during the consultation period prior to adopting the Corporate Plan. How this has occurred will be set out in an SEA Statement which will be published when the Corporate Plan is adopted.
- 7.4 The next steps in the SEA process following consultation on the Environmental Report are proposed as follows:

Stage	Proposed Time (Indicative)
Consultation Period on Environmental Report	6 weeks
Consultation Closes	Friday 6 th June 2008
SEPA must take account of Environmental Report and views expressed upon it when finalising Corporate Plan	1 week
SEPA publishes Corporate Plan	June 2008
SEPA publishes SEA Statement	July 2008
Monitoring of environmental effects	After plan implementation

Appendix A - Other Relevant Plans Programmes and Strategies

KEY	
	International PPS
	United Kingdom PPS
	Scotland PPS
	Regional/Local PPS

Name of PPS	PPS Function
GENERAL	
Scottish Government Strategic Objectives (2007)	<p>Sets out the Governments 5 key strategic objectives:</p> <p>12. Wealthier and Fairer – Enable businesses and people to increase their wealth and more people to share fairly in that wealth;</p> <p>13. Healthier – Help people sustain and improve their health especially in disadvantaged communities, ensuring better, local and faster access to health care;</p> <p>14. Safer and Stronger – Help local communities to flourish, becoming stronger, safer places to live, offering improved opportunities and a better quality of life;</p> <p>15. Smarter – Expand opportunities for Scots to succeed from nurture through to life long learning ensuring higher and more widely shared achievements; and</p> <p>16. Greener – Improve Scotland’s natural and built environment and the sustainable use and enjoyment of it. Specifically:</p> <ul style="list-style-type: none"> • Climate change • Sustainable places • People and nature • Consumption and production • Countryside culture
BIODIVERSITY, FLORA AND FAUNA	
Convention on Wetlands of International Importance 1971 (amended 1982 and 1987)	<p>Otherwise known as the Ramsar Convention, this emphasises the special value of wetland, particularly as a key habitat for waterfowl. The Convention resulted in designation of sites for management, conservation at international level.</p> <p>www.ramsar.org</p>
UN Convention on Biological Diversity (1992) (CBD)	<p>Article 6 requires that all parties to the Convention develop national biodiversity strategies plans or programmes, and that they seek to integrate the provisions of these across other policy sectors. Article 7 requires the identification of key resources, and their protection. Monitoring of potentially damaging process and activities should also be undertaken. www.biodiv.org</p>
Council Directive 92/43/EEC the conservation of natural habitats and of wild fauna and flora, (Habitats Directive)	<p>Established a commitment to designating networks of sites of ecological importance across Europe. These are known as Natura 2000 sites and include Special Protection Areas (SPAs designated under the Birds Directive – see below) and Special Areas of Conservation (SACs).</p> <p>www.ec.europa.eu/environment/nature/natureconservation/eu_nature_legislation/habitats_directive/index_eu.htm</p>
Council Directive 79/409/EEC on the conservation of wild birds. (Birds Directive)	<p>Protects all wild birds (together with their nests and eggs) and their associated habitats. Commitment to designation of SPAs (see previous).</p> <p>www.europa.eu.int/env-lex/en/consleg/pdf/1979/en_1979L0409_do_001.pdf</p>
EU Biodiversity Strategy	<p>Aims to “anticipate, prevent and attack” any reduction or loss of species and habitats across Europe. Supports implementation of the habitats and Birds Directives, supports the establishment of networks of protected sites, aims to achieve conservation by making plans for priority resources. Also notes the importance of biodiversity outwith protected areas.</p>
Nature Conservation (Scotland) Act 2004	<p>Introduced a ‘duty to further the conservation of biodiversity’ for all public bodies, and sets out more specific provisions within this (e.g. for SSSIs). Also states a requirement for the preparation of a Scottish Biodiversity Strategy, to which all public bodies should pay regard.</p> <p>www.legislation.gov.uk/legislation/scotland/acts2004/40006--a.htm#end</p>

Name of PPS	PPS Function
Scotland's Biodiversity – It's In Your Hands. A strategy for the conservation and enhancement of biodiversity in Scotland (2004)	Sets out Scottish aims relating to biodiversity. Seeks to go beyond a previous emphasis on protecting individual sites to achieve conservation at a broader scale. Aims to halt loss and reverse decline of key species, to raise awareness of biodiversity value at a landscape or ecosystem scale, and to promote knowledge, understanding and involvement amongst people. www.scotland.gov.uk/Publications/2004/05/19366/37239
Scotland's Biodiversity - It's In Your Hands. Strategy Implementation Plans. (2005)	This document implements a series of strategies to implement the objectives of the 2004 strategy for the period 2005 – 2007. The plans were developed with reference to three broad sectors: Urban; Rural and Marine, and cover two crosscutting issues: interpretation, communication and education (ICE); and local delivery. www.biodiversityscotland.org.uk
NPPG14 – Natural Heritage	Provides the key statement on planning in relation to natural heritage. Summarises obligations in relation to natural heritage and provides specific advice on how these can be taken forward in development plans. Includes an emphasis on safeguarding and enhancing natural heritage outwith designated sites.
SNH Natural Heritage Futures Series	SNH has prepared a suite of publications to guide the future management of the natural heritage towards 2025, within the wider context of sustainable development. As far as possible, these documents aim to identify common goals and encourage an integrated approach in which all sectors work together. SNH will use this initiative, called Natural Heritage Futures, to inform its own priorities and as a basis for further work with partner organisations. www.snh.org.uk/futures/Data/index.htm
POPULATION AND HUMAN HEALTH	
UK Fuel Poverty Strategy (Fourth Annual Progress Report, 2006)	Covers the Scottish commitment to eliminating fuel poverty in Scotland by November 2016, as far as is reasonably practicable. The Scottish Executive was also aiming to achieve a 30% reduction in fuel poverty in Scotland by 2006. www.dti.gov.uk/energy/fuel-poverty/strategy/index.html
Firm Foundations: The Future of Housing in Scotland: A Discussion Paper	Sets out proposals for new housing policies that aim to substantially increase the level of new housing development to 35000 units per annum and to provide a much more energy efficient and sustainable housing stock
Land Reform (Scotland) Act 2003	Set out a new right of responsible access in Scotland, and made provisions for community right to buy. Core paths to be identified in each local authority area, promoting more widespread and functional walking, cycling and riding and thereby supporting improved levels of physical activity. www.opsi.gov.uk/legislation/scotland/acts2003/20030002.htm
Closing the Opportunity Gap (2004) Scottish Executive	This is the Scottish Executive's overall approach to reducing social disadvantage in Scotland. It aims to prevent people from falling into poverty, to provide routes out of poverty and to sustain people in lifestyles that are free from poverty. The six objectives include increasing employment opportunities for disadvantaged groups, building confidence and skills of young people, reducing financial exclusion, neighbourhood regeneration, health improvement and provision of improved access to services. www.scotland.gov.uk/topics/people/social-inclusion/17415/opportunity
Homes for Scotland's People: A Scottish Housing Policy Statement, 2005. Scottish Executive	Sets out the Scottish Executive's commitments to housing. Particularly aims to provide more affordable housing, through diversification of ownership structures and ensuring planning plays a role in releasing land for housing in development plans. Also states a need to invest in infrastructure to meet the capacity requirements of new housing, and to improve the quality of the social rented housing sector. Aims to address homelessness and eradicate fuel poverty. www.scotland.gov.uk/Publications/2005/03/20793/53993
People and Place: Regeneration Policy Statement	Provides the policy commitments relating to regeneration, moving the agenda forward in light of recent progress. States continuing commitments to the Clyde Corridor as a national priority and also emphasises the regional impacts of regeneration in Ayrshire and Inverclyde. Aims to improve governance in these areas and to particularly target transport connections to aid the regeneration process. www.scotland.gov.uk/Publications/2006/06/01145839/0

Name of PPS	PPS Function
SPP3 Planning for Housing (2003) (currently being revised)	Aims to ensure that planning promotes high quality residential environments, and delivers an effective and sufficient supply of housing land in appropriate locations. Notes that sustainable extensions to settlements should be carefully planned and states that new housing should be guided to locations that are accessible by foot, cycle and public transport. States that a plan led approach should be taken to delivering housing land, with development plans setting out how demand for housing will be met. Plans should be regularly updated and alternative provisions should be made where there are delays in plan making that reduce the capacity to keep up with housing demand. www.scotland.gov.uk/Publications/2003/02/16499/18894
Improving Health in Scotland – The Challenge. (2003) Scottish Executive	Overarching strategy for health that covers physical, social and mental health. Raises awareness of health as a cross sectoral issue, and notes the need to address key risk factors. Also raises issue of health inequalities in Scotland, and states that Community Planning Partnerships are an important mechanism for overcoming this at the local level, including by helping to improve physical and social environments. www.scotland.gov.uk/Publications/2003/03/16747/19929
Physical Activity Task Force (2003) Let's Make Scotland More Active	Aims to ensure that the Scottish population becomes more active, setting the target of all adults accumulating at least 30 minutes of moderate activity on most days of the week, and an hour for children. By achieving improved rates of activity, levels of chronic heart disease, high blood pressure, diabetes, obesity, colon cancer could be substantially reduced. www.scotland.gov.uk/Publications/2003/02/16324/17895
SPP11 Physical Activity and Open Space (Consultative Draft) 2006 – Due to be finalised 2007.	Sets out a framework for planning to support both passive and active recreation. Notes the importance of good quality green space as part of civic realm, and states that councils should prepare open space strategies, based on audits of their areas. www.scotland.gov.uk/Publications/2006/08/10134711/0
PAN 65 Planning and Open Space (2003)	Advice on the role of the planning system in protecting and enhancing existing open spaces and providing high quality new spaces. www.scotland.gov.uk/Publications/2003/01/16188/16553
Eating for Health: meeting the challenge. (2004) Scottish Executive	This document provides the strategic framework for implementing the Executive's commitment to healthy diets and ensuring that all customers have access to affordable, nutritious food. www.scotland.gov.uk/library/documents/diet-00.htm
SOIL	
EU Thematic Strategy for Soil Protection (2005)	Notes that soil has important functions but that degradation of its quality is accelerating, partly due to wind and water erosion and also as a result of depletion of organic matter content. It sets out commitments to improving quality as a result, including development of a New Directive http://ec.europa.eu/environment/soil/index.htm
Farm Soils Plan, 2005 Scottish Executive et al	This document was produced to provide straightforward guidance for arable farmers on ways to minimise pollution and benefit businesses through good soil management. The report explains the role good soil management plays in the achievement of environmental objectives for water, air and climate change as well as detailing why soils themselves require protection. www.scotland.gov.uk/Publications/2005/12/01130314/03142
The Sludge (Use in Agriculture) Regulations 1989 (as amended)	These Regulations implement Council Directive No. 86/278/EEC (OJ No. L181/6) on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture. The regulations require that soil and sludge is tested before being applied to land and require that this information, as well as information relating to the amounts of sludge disposed and the disposal sites used, is held. The legislation provides limitations on the crops that can be grown on this land and their use. www.opsi.gov.uk/si/si1989/Uksi_19891263_en_1.htm
A forward Strategy for Scottish Agriculture: Next Steps (2006) Scottish Executive	This document builds on 'A Forward Strategy for Scottish Agriculture' published in 2001. While this original strategy remains valid, it has been updated to reflect progress made and in particular focuses on the importance of sustainable development and climate change. The report includes a series of indicators which could be used to monitor success of the strategy and a monitoring strategy has been prepared. There is potential overlap between some aspects of this strategy and the SRDP and this should be considered in more detail. www.scotland.gov.uk/Publications/2006/03/01142456/0

Name of PPS	PPS Function
The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) (Scotland) Regulations 2003	These Regulations re-enact, with amendments, the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 2001 ("the 2001 Regulations"), which require persons with custody or control of a crop being made into silage, of livestock slurry or of certain fuel oil to carry out works and take precautions and other steps for preventing pollution of inland or coastal waters. www.opsi.gov.uk/legislation/scotland/ssi2003/20030531.htm
The Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2003	These Regulations require the occupier of a farm which is in a nitrate vulnerable zone to ensure that the Action Programme measures set out in the Schedule to the Regulations are implemented in relation to the part of the farm which is in the nitrate vulnerable zone. The regulations provide for monitoring the Action Programme and set out the enforcement and appeal procedures. www.opsi.gov.uk/legislation/scotland/ssi2003/20030051.htm
The Protection of Water against Agricultural Nitrate Pollution (Scotland) Amendment Regulations 2005	These Regulations amend the Protection of Water Against Agricultural Nitrate Pollution (Scotland) Regulations 1996 ("the 1996 Regulations"). The 1996 Regulations gave effect to Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources (O.J. No. L 375, 31.12.91, p.1). The schedule to these Regulations set out (1) the criteria for identifying Nitrate Vulnerable Zones; (2) the method for monitoring waters; and (3) the provisions to be included in the Action Programme for Nitrate Vulnerable Zones. www.legislation.gov.uk/legislation/scotland/ssi2005/20050593.htm
Rural Development Programme for Scotland 2007-2013. The Strategic Plan.	Sets out priorities for allocating EU funding rural development over the coming years. Has three key themes of underpinning performance and quality in the primary sectors, enhancing rural landscapes and natural heritage and promoting a more diverse rural economy and thriving rural economies. Rural Development Plan also prioritises the amenity of villages, affordable housing and distribution and storage networks to allow access to local markets. www.scotland.gov.uk/Publications/2006/02/08132503/0
Rural Scotland: A New Approach. (2000) Scottish Executive	Provides strategic confirmation of key issues such as establishing National Parks, Land Reform Act (ownership and access), water quality, planning and farming and notes their contribution to environmental quality. The main environmental objectives are to maintaining the quality and diversity of Scotland's natural and cultural heritage. The Strategy proposes that local and regional influences are maintained and promoted as part o this. It also notes the importance of forestry in Scotland and states a commitment to restoration and diversity objectives, including the creation of 15000 hectares of native woodland by 2003. www.scotland.gov.uk/library2/doc15/rsna-00.asp
Rural Scotland: Taking Stock. (2003) Scottish Executive	Sets out the progress which has been made in achieving the Scottish Executive's vision for rural Scotland, under the headings of: <ul style="list-style-type: none"> • supporting rural economic development • breaking down barriers • improving access to services • sustaining and making the most of our natural and cultural heritage. It notes the Treefest initiative and events which helped raise awareness of the value of trees and woods in Scotland. www.scotland.gov.uk/Publications/2003/03/16701/19555
Planning Advice Note 33 – Contaminated Land	Sets out the role of the planning system in reclaiming and developing contaminated sites as a means of improving general amenity, enabling regeneration and improving environmental quality.
WATER	
Water Framework Directive 2000/60/EC	This provides an overarching strategy, including a requirement for EU Member States to ensure that they achieve 'good ecological status' by 2015. River Basin Management Plans were defined as the key means of achieving this. www.defra.gov.uk/environment/water/wfd/index.htm
Bathing Waters Directive 76/160/EEC	Main objective is to protect public health and the environment from faecal pollution at bathing waters. It requires Member States to identify popular bathing areas and monitor their water quality throughout the bathing season (May – September). Sets a number of microbiological and physiochemical standards that bathing waters must either comply with (mandatory standards) or attempt to meet (Guideline standards). www.defra.gov.uk/environment/water/quality/bathing/default.htm

Name of PPS	PPS Function
Shellfish Waters Directive 79/923/EEC	Aims to protect or improve shellfish waters in order to support shellfish life and growth, therefore contributing to the high quality of shellfish products directly edible by man. Sets physical, chemical and microbiological water quality requirements that designated shellfish waters must either comply with ('mandatory' standards) or endeavor to meet ('guideline' standards). www.defra.gov.uk/environment/water/quality/shellfish/index.htm
EU Directive on the Assessment and Management of Flood Risk	Received its second reading in the European Parliament in April 2007. Proposes to lay down a framework for the reduction of risk to human health, the environment and economic activity associated with floods in the Community. www.defra.gov.uk/enviro/fcd/eufldir/default.htm
Water Environment and Water Services (Scotland) Act 2003 (WEWS Act)	Transposes the Directive into the Scottish context. Aims to protect the water environment by ensuring a reliable and high quality supply of water, reducing groundwater pollution significantly, and protecting marine and other waters. More specifically, sets out arrangements for River Basin Management Planning in Scotland and Controlled Activities Regulations. www.opsi.gov.uk/legislation/scotland/acts2003/20030003.htm
A Plan of Action - River Basin Planning in the Scotland River Basin District, Consultation Document SEPA (2006) A Plan of Action - Solway Tweed River Basin Planning, Consultation Document SEPA (2006)	Currently open for consultation, these reports set out the proposed arrangements for River Basin Management Planning in the each of Scotland's two RBD. They state that reports setting out Significant Water Management Issues (SWMI) will be published in July 2007, with draft RBMPs anticipated in 2008. www.sepa.org.uk/pdf/consultation/current/rbmp_poa/pamphlet_scotland.pdf www.sepa.org.uk/pdf/consultation/current/rbmp_poa/poa_solway_tweed.pdf
The Water Environment (Controlled Activities) (Scotland) Regulations 2005	Sets out the process by which activities that have the potential to affect Scotland's water environment are regulated. Authorisation under the CAR is required for discharging to waters, disposal of pollutants to land, abstractions, impoundments and engineering works affecting water bodies. www.legislation.gov.uk/legislation/scotland/ssi2005/20050348.htm
Fisheries Management Plans	Produced by Fisheries Groups for specific areas as part of the Strategic Framework for Inshore Fisheries. Plans to include the setting out of the local objectives for the inshore fisheries, outlining the actions which are required to implement local objectives and identifying the tools required to implement objectives. www.sfcc.co.uk/newsart.asp?IDD=31
Shoreline Management Plans	Non-statutory plans for areas where coastal erosion is identified as a problem. Prepared by planning authorities in association with adjoining authorities and other sources. These plans consider the implications of alternative means of dealing with coastal erosion and outline a strategy for coastal defence. They should also identify the implications for development plan policies and development control decisions, highlighting opportunities for maintaining and enhancing the natural environment. Arrangements for monitoring the natural coastal processes are also set out, along with the effect of the coastal defence strategy. 8 exist in Scotland. www.defra.gov.uk/enviro/fcd/policy/smp.htm
Scottish Executive (2006) Better bathing waters: meeting the challenges of the revised Bathing Water Directive in Scotland (March 2006)	The Strategy is the Executive's national policy statement following the revision of the Bathing Water Directive. Actions included in the Strategy are: 1. Continued work on improving sewerage infrastructure 2. Industrial discharges to be regulated under CAR 3. Tackle diffuse pollution through General Binding Rules for agriculture, possible LMC measures or further measures under CAR 4. Increase public participation, including encouraging local community groups' involvement 5. Increase provision of information on water quality, including extended signage. www.scotland.gov.uk/Publications/2006/03/23151924/0
Scottish Executive Environment Group (2002) Scotland's Bathing Waters A Strategy for Improvement	Aims to reduce water pollution in order to specifically improve bathing water catchments. Measures include changes to agricultural practices to address diffuse pollution, ensuring compliance with controls of industrial discharges, and making more use of Sustainable Urban drainage Systems (SUDS). www.scotland.gov.uk/Resource/Doc/46905/0031395.pdf

Name of PPS	PPS Function
SNH Natural Heritage Future – Freshwaters (2005)	This document is one of a series which aims to guide the future management of the natural heritage towards 2025, within the wide context of sustainable development. The document details national objectives for the natural heritage of freshwaters and presents a list of priorities which will inform SNH's input to plans and strategies for various sectors and geographical areas including the SRDP.
Scottish Water - Quality and Standards 3	Defines investment priorities for Scotland's Water industry. www.scotland.gov.uk/Topics/Environment/Water/17583/16183
Scottish Water - Water Resource Plan	Scottish Water is committed to producing a water resource plan with SEPA liaison and guidance to ensure protection of water resources. Includes supply-demand appraisal. www.scottishwater.co.uk
Scottish Water Draft National Sludge Strategy	Sets out proposals to significantly reduce the proportion of sewage sludge that is recycled untreated to land and to increase levels of recycling for agricultural use and energy from waste / incineration.
Scottish Planning Policy 7 – Planning and Flooding	This sets out the Government's policy on taking flood risk into account when preparing Development Plans and determining applications for planning permission. This is an important policy for SEPA as the Agency is a statutory consultee on planning applications where flood risk may be an issue and SEPA provides advice to planning authorities and developers about flood risk. www.scotland.gov.uk/consultations/planning/spp7-00.asp
AIR QUALITY	
1996/62/EC Air Quality Framework Directive	Overarching Directive on air quality that seeks to provide a co-ordinated and consistent approach to air quality in order to avoid negative impacts on health and the environment. Aims to achieve improvements in air quality where it is poor and sets out a framework for monitoring. www.europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31996L0062:EN:HTML
1999/30/EC Directive relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air	Provides more specific guidance on the need to improve air quality and reduce emissions of specific types of gas. http://europa.eu.int/eur-lex/pri/en/oj/dat/1999/l_163/l_16319990629en00410060.pdf
EU Thematic Strategy on Air Pollution (2005)	Sets out interim objectives for improving air quality. Notes that existing legal instruments will be merged to form single Directive on Air Quality. States that air pollution can have consequences for health and ecosystems, with the latter being caused primarily by processes of acidification and eutrophication. Sets targets for reducing specific pollutants. http://ec.europa.eu/environment/air/cafe/index.htm
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. Working Together for Clean Air (2000)	Provides more specific UK targets for reducing air pollution and sets out local authority responsibilities for achieving most of these. States that land use planning and transport planning have a key role to play in contributing to these targets. www.scotland.gov.uk/Publications/2003/02/16284/17626
The Pollution Prevention and Control (Scotland) Regulations 2000	These Regulations are made under section 2 of the Pollution Prevention and Control Act 1999. They set out, for Scotland, a pollution control regime for the purpose of implementing the Integrated Pollution Prevention and Control Directive (Council Directive 96/61/EC) and for regulating other environmentally polluting activities not covered by the Directive. Intensive agriculture is covered under this legislation and issues relating to emissions to air and water and the disposal of waste are considered in this legislation. www.legislation.gov.uk/legislation/scotland/ssi2000/20000323.htm
CLIMATIC FACTORS	
Kyoto Protocol (1997)	Sets out international agreement on targets and mechanisms for addressing climate change. Includes commitments to improved energy efficiency, reductions of greenhouse gases, carbon sequestration, sustainable agriculture, renewable energy, appropriate market mechanisms, sustainable transport and waste management. http://unfccc.int/kyoto_protocol/items/2830.php

Name of PPS	PPS Function
The Second European Climate Change Programme (currently in preparation)	The first programme focused on achieving climate change targets by reducing emissions and increasing carbon sequestration. The review notes that the work identified in the first programme is being undertaken according to plan, but that further measures will be required in order to meet the EU's commitments under the Kyoto agreement. Some aspects of the first programme have been more successful than others, with energy generation targets having been met, but transport objectives proving more difficult to achieve. Current Commission policy is therefore focusing on achieving modal shift (with targets to reduce CO ₂ emissions of cars having already been met). http://ec.europa.eu/environment/climat/eccpii.htm
Tomorrow's Climate, Today's Challenge: UK Climate Change Programme (2006)	Sets out policies and priorities for action in the UK and internationally. Sets out measures to reduce emissions target every sector of the economy and include a stricter emissions cap for industry, measures to encourage the uptake of biofuels in petrol, tighter building regulations, measures to improve household energy efficiency, a renewed emphasis on encouraging and enabling the general public, businesses and public authorities to help achieve the Government's targets and increased levels of microgeneration. www.defra.gov.uk/environment/climatechange/uk/ukccp/index.htm
Draft Climate Change Bill (2007)	The UK Government's blueprint for tackling climate change was published on the 13 March 2007. The draft Climate Change Bill, the first of its kind in any country, and accompanying strategy, set out a framework for moving the UK to a low-carbon economy. It demonstrates the UK's leadership as progress continues towards establishing a post-Kyoto global emissions agreement. www.defra.gov.uk/corporate/consult/climatechange-bill/consultation.pdf
Consultation on Proposals for a Scottish Climate Change Bill	The Scottish Government's proposals for a Climate Change Bill were published in January 2008. This aims to provide a statutory long term framework for reducing Scotland's greenhouse emissions by 80% by 2050. www.scotland.gov.uk/Publications/2008/01/28100005/0
Changing Our Ways – Scotland's Climate Change Programme (2006)	Provides national interpretation of broader climate change objectives. States that Scotland is seeking to exceed its share of carbon emission reductions by 1 million tonnes, going beyond UK targets of a 12.5% reduction in greenhouse gases between 2008 and 2012, a reduction of CO ₂ by 20% by 2010 and 60% by 2050. www.scotland.gov.uk/Publications/2006/03/30091039/0
ENERGY	
EU Biofuels Directive (2003/30/EC)	Promotes the use of biofuels or other renewable fuels for transport as one of the tools by which the European Community can reduce its dependence on imported energy and influence the fuel market for transport, and hence the security of energy supply in the medium and long term. http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_123/l_12320030517en00420046.pdf
EU Renewables Directive (2001/77/EC)	Member states are required to adopt national targets for renewables that are consistent with reaching the Commission's target of 22 per cent of electricity from renewables by 2010. The indicative target that the proposal sets for the UK is 10 per cent of electricity by that date. The directive also requires that Member States ensure that a guarantee of origin is issued on request in respect of electricity generated from eligible renewable energy sources, as defined by the directive. In Great Britain this part of the directive has been implemented through the Electricity Regulations 2003 (Statutory Instrument 2003 No. 2562). These guarantees of origin are called REGOs and a guide to the Statutory Instrument has been produced. http://www.dti.gov.uk/energy/sources/renewables/policy/european/directive/page23710.html
UK Energy White Paper. Our energy future – creating a low carbon economy (2003)	Sets out the challenges for the energy sector in the UK, and defines how it should change over the coming years. Key priorities include reducing CO ₂ emissions from the sector by 60% by 2050 (and substantially by 2020), providing more reliable energy supplies, updating the energy supply network (including the grid) and creating more diversity, including by promoting more renewable energy generation and local level supplies. www.dti.gov.uk/files/file10719.pdf

Name of PPS	PPS Function
Securing a Renewable Future: Scotland's Renewable Energy (2003)	Set the ambitious target of generating 40% of Scotland's energy from renewable sources by 2020. Notes that diversification of energy sources will be key to further diversification. Also aims to support continued partnership working between public and private sectors and to stimulate small. Scale community and householder renewables schemes. www.scotland.gov.uk/Publications/2003/03/16850/20554
Scotland's Renewable Energy Potential: realising the 2020 target (2005)	Considers the role of different technologies and infrastructure capacity to meet the target of generating 40% of energy in Scotland from renewable sources by 2020. Notes that this will require a further installed capacity of around 3.4GW, to meet the estimated need for a total of 6GW to meet this target. States that the future mix remains uncertain, partly due to anticipated closure of some existing plant. It would be inappropriate to apportion growth to different technologies, but suggests that further investment and development of marine and biomass would be beneficial. www.scotland.gov.uk/Resource/Doc/54357/0013233.pdf
MATERIAL ASSETS	
Taking sustainable use of resources forward: A Thematic Strategy on the prevention and recycling of waste (EU, 2005)	One of several sectorally focused strategies produced under the Environmental Action Programme. http://ec.europa.eu/environment/waste/pdf/sec_2005_1682_en.pdf
EU Council Directive 99/31/EC 'Landfill Directive'	Defines three categories of waste (landfills for hazardous, non-hazardous and inert waste) and provides a standard waste acceptance procedure to accompany requirements for licensing of landfill operators. States the need for national strategies that set out how biodegradable waste being disposed of in landfill sites can be reduced in favour of recycling, composting biogas or materials / energy recovery. Sets targets for reducing landfilled municipal waste: 35% 1995 levels by 2016. http://europa.eu.int/eur-lex/pri/en/oj/dat/1999/l_182/l_18219990716en00010019.pdf
National Waste Plan 2003	Brings together Area Waste Plans and sets out an action plan for radical change to waste management in Scotland. Key challenges include reducing landfilled waste in line with EU targets (see above), and increasing recycling, composting and energy from waste. Confirms target of recycling or composting 25% of municipal waste by 2006 and 55% by 2020. Underlying aims include reducing the environmental impacts of waste management and addressing current environmental injustices. www.sepa.org.uk/pdf/nws/guidance/national_plan_2003.pdf
Area Waste Plans	Set out aims and targets for each of the 11 Waste Strategy Areas outlined in the National Waste Plan. (see above)
SPP10 – Waste Management	Sets out the role of planning in relation to waste management. States that to date many development plans have not successfully contributed to waste management objectives and calls for improved links between development plans and Area Waste Plans. Aims to achieve a better planned and more inclusive approach to providing sites for waste management.
Framework for Economic Development in Scotland (2004)	Sets out the overarching framework for economic development in Scotland. Aims <i>“to raise the quality of life of the Scottish people through increasing the economic opportunities for all on a socially and environmentally sustainable basis.”</i>
A Smart, Successful Scotland: Strategic Direction to the Enterprise Networks and an Enterprise Strategy for Scotland (2004)	Sets out role of Scottish Enterprise Network and partners in improving Scottish economic performance. Aims to increase productivity, entrepreneurship, learning and skills and digital connectivity. Notes need to attract and retain workers, reduce income and employment disparities between areas and ensure key digital infrastructure is in place. www.scotland.gov.uk/library5/enterprise/sssen-00.asp
Scottish Executive (2003) Securing a future: Scotland's Renewable Energy	Notes the Scottish Executive's target of achieving 18% of electricity generation in Scotland from renewables by 2010. Includes a commitment to biomass generation in Scotland and notes the importance of the industry's role in achieving this. Also discusses opportunities arising from biofuel initiatives, including short rotation coppice and co-products from timber operations and agriculture. www.scotland.gov.uk/library5/environment/srfe-00.asp

Name of PPS	PPS Function
A Smart, Successful Highlands and Islands: An Enterprise Strategy for the Highlands and Islands of Scotland (2005)	Focuses on the economic development needs of the Highlands and Islands, including increasing economic capacity (as opposed to employment creation). States that this should be achieved by strengthening communities, developing skills, growing businesses and establishing global connections. Notes that the area's natural and cultural heritage are unique assets to be harnessed and emphasises importance of sustainable economic development. Outlines the needs of different parts of the area, prioritising action in fragile and regeneration areas. www.hie.co.uk/HIE-HIE-corporate-documents-2005-06/a-smart-successful-handi-english.pdf
CULTURAL HERITAGE, INCLUDING ARCHITECTURAL AND ARCHAEOLOGICAL HERITAGE	
This has been scoped out of the assessment	
LANDSCAPE	
European Landscape Convention	Promotes the protection, management and planning of all landscapes in Europe. Highlights the importance and need for public involvement in the development of landscapes. Encourages a joined up approach through policy and planning in all areas of land use, development and management, including the recognition of landscape in law. http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm
PLANNING	
National Planning Framework for Scotland (2004) Scottish Executive (Note: NPF 2 and associated SEA currently out for consultation)	Non-statutory framework to guide the spatial development of Scotland to 2025. The key aims of the strategy for Scotland's spatial development to 2025 are: <ul style="list-style-type: none"> • to increase economic growth and competitiveness; • to promote social and environmental justice; and • to promote sustainable development and protect and enhance the quality of natural and built environments. www.scotland.gov.uk/Publications/2004/04/19170/35317 Current consultation - www.scotland.gov.uk/Publications/2008/01/07093039/0
Government Strategic Objective	SEPA's Contribution
Wealthier and fairer	We help to create the conditions for sustainable economic growth in Scotland by securing the best possible environmental quality. Our regulation will not hamper innovation and growth and will focus on areas of greatest risk reducing the burden of regulation for businesses that do not harm the environment. See our "Better Regulation" outcome on <i>{insert page number}</i> .
Healthier	SEPA's main role is to protect the environment and human health . Scotland's environment is important to everyone's wellbeing, and we ensure that emissions and discharges are below safe limits, that waste is transported and disposed of safely and that communities are protected from the adverse effects of environmental pollution. See "Protected Health & Communities" on page <i>{insert page number}</i> and all of our outcomes.
Safer and Stronger	We will focus on deliberate environmental crime and operators who refuse to comply with their licence. We will ensure firm action is taken with those who cause unacceptable damage. See our "Better Regulation" & "Protected Health & Communities" outcomes <i>{insert page numbers}</i> .
Smarter	SEPA's provides advice and information on a variety of environmental issues. See our "Better Regulation" outcome and "Making SEPA fit for purpose" <i>{insert page numbers}</i>
Greener <ul style="list-style-type: none"> • Climate Change • Consumption & Production • Sustainable places • People & Nature • Countryside Culture 	SEPA's main role is to protect the environment and human health . Much of our work fits clearly with this Greener Objective and this is explained in more detail throughout this plan. See each of our outcomes.

APPENDIX 2 (A)

ASSESSMENT OF THE EFFICIENT SEPA OUTCOME

understand, to inform environmental decision making and influence behaviour															
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
Comments – Improving customer satisfaction will not directly lead to any environmental effects, although customer satisfaction may indicate a better protected environment. Provision of information is likely to make a positive contribution to all objectives in SEPA's main areas of interest and competence as it helps inform decision making and helps to change behaviour, which may lead to a better protected environment.															+
Culture of Efficiency and High Performance															
To be recognised as a best value organisation within 5 years	0	0	0	0	0	0	0	0	0	0	+	+	0	0	
Contribute to Scottish Government's efficiency target	0	0	0	0	0	0	0	0	0	0	+	+	0	0	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE NO SIGNIFICANT CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
Comments – While these actions will result in better resources efficiency (hence positives recorded under these objectives), they are unlikely <i>in themselves</i> to lead to significant environmental effects (particularly as SEPA's environmental footprint is already quite small). SEPA's own environmental performance is though important as a lead to others and in reducing our overall footprint. Recommend more positive wording that ties SEPA's environmental performance most specifically into the Corporate Plan.															0
Leadership and Governance															
To be an influential and recognised authority on the environment in Scotland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
To develop our staff to meet future demands and priorities	++	++	++	++	+	++	++	+	++	+	++	++	0	++	
To be an exemplar in Scotland for managing our environmental impacts	++	++	++	++	+	++	++	+	++	0	+	++	0	++	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
Comments – The ambition to be an exemplar in managing our environmental effects will make the most direct positive contribution, particularly in the areas where SEPA has most direct responsibility either through regulation or influence (air, water, flooding, soil, waste and human health). Other objectives will also be beneficially affected by this action, although this depends to a greater degree on actions of others (eg climate, biodiversity). Staff development will also make a positive contribution across most environmental outcomes as it ensures that staff are able to meet future environmental priorities effectively. Being recognised an influential authority may have some positive effects, but these are best quantified in terms of influence over specific sectors and activities (see other outcomes)															++

SUMMARY OF EFFICIENT SEPA OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OUTCOMES	TIMESCALE: MEDIUM / LONG	CUMULATIVE EFFECTS ? YES, POSITIVE	MITIGATION ACTIONS REQUIRED
<p>SUMMARY – The efficient SEPA outcome and its associated actions will help SEPA to operate and regulate in a way that helps to drive towards greener outcomes. Many of SEPA's activities to protect Scotland's environment are enshrined within regulation and therefore finding ways to use that regulation more effectively and in a way that reduces the administrative burden on both regulated industry and on SEPA should lead to significant benefits over the long term. The benefits will likely be most clearly felt in those parts of the environment most closely protected by SEPA through regulation, such as air, water and soil quality, waste management and the health of people and communities. The focus on working in partnership to deliver environmental objectives and on internal efficiency should also make a positive contribution to many of the objectives, particularly in those areas where SEPA has statutory responsibilities. In particular, the ambition to become an exemplar (and demonstrating this through SEPA's actions) will make a significant positive contribution and this is taken forward across the organisation.</p> <p>Some of the actions are procedural or behavioural (eg best value and customer focus) which will not likely <i>in themselves</i> lead to environmental effects but which may make a positive contribution as part of the suite of activities outlined in the Corporate Plan.</p> <p>One area that could be enhanced in this “overarching” outcome is greater reference to SEPA's own environmental effects resulting from its day to day business activities. This “internal environmental policy” is implicit in many of the actions and is referred to as part of being an exemplar, but could be more clearly identified as a priority in this overarching outcome or more specific action spread across all outcomes.. A recommendation to this effect is made in the mitigation box.</p>			<p>(a) It would be useful for more explicit reference to SEPA's own environmental performance in this “overarching” outcome. SEPA has a range of environmental effects arising from its day to day activities, including waste generation, emissions from travel, emissions from running its estate and chemical emissions from laboratories. All of these are monitored through an internal environmental policy and performance targets are set. Greater profile of this as an exemplar for other organisations and to reinforce the importance SEPA attaches to this would be a very useful addition to this part of the Corporate Plan.</p>

APPENDIX 2 (B)

ASSESSMENT OF THE CLIMATE CHANGE OUTCOME

CLIMATE CHANGE OUTCOME	AIR	WATER		SOIL		CLIMATE		BIODIVERSITY	HEALTH & POP'N	MATERIAL ASSETS			LANDSCAPE	OVERALL	
	Contribute to improving air quality and meeting national air quality objectives ?	Contribute to protection and enhancement of waterbodies ?	Contribute to reduction of flood risk ?	Contribute to the protection of soil quality and function	Contribute to reduction in rates of contaminated and derelict land ?	Contribute to reduction in greenhouse gas emissions ?	Contribute to effective adaptation to climate change ?	Contribute to protect and enhance biodiversity ?	Contribute to protection of human health and enhancement of communities ?	Promote use of renewable resources ?	Reduce energy consumption and promote energy efficiency ?	Reduce waste and encourage reuse and recycling ?	Contribute to protect and enhance landscape ?		
A. Will the Action...															
Action															
Understanding the State of the Environment															
Establish where SEPA's monitoring programme can support climate change science – in partnership with other organisations develop and understand indicators of climate change	0	0	0	0	0	+	+	0	0	0	0	0	0	0	
Use our understanding of the environment to help minimise greenhouse gas emissions from both the manmade and natural environment	+	+	+	+	0	+	+	+	0	+	+	0	?	+	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
Comments – Using SEPA data and knowledge to influence decisions which have a bearing on greenhouse gas emissions may make a positive contribution to the climate, air, water and energy objectives (eg through influencing the actions or decisions of others or by working in partnership). The monitoring progress action will, in itself, not lead to significant environmental effects, but may make a contribution to better understanding the environment (particularly in respect of climate matters) which may have long term environmental effects.														+	
Protecting and Improving the Environment															
Climate Proof new and existing regulatory	+	+	++	+	0	++	++	+	++	+	++	+	0	?	++

instruments and licences to minimise climate change impact and promote best practice in adaptation and mitigation	?	?		?				?	?						
Develop our Floodline Service and deliver flood avoidance/management in new developments through consultative role in planning	0	0	++	0	0	0	++	0	++	0	0	0	0	0	++
Examining Strategic Environmental Assessment processes to ensure they make an effective contribution to tackling climate change	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

Comments – The climate proofing of regulatory instruments will ensure that climate change consideration are embedded into all of SEPA’s regulatory activities and, accordingly, this scores significant positive against the climate and energy efficiency objectives and the flooding objective. A question mark is, though recorded, as there may be consequences for the way SEPA regulates emissions to air, water and land. For example, the carbon emissions of some abatement technologies may be high, but afford effective protection of the environment by removing pollutants at source. Consideration of to what extent climate change objectives will over-ride wider environmental protection objectives will therefore be required as part of this action. Accordingly a question mark is recorded for effects on air, water, land, biodiversity and human health for this action. This issue was addressed in SEPA’s climate change plan SEA and mitigation measures identified.

The floodline and flood avoidance actions scored significant positive for the flood risk, climate adaptation and health and population objectives as they are directly aimed at improving Scotland’s ability to respond to flood risk and therefore will contribute to reducing the potential impacts that flooding will have on people and property. This is of particular importance to communities as in addition to the initial shock and trauma experienced by flood victims, communities can remain affected by stress, health impacts and property blight for years into the future.

An Influential Authority on the Environment

Support the Scottish Government and others in developing and implementing legislation, policy and actions e.g. Supporting the Scottish Climate Change Bill and Scotland’s Climate Change Adaptation Strategy	+	+	++	+	0	++	++	+	++	++	+	0	?	+	++
--	---	---	----	---	---	----	----	---	----	----	---	---	---	---	----

Drive down our own CO2 emissions and act as an exemplar for reducing the environmental impact of our own activities	+	0	+	0	0	+	+	0	0	0	+	0	0	0	+
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
<p>Comments – Providing technical advice and support to Scottish Government in implementing the proposed Climate Change Bill should make a significant positive contribution to the climate and flooding objectives, as well as protecting health and communities (eg from adverse effects of climate change). In particular, supporting measures to achieve the Bill's 80% target for reduction in greenhouse gases will make significant positive contribution. Supporting the Bill and adaptation strategy is also likely to assist with the promotion of renewables. Wider benefits for air, water and soil quality as well as for biodiversity and energy efficiency are likely in the long term, particularly from the potential adverse effects of climate change. The Climate Change Bill has been subject to SEA and is available on the Scottish Government website. Effects on landscape are not known as this may depend on how future decisions relating to flood defence, for example, are implemented.</p> <p>SEPA's Climate Change Plan (CCP) incorporates a wide range of actions associated with reducing the Agency's greenhouse gas emissions and influencing the actions of others through regulatory and other activities. By developing a prioritised programme of CCP activities and progressing them, this is likely to make a significant positive contribution to the climate and flooding objectives. For other topics, it is likely that this action will make a minor but positive contribution as it will not directly protect or improve environmental quality but will play a wider part in protecting and enhancing air, water soil and health in the long term, particularly from the potential adverse effects of climate change. The CCP has been subject to SEA and its Environmental Report is available on SEPA's website. Effects on landscape are not known as this may depend on how future decisions relating to flood defence for example are implemented.</p> <p>Driving down SEPA's own CO2 emissions will be positive in demonstrating a lead, although actual CO2 savings will be small as SEPA's carbon footprint already relatively low. As noted for the efficient SEPA outcome, more explicit recognition of IEP as a whole would enhance the Corporate Plan.</p>															
Better Regulation															
Develop advice and guidance for industry, in conjunction with other partners, on climate change, water, energy and resource efficiency and establish a programme for delivery	+	+	+	+	0	+	+	+	+	+	0	0	0	+	
Look to improve all regulatory regimes to ensure that mitigation and adaptation to climate change is promoted and supported	+	+	++	+	0	++	++	+	++	+	++	+	?	?	++
	?	?		?				?							
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
														?	++

<p>Comments - Guidance to industry is likely to make a positive contribution to many environmental objectives, but there is no guarantee that this will result in actual positive effects, hence these are recorded as positive rather than significant positive. Climate proofing all regulatory regimes will likely make a significant contribution to many objectives. A question mark is, though recorded, as there may be consequences for the way SEPA regulates emissions to air, water and land. For example, the carbon emissions of some abatement technologies may be high, but afford effective protection of the environment by removing pollutants at source. Consideration of to what extent climate change objectives will over-ride wider environmental protection objectives will therefore be required as part of this action. Accordingly a question mark is recorded for effects on air, water, land, biodiversity and human health.</p> <p>The climate proofing of regulatory instruments will ensure that climate change consideration are embedded into all of SEPA's regulatory activities and, accordingly, this scores significant positive against the climate and energy efficiency objectives and the flooding objective. A question mark is, though recorded, as there may be consequences for the way SEPA regulates emissions to air, water and land. For example, the carbon emissions of some abatement technologies may be high, but afford effective protection of the environment by removing pollutants at source. Consideration of to what extent climate change objectives will over-ride wider environmental protection objectives will therefore be required as part of this action. Accordingly a question mark is recorded for effects on air, water, land, biodiversity and human health for this action. This action repeats a similar one under the protecting and improving the environment section and could therefore be deleted.</p> <p>Working with industry will be positive in raising awareness, but extent to which this results in specific climate outcomes is uncertain.</p>															
How Will We Do This ?															
Meet the commitments made in SEPA's Climate Change Plan	+	+	++	+	0	++	++	+	+	+	+	0	?		
<p>Comments - SEPA's Climate Change Plan (CCP) incorporates a wide range of actions associated with reducing the Agency's greenhouse gas emissions and influencing the actions of others through regulatory and other activities. By developing a prioritised programme of CCP activities and progressing them, this is likely to make a significant positive contribution to the climate and flooding objectives. For other topics, it is likely that this action will make a minor but positive contribution as it will not directly protect or improve environmental quality but will play a wider part in protecting and enhancing air, water soil and health in the long term, particularly from the potential adverse effects of climate change. The CCP has been subject to SEA and its Environmental Report is available on SEPA's website. Effects on landscape are not known as this may depend on how future decisions relating to flood defence for example are implemented.</p>														++	
Work with Scot Govt in preparation of CC legislation & policy	+	+	++	+	0	++	++	+	++	0	0	0	+		
<p>Comments - Providing technical advice and support to Scottish Government in implementing the proposed Climate Change Bill should make a significant positive contribution to the climate and flooding objectives, as well as protecting health and communities (eg from adverse effects of climate change). In particular, supporting measures to achieve the Bill's 80% target for reduction in greenhouse gases will make significant positive contribution. Supporting the Bill and adaptation strategy is also likely to assist with the promotion of renewables. Wider benefits for air, water and soil quality as well as for biodiversity and energy efficiency are likely in the long term, particularly from the potential adverse effects of climate change. The Climate Change Bill has been subject to SEA and is available on the Scottish Government website. Effects on landscape are not known as this may depend on how future decisions relating to flood defence for example are implemented.</p>														++	
Provide technical support to Scot Govt on all aspects of climate change	+	+	++	+	0	++	++	+	++	+	+	+	+		
<p>Comments - This action largely repeats the one above it and the same comments apply.</p>															
Provide advice on other areas in accordance with duties	+	+	++	+	0	++	++	+	++	+	+	++	?		

Comments – This action seeks to mainstream climate change issues across all of SEPA’s activities and therefore will make a significant contribution across most environmental objectives.															
Develop SEPA’s role as education and information provider on climate change	+	+	++	+	0	++	++	0	++	+	+	+	0		
Comments - This action relates to ensuring that SEPA itself is well placed to make the necessary adaptations to climate change and to communicate to stakeholders. Accordingly, this action is likely to make a significant contribution to the climate objectives and also to the health and population objective as better communication about climate change, particularly adaptation, will assist those potentially affected (eg flooding) in undertaking necessary actions. It is likely that these actions will also result in more minor contribution to other objectives such as air, water and soil quality.														+	
Work with Scot Govt / others to raise awareness of climate change issues	+	+	++	+	0	++	++	0	++	+	+	+	0		
Comments - Many of these actions and targets relate to the development of a communications plan and a programme for ensuring that SEPA itself is well placed to make the necessary adaptations to climate change. Accordingly, these actions are likely to make a significant contribution to the climate objectives and also to the health and population objective as better communication about climate change, particularly adaptation, will assist those potentially affected (eg flooding) in undertaking necessary actions. It is likely that these actions will also result in more minor contribution to other objectives such as air, water and soil quality.														+	
Review SEPA’s scientific monitoring	0	0	+	0	0	+	+	0	+	0	0	0	0		
Comments – Review of monitoring processes in itself will not lead to significant environmental effects, although the results of the monitoring may lead to enhancement of understanding of climate change issues. Accordingly, there may be a minor positive effect with respect to the climate change, flooding and health and communities objectives.														0	
Review SEPA’s regulatory activities to ensure impact of, and on, climate change are considered	+	+	++	+	0	++	++	+	++	+	++	+	0	++	?
Comments – The climate proofing of regulatory instruments is described in the actions under better regulation and protecting and improving the environment (above) and the same comments apply. Could be deleted as repeats previous actions.															
Train staff who come into contact with industry to give advice	0	0	+	0	0	+	+	0	+	+	+	+	0		
Comments – This simple action has the potential to make a positive contribution to the climate change objectives (not recorded as significant as depends on take up of SEPA advice by industry) and also, to a lesser extent to wider issues including human health and energy efficiency.															
Support delivery of climate change declaration	0	0	0	0	0	+	+	0	0	+	+	0	0		
Comments – This action supports a range of other stakeholders’ activities towards the climate change declaration and the Scottish Climate Impacts Partnership. This will															

make a positive contribution to climate change objectives in particular.

SUMMARY OF CLIMATE CHANGE OUTCOME

THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OUTCOMES

**TIMESCALE:
MEDIUM / LONG**

**CUMULATIVE EFFECTS ?
YES, POSITIVE**

MITIGATION ACTIONS REQUIRED

SUMMARY – This outcome scored particularly well in terms of making a positive contribution across virtually all of the objectives. In particular, actions under this outcome are likely to make a significant contribution to the climate change mitigation and adaptation objectives as well as to the flooding objective. This is unsurprising as the main focus of this outcome is about ensuring that SEPA plays its part in reducing Scotland's greenhouse gas emissions, in promoting greater resilience to predicted effects of climate change and in working in partnership with the Scottish Government and others to establish and then work towards challenging climate change targets.

It is likely that actions under this outcome will also make a significant positive contribution to protection of human health by enhancing flood warning and flood management activities. Improving Scotland's ability to respond to flood risk through better flood warning, influencing the siting of new developments where flooding may be an issue and through effective emergency response are all aimed at protecting people from the dangers of flooding. This is particularly important as in addition to the initial shock and trauma experienced by flood victims, communities can remain affected by stress, health impacts and property blight for years into the future.

Although focused on climate change, many of the actions in this outcome will also make a wider contribution to the other objectives, particularly air, water, soil, biodiversity and resource/energy efficiency.

(a) There is the potential that climate proofing SEPA's regulatory activities will lead to conflict between environmental protection and climate change objectives. These should be reconciled by focusing on those regulatory activities where both effective environmental protection and climate change objectives can be achieved. More specific mitigation measures at set out in the SEA of SEPA's Climate Change Plan which assesses this issue in more detail.

(b) the climate proofing action appears three times and this should be rationalised to eliminate duplication.

APPENDIX 2 (C)

ASSESSMENT OF THE HEALTH & COMMUNITIES OUTCOME

HEALTH & COMMUNITIES OUTCOME	AIR	WATER		SOIL		CLIMATE		BIODIVERSITY	HEALTH & POP'N	MATERIAL ASSETS			LANDSCAPE	OVERALL
	Contribute to improving air quality and meeting national air quality objectives ?	Contribute to protection and enhancement of waterbodies ?	Contribute to reduction of flood risk ?	Contribute to the protection of soil quality and function	Contribute to reduction in rates of contaminated and derelict land ?	Contribute to reduction in greenhouse gas emissions ?	Contribute to effective adaptation to climate change ?	Contribute to protect and enhance biodiversity ?	Contribute to protection of human health and enhancement of communities ?	Promote use of renewable resources ?	Reduce energy consumption and promote energy efficiency ?	Reduce waste and encourage reuse and recycling ?	Contribute to protect and enhance landscape ?	
A. Will the Action...														
Action														
Understanding the State of the Environment														
Promote and engage in research to improve our understanding of the environment as it affects human health.	+	+	0	+	0	0	0	+	++	0	0	0	0	+
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES														
Comments – The chemical pressure action is orientated towards enhancing SEPA's understanding the chemical pressures on the environment. Accordingly, it is likely to make only an indirect (and therefore minor) contribution to most of the objectives it itself. It will, however, allow SEPA to better understand the impact of chemicals on the environment this will therefore make a significant contribution in particular to protecting and enhancing human health and communities by translating this understanding into more informed decisions on SEPA activities. By better understanding chemical pressures, this may lead to a wider contribution to the protection of air, water, soil and biodiversity. The action to research links between pollution, licencing and human health is orientated towards enhancing understanding of the effects of environmental pollutants on human health. Accordingly, it is likely to make only an indirect (and therefore minor) contribution to most of the objectives in itself. It will, however, allow SEPA to better understand the impact of pollutants on human health and this will therefore make a significant contribution to protecting and enhancing human health and communities by translating this understanding into more informed decisions on SEPA activities. By better understanding health effects, this may lead to a wider contribution to the protection of air, water, soil and biodiversity.														+
Protecting and Improving the Environment														
Develop and implement plans to prevent and minimise incidents and ensure effective response when dealing with environmental	++	++	++	++	0	0	++	+	++	0	0	0	0	++

positive benefits of good quality green space and creating healthier and more attractive places to live.														
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

Comments –
 Actions associated with SEPA’s planning liaison function will likely make a positive contribution to many environmental objectives, but is particularly relevant to flooding, where SEPA has a crucial role in influencing the design and location of new development.

+

Better Regulation

Utilise improved knowledge of the health impacts of the environment to develop an effective risk-based approach to regulation and to inform development of better standards of environment and health protection.	+	+	+	+	+	+	+	+	+	+	+	+	+	+
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Ensure a strategic approach to preventing negative impacts from human activities, and to exploit the positive benefits of a healthy environment, through routes such as Strategic Environmental Assessment (SEA), and promoting Health Impact Assessment.	+	+	+	+	+	+	+	+	+	+	+	+	+	+
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES

+

Comments – These actions will lead to some positive environmental effects. The enforcement strategy, when implemented, should focus SEPA’s enforcement activities on areas of most significant environmental risk and may, therefore, lead to positive effects in those areas where the enforcement applies – eg air, water and land quality, waste and protection of human health.

How Will We Do This ?

Target regulation and respond to environmental incidents	++	++	++	++	0	0	++	+	++	0	0	0	0	++
Comments - Reacting effectively to emergencies as they arise plays an important part in the protection of Scotland's environment. Emergencies may relate to pollution of environmental media such as air water and soil, risk to human health and communities or may relate to flooding of land and property. As a result, these actions have scored a significant positive contribution to the media and health objectives as well as the climate adaptation objectives. It is likely that an indirect (minor) positive contribution to the biodiversity objective will also occur as biodiversity protection will also result from effective emergency response.														
Improve SEPA's knowledge and understanding of effects of environmental pollutants on human health	+	+	0	+	0	0	0	+	++	0	0	0	0	+
Comments - This action is orientated towards enhancing SEPA's collection and analysis of data on the effects of environmental pollutants on human health. Accordingly, it is likely to make only an indirect (and therefore minor) contribution to most of the objectives in itself. It will, however, allow SEPA to better understand the impact of pollutants on human health and this will therefore make a significant contribution to protecting and enhancing human health and communities by translating this understanding into more informed decisions on SEPA activities. By better understanding health effects, this may lead to a wider contribution to the protection of air, water, soil and biodiversity.														
Support research into health effects of pollutants	+	+	0	+	0	0	0	+	++	0	0	0	0	+
Comments - This action is orientated towards enhancing research on the effects of environmental pollutants on human health. Accordingly, it is likely to make only an indirect (and therefore minor) contribution to most of the objectives in itself. It will, however, allow SEPA to better understand the impact of pollutants on human health and this will therefore make a significant contribution to protecting and enhancing human health and communities by translating this understanding into more informed decisions on SEPA activities. By better understanding health effects, this may lead to a wider contribution to the protection of air, water, soil and biodiversity.														
Better understand the chemical pressures on the environment	+	+	0	+	0	0	0	+	++	0	0	0	0	+
Comments - This action is orientated towards enhancing SEPA's understanding the chemical pressures on the environment.. Accordingly, it is likely to make only an indirect (and therefore minor) contribution to most of the objectives it itself. It will, however, allow SEPA to better understand the impact of chemicals on the environment this will therefore make a significant contribution in particular to protecting and enhancing human health and communities by translating this understanding into more informed decisions on SEPA activities. By better understanding chemical pressures, this may lead to a wider contribution to the protection of air, water, soil and biodiversity.														
Minimise impacts on Scotland's communities from environmental incidents	++	++	++	++	0	0	++	+	++	0	0	0	?	++
Comments - This action and associated targets scored significant positive for air, water, soil and health topics as effective regulation and response to environmental incidents when they occur will directly protect these. It is likely that an indirect (minor) positive contribution to the biodiversity objective will also occur as biodiversity protection will also result from effective regulation and emergency response. A question mark for landscape is recorded as protecting air, water and soil may have														

landscape effects (eg flood prevention), but the extent of effect depends upon the incident nature and location.																
Aim for development plans to incorporate SEPA advice	+	+	+	+	+	+	+	+	+	+	+	+	+	?	+	
Comments - This action is wide ranging and likely to make a contribution to all objectives in some form. This action may make a significant contribution, particularly in respect of flooding issues, where SEPA is a statutory consultee, but this depends upon planning authorities taking SEPA's advice. A question mark is recorded for landscape as SEPA's advice to planning authorities may have some effects on landscape which are not possible to determine at this stage – eg flood defence, avoiding new development on flood plains etc. SEA of development plans will need to pick up landscape effects arising from spatial planning policies and land allocations.																
Continuously improve floodline service and flood risk systems	0	0	++	0	0	0	++	0	++	0	0	0	0	0	0	++
Comments - This action and associated targets scored significant positive for the flood risk, climate adaptation and health and population objectives as it is directly aimed at improving Scotland's ability to respond to flood risk and therefore will contribute to reducing the potential impacts that flooding will have on people and property. This action is of particular importance to communities as in addition to the initial shock and trauma experienced by flood victims, communities can remain affected by stress, health impacts and property blight for years into the future. While this action may also have some positive effects in terms of water quality (through better understanding and management of flood risk – eg via advice to planning authorities about flood risk), and to a certain degree soil quality, it is unlikely to make a significant contribution to the other objectives. This action only applies to flood warning and flood risk and therefore no proposals for flood defences are likely to come through this action – this will be pursued through Development Plans and other process – hence no negative effects recorded.																
Ensure close working with Crown Office and PF Service	+	+	0	+	0	0	0	+	+	0	0	0	0	0	+	
Comments – This will, in itself, have few environmental effect, however good working with the Crown Office and PF service will help SEPA in raising awareness of environmental legislation and issues and environmental crime, which in turn may assist compliance and enforcement																
Launch awareness raising campaign on environmental crime	+	+	0	+	0	0	0	+	+	0	0	0	0	+	+	
Comments – Raising awareness of environmental crime will likely assist SEPA's efforts in both preventing environmental crime occurring and in ensuring that enforcement or prosecution are effective. Accordingly, this action is likely to have the most positive effect on those areas that SEPA regulates. Landscape scores positive as this action may reduce one of the most common environmental crimes, fly tipping.																
SUMMARY OF HEALTH & COMMUNITIES OUTCOME																
OVERALL, THIS OUTCOME WILL LIKELY MAKE A POSITIVE TO SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OUTCOMES				TIMESCALE: MEDIUM / LONG			CUMULATIVE EFFECTS ? YES, POSITIVE			MITIGATION ACTIONS REQUIRED (a) The action on incident response indicates a 95% target. A recommendation of this Environmental Report is that this figure is kept under review with the aspiration that it is improved in future Corporate Plans.						
SUMMARY – This outcome scored particularly well in terms of making a positive contribution across very many of the objectives. Of particular importance under this outcome are those actions related to SEPA's role in responding to emergencies and in dealing with environmental pollution incidents quickly and effectively. This is of primary importance in protecting people and the environment.																

There is a strong research theme to many of the actions under this outcome. This will help SEPA to better understand the pressures being placed upon the environment and therefore upon people's health. Of particular importance here are activities connected with better understanding links between pollution, SEPA's licencing of activities and human health, which should lead to direct benefits in aligning regulatory activities to protect health.

It is likely that actions under this outcome will also make a significant positive contribution to protection of human health by enhancing flood warning and flood management activities – in association with similar actions under the climate change outcome. Improving Scotland's ability to respond to flood risk through better flood warning, influencing the siting of new developments where flooding may be an issue and through effective emergency response are all aimed at protecting people from the dangers of flooding. This is particularly important as in addition to the initial shock and trauma experienced by flood victims, communities can remain affected by stress, health impacts and property blight for years into the future.

SEPA's planning liaison activities are also included under this outcome and these are aimed at ensuring that environmental protection and human health is protected by seeking to influence decisions about the scale, nature and location of new development. Reducing flood risk through this liaison process is a key objective and this should lead to a reduction of flood risk (from new development) in the long term assuming SEPA's advice is taken up by planning authorities.

Under this outcome there is also a focus on raising awareness about environmental crime and about ensuring compliance with licences and undertaking enforcement/prosecution where necessary. This again is an important part of SEPA's ability to play a direct role in protecting health and protecting the environment and accordingly makes a significant contribution to many of the SEA objectives in this assessment.

APPENDIX 2 (D)

ASSESSMENT OF THE WASTE & RESOURCES OUTCOME

WASTE & RESOURCES OUTCOME	AIR	WATER		SOIL		CLIMATE		BIODIVERSITY	HEALTH & POP'N	MATERIAL ASSETS			LANDSCAPE	OVERALL	
	Contribute to improving air quality and meeting national air quality objectives ?	Contribute to protection and enhancement of waterbodies ?	Contribute to reduction of flood risk ?	Contribute to the protection of soil quality and function	Contribute to reduction in rates of contaminated and derelict land ?	Contribute to reduction in greenhouse gas emissions ?	Contribute to effective adaptation to climate change ?	Contribute to protect and enhance biodiversity ?	Contribute to protection of human health and enhancement of communities ?	Promote use of renewable resources ?	Reduce energy consumption and promote energy efficiency ?	Reduce waste and encourage reuse and recycling ?	Contribute to protect and enhance landscape ?		
A. Will the Action...															
Action															
Understanding the State of the Environment															
Publish waste data reports that evaluate and interpret the overall impact and effectiveness of waste and resource use activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Use data intelligently to form a basis for the future development of waste and resource use initiatives	0	0	0	0	0	+	0	0	+	0	++	++	0	+	
Ensure the characteristics of waste are linked appropriately to environmental decision making	?	?	0	?	0	?	0	?	?	?	?	?	0	?	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES BUT WITH UNCERTAINTIES															
Comments – Most of these actions relate to collection, publication and use of waste data which in itself will not have environmental effects, but will assist policy making on waste. The action on “characteristics of waste” is vague and activities under it uncertain. Accordingly, question marks as to the effects of this action have been recorded. This Environmental Report recommends rewording this action for clarity.														+	?
Protecting and Improving the Environment															
Ensure waste is managed safely and effectively, and SEPA's regulatory resources are	++	++	0	++	+	++	0	+	++	0	0	+	+	++	

targeted appropriately															
Ensure licence compliance and work alongside other agencies to tackle environmental crime and improve enforcement action	++	++	0	++	+	++	0	+	++	0	0	+	+	++	
Promote an integrated network of high quality waste management facilities	++	++	0	++	0	++	0	+	++	0	0	++	?	?	++
	?	?		?				?	?						
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES BUT WITH UNCERTAINTIES															
<p>Comments – These actions are specifically aimed at ensuring that there is an adequate network of waste management facilities that allow Scotland to deal with its waste in a way that it is sustainable, safe and efficient. To this end, most of the actions will make a very significant contribution to many of the objectives, but most notably air, water, soil, climate change (due to reduced methane from landfill) and protection of human health. To achieve this, a significant shift away from landfill to other methods of waste management will be required as indicated by the third action in this section. Delivery of this waste facility network will be achieved through other activities (eg Local Authority waste planning and land use planning), however there are environmental issues that may be raised depending upon the facilities and where they are sited. These issues may include emissions to air (eg from energy from waste facilities), emissions to water and land (eg from leachate) and the effects of operating waste management facilities on communities located close to them (eg smell, dust, noise, traffic etc). These matters need to be addressed via planning/environmental regulation as facilities are brought forward.</p>															
An Influential Authority on the Environment															
Promote sustainable resource management towards a zero waste society through the review of National Waste Policy	++			+				+	++					?	++
	?	++	0	?	0	++	0	+	?	+	++	++			++
Develop an effective mechanism to deliver expert advice and guidance on sustainable resource management	0	0	0	0	0	+	0	0	0	++	++	++	0	++	
Provide effective, accessible and simple advice on waste and resources.	0	0	0	0	0	0	0	0	+	+	++	++	0	+	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
<p>Comments – As noted above, promoting sustainable resource management will likely result in significant positive effects, particularly for the waste and climate objectives. Progress towards achievement of “zero waste” would have very significant positive environmental effects, particularly for climate change (as methane emissions from landfill</p>															

sites will be greatly reduced). To achieve zero waste, however, a new network of facilities will be required some of which may have environmental effects. Delivery of this network will be achieved through other activities (eg Local Authority waste planning and land use planning), however there are environmental issues that may be raised depending upon the facilities and where they are sited. These issues may include emissions to air (eg from energy from waste facilities), emissions to water and land (eg from leachate) and the effects of operating waste management facilities on communities located close to them (eg smell, dust, noise, traffic etc). These matters need to be addressed via planning/environmental regulation as facilities are brought forward.															
Better regulation															
Work with partners to deliver the better waste regulation programme	++	++	0	++	0	++	0	+	++	0	+	++	0	++	
Ensure that the development of waste policy is integrated with other environmental arenas	++	++	0	++	+	++	+	+	+	+	+	++	0	++	
Implement a fully risk- assessed inspection and compliance programme	++	++	0	++	0	0	0	+	++	0	0	+	0	++	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES														++	
Comments – These actions together will likely make a very significant contribution to many objectives.															
How Will We Do This ?															
Make more waste data accessible	0	0	0	0	0	0	0	0	+	0	0	+	0		
Comments - This action is orientated towards enhancing SEPA's collection and analysis of data on waste and resource use. Accordingly, it is likely to make only an indirect (and therefore minor) contribution to most of the objectives. It will, however, allow SEPA to better understand the impact of waste and resource use activities on the environment, which should make a positive contribution to the objective to reduce waste and encouraging reuse and recycling. By better understanding the issues, it may also enable SEPA to make a significant contribution to protecting human health and communities.														0	+
Analyse and report waste trends	0	0	0	0	0	0	0	0	+	0	0	+	0		
Comments - This action is orientated towards enhancing SEPA's collection and analysis of data on waste and resource use. Accordingly, it is likely to make only an indirect (and therefore minor) contribution to most of the objectives. It will, however, allow SEPA to better understand the impact of waste and resource use activities on the environment, which should make a positive contribution to the objective to reduce waste and encouraging reuse and recycling. By better understanding the issues, it may also enable SEPA to make a contribution to protecting human health and communities.														0	+
Review licence and permit conditions and advice to landfill operators	+	+	0	+	+	+	0	+	+	0	+	+	+	+	
Comments – The review itself is unlikely to lead to significant environmental effects. It is possible however that the review will lead to greater environmental protection															

where licences and conditions are re-considered in the light of environmental risks. Provision of advice to operators may also have some positive effects, but this depends upon the extent to which the advice is taken up. Assuming that the review will be based around environmental risk, positive contribution is recorded for most objectives.															
Ensure that objectives of the National Waste Strategy are reflected in spatial planning policies	+	+	+	+	+	+	+	+	+	+	+	+	++	+	+
Comments - This action is wide ranging and likely to make a contribution to all objectives in some form, although it is most likely to have positive effects in respect of the waste objective. Aligning planning policies to reduce waste and to shift waste management from landfill to reuse, recycling or recovery will likely reduce methane emissions, reduce land take for landfill, provide an effective framework for development of modern facilities for waste management and ensure that safeguards to the adverse effects of waste management are implemented through the planning system.															
Work with partners to determine priority environmental crime issues and opportunities for action to address them	+	+	0	+	0	0	0	+	+	0	0	0	0	+	+
Comments – Prioritising environmental crime will likely lead to positive environmental effects for those environmental issues that SEPA has lead legislative responsibility.															

SUMMARY OF WASTE & RESOURCES OUTCOME

OVERALL, THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OUTCOMES	TIMESCALE: MEDIUM / LONG	CUMULATIVE EFFECTS ? YES, POSITIVE	MITIGATION ACTIONS REQUIRED
<p>SUMMARY – This outcome scored particularly well in terms of making a positive contribution across very many of the objectives. Many of the actions are aimed at ensuring that Scotland continues its improving record in reducing the amount of waste going to landfill and improving rates of reuse and recycling. To achieve this, SEPA has a key role to play in both controlling the management of waste, promoting opportunities to reduce levels of waste generated and in promoting the development of a new, modern, network of waste management facilities that will allow Scotland to deal with its waste in a way sustainable, safe and efficient and which works towards the Scottish Government’s aim of a zero waste society.</p> <p>Moving to a zero waste society will require a range of new waste management facilities. These may have local environmental or community effects that will need to be managed through effective site planning and operational regulation. It is important that the environmental effects of the new facilities are fully assessed as part of their planning and development. This will need to occur through SEA of development plans, EIA of specific proposals as they come forward and through regulation by SEPA through waste management licencing and/or PPC.</p> <p>Reducing the amount of waste going to landfill through actions under the outcome will make a very significant contribution to climate change objectives as this should significantly reduce levels of methane, a powerful greenhouse gas that has 21 times more global warming potential than CO2. Reducing the overall volume of waste will also lead to benefits for human health and communities also (eg through reduced emissions from fewer waste sites, reduced transport of waste etc).</p> <p>This outcome will also have benefits for landscape as it contains actions that may reduce the landscape effects of waste (eg from</p>			<p>(a) Ensure local effects of new waste management sites are considered – through (a) SEA of National Waste Plan, (b) SEA of land use plans, (c) EIA of planning decisions and through environmental licencing.</p> <p>(b) Revise wording of action entitled: “ensure characteristics of waste are linked appropriately to decision making” in order to promote clarity and to enable environmental effects to be understood.</p>

landfill sites or from fly tipping)



APPENDIX 2 (E)

ASSESSMENT OF THE AIR OUTCOME

AIR OUTCOME	AIR	WATER		SOIL		CLIMATE		BIODIV ERSITY	HEALTH & POP'N	MATERIAL ASSETS			LAND SCAPE	OVERALL	
	Contribute to improving air quality and meeting national air quality objectives ?	Contribute to protection and enhancement of waterbodies ?	Contribute to reduction of flood risk ?	Contribute to the protection of soil quality and function	Contribute to reduction in rates of contaminated and derelict land ?	Contribute to reduction in greenhouse gas emissions ?	Contribute to effective adaptation to climate change ?	Contribute to protect and enhance biodiversity ?	Contribute to protection of human health and enhancement of communities ?	Promote use of renewable resources ?	Reduce energy consumption and promote energy efficiency ?	Reduce waste and encourage reuse and recycling ?	Contribute to protect and enhance landscape ?		
A. Will the Action...															
Action															
Understanding the State of the Environment															
Develop and implement SEPA's Air Data Strategy	+	0	0	0	0	+	0	0	+	0	0	0	0	0	+
Develop our understanding of habitat degradation from air pollution from regulated industry and take appropriate action to address air pollution pressures on habitats	+	+	0	+	0	0	0	++	+	0	0	0	+	+	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
Comments – Most of these actions are designed to improve SEPA's data and understanding of the air environment. These in themselves may not lead to direct environmental effects, but will make a positive contribution indirectly through more informed decision making.														+	
Protecting and Improving the Environment															
Ensure licence compliance for all regulated activities	++	+	0	+	0	++	0	+	++	0	?	0	0	+	++
Develop and implement a programme to address poor air quality in partnership with other organisations to build on current measures at a local	++	+	0	+	0	+	0	+	++	0	0	0	0	+	++

and national level.															
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
Comments – These actions will directly make significant contributions to many of the objectives, most notably in respect of air quality, climate and protecting human health. This is unsurprising given the focus on air quality enhancement. There are some uncertainties regarding the impact on energy use and greenhouse gas emissions from regulatory activities on air emissions (eg some abatement technologies can be energy intensive). Overall, however, the actions are very positive.															
+ ++															
An Influential Authority on the Environment															
Influence and provide technical support for policy development with Scottish and UK Governments and at a European and International level	+	0	0	0	0	+	0	+	+	0	0	0	0	+	
Through the provision of guidance, technical support, briefings and information, Influence customers and the public to promote changes in behaviour	+	0	0	0	0	+	0	0	+	0	0	0	0	0	+
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
Comments – These actions are based around influencing, support and developing service delivery and while they will make some contributions (most notably to the air, climate and human health objectives), these are likely to be reasonably limited compared to other actions under the air outcome. These actions relate to influencing and evaluation, which may lead to positive effects if that influencing is successful and behaviour / policy is therefore changed. This though is dependent upon the ability of SEPA to successfully influence and whether customers/stakeholders/the public take up SEPA's advice.															
+															
Better Regulation															
Where appropriate, work with the Scottish Government to implement risk based regulation - adoption of General Binding Rules for low risk activities	++	+	0	+	0	+	0	+	++	0	0	0	0	+	
Develop post regulatory impact assessments	+	0	0	0	0	0	0	0	+	0	0	0	0	0	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
Comments – This action seeks to target activities based on the highest environmental risk and to adopt general binding rules for lower risk areas. This will ensure consistency of approach to these lower risk activities as well as ensuring that resources are prioritised to those greatest threats to Scotland's environment. This will lead to															
+															

positive effects most notably for air quality and protection of human health.															
How Will We Do This ?															
Monitor and regulate industry to minimise harm to the environment	++	+	0	+	0	+	0	+	++	0	+	0	0	+	
Comments – Regulation of industry is a key part of SEPA's business and is aimed clearly at protecting and improving the air environment. This, associated with the actions under better regulation, will likely make a significant positive contribution to the air and human health objectives.															
Promote use of BAT through PPC	++	+	0	+	0	+	0	+	++	0	+	0	0	+	
Comments – Use of Best Available Techniques (BAT) through SEPA's Pollution Prevention and Control (PPC) regulatory activities promotes higher emissions standards from regulated activities. This should lead to significant positive outcome for air and human health objectives.															
Partnership working to address poor air quality	++	0	0	0	0	0	0	+	++	0	0	0	0	0	
Comments – This is an important action aimed at targeting of areas suffering already from poor air quality in Scotland. Although Scotland's air quality is generally good, there are pockets of very poor quality which detrimentally affects those living within these areas. Focusing on this will make a big difference to air quality and human health in these areas.														0	++
Regulate the emissions trading scheme	+	0	0	0	0	+	0	0	0	0	0	0	0	0	
Comments – SEPA's role in emissions trading will lead to positive benefits for air and climate, but impact of SEPA Corporate Plan to this compared to other drivers is small.														0	+
Provide support to Scot Govt on new legislation	++	+	0	+	0	+	0	+	++	0	0	0	0	+	
Comments – Supporting Scottish Government programme of legislation and policy will help to ensure that SEPA's objectives are effectively built into the legislative programme. This is likely to make a significant contribution to air and human health objectives and more generally to land and biodiversity.															
Quantify impact of regulated industry on local air quality and the impact of unregulated activities	++	+	0	+	0	+	0	+	++	0	0	0	0	+	
Comments - This action is fundamental to helping SEPA and others to understand where environmental improvements are necessary and will therefore assist in the development of targeted approaches to regulatory action. Accordingly, it will likely make a significant contribution to the air and health objectives in particular, although indirect benefits for water, soil, climate and biodiversity objectives are also likely.															
Use the planning system to flag air quality issues	+	0	0	0	0	+	+	+	+	0	0	0	0	+	
Comments - This action is wide ranging and likely to make a contribution to all objectives in some form, although it is most likely to have positive effects in respect of the air,															

climate and health objectives. Action could be made more specific rather than to “flag” issues.														
Identify how emissions can be reduced other than through normal regulatory practice and work alongside key partners to achieve this	+	+	0	+	0	+	0	+	+	0	0	0	0	+
<p>Comments – This action is directly oriented towards identifying how air emissions can be reduced through non regulatory means. As a result, a positive contribution is likely to be made in respect of air and human health, but also indirectly to the water, soil, climate and biodiversity objectives. The action is the first step in identifying such mechanisms and further actions may flow from this.</p>														

SUMMARY OF THE AIR OUTCOME

<p>OVERALL, THIS OUTCOME WILL LIKELY MAKE A POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OUTCOMES</p>	<p>TIMESCALE: MEDIUM / LONG</p>	<p>CUMULATIVE EFFECTS ? YES, POSITIVE</p>	<p>MITIGATION ACTIONS REQUIRED</p> <p>(a) No potential adverse effects identified, although it would be useful to be vigilant regarding possible conflicts between some of the actions in this outcome associated with regulating emissions to air and those under the climate outcome seeking to ensure that regulatory activities do not compromise climate objectives. See also mitigation for the climate outcome)</p> <p>(b) Action on planning system to be made more specific for clarity.</p>
<p>SUMMARY – Scotland’s air quality is generally good and is improving. However, there are pockets of very poor air quality, particularly in urban areas, which can contribute to poor health and even to premature death. Many of the actions under this outcome are focused towards addressing these areas of poor air quality through regulation of industry, through working in partnership with other bodies (such as local authorities) to address specific problems and through development of SEPA’s understanding of the air environment and its impacts on people.</p> <p>Overall, the actions included within this outcome will likely make a positive contribution to most objectives and a significant contribution to the air and human health objectives. By protecting and enhancing air quality there are also likely to be positive effects on the wider environment, including water (eg reduced acidification resulting from atmospheric deposition), biodiversity (eg effects of poor air quality on habitats and species) and climate (eg reducing overall emission levels may also lead to reduction in greenhouse gas emissions. Accordingly, the air outcome is recorded as having positive effects on these objectives also.</p> <p>SEPA’s planning liaison activities are also included under this outcome and these are aimed at ensuring that environmental protection and human health is protected by seeking to influence decisions about the location of new development bearing in mind existing air quality issues. Siting new development in a way that does not exacerbate and (ideally) reduces existing air pollution problems (eg from transport) is a key objective. This action should help address this issue.</p> <p>There is a strong research theme to many of the actions under this outcome. This will help SEPA to better understand the pressures being placed upon the air environment and therefore upon people’s health. Of particular importance here are activities connected with better understanding links between air pollution, SEPA’s licencing of activities and human health, which should lead to direct benefits in aligning regulatory activities to protect health.</p> <p>There is a risk of potential conflict between actions under this outcome and the action to climate proof regulatory activities. Where SEPA’s regulatory activities require the use of (often) energy intensive facilities to remove pollutants from emissions to air, this may conflict with objectives in the climate change outcome to “climate proof” regulatory activities reduce greenhouse gas emissions. This will need to be effectively managed to ensure both objectives can be satisfactorily met. For further details, see mitigation)</p>			

APPENDIX 2 (F)

ASSESSMENT OF THE LAND & SOIL OUTCOME

LAND & SOILS OUTCOME	AIR	WATER		SOIL		CLIMATE		BIODIVERSITY	HEALTH & POP'N	MATERIAL ASSETS			LANDSCAPE	OVERALL
	Contribute to improving air quality and meeting national air quality objectives ?	Contribute to protection and enhancement of waterbodies ?	Contribute to reduction of flood risk ?	Contribute to the protection of soil quality and function	Contribute to reduction in rates of contaminated and derelict land ?	Contribute to reduction in greenhouse gas emissions ?	Contribute to effective adaptation to climate change ?	Contribute to protect and enhance biodiversity ?	Contribute to protection of human health and enhancement of communities ?	Promote use of renewable resources ?	Reduce energy consumption and promote energy efficiency ?	Reduce waste and encourage reuse and recycling ?	Contribute to protect and enhance landscape ?	
A. Will the Action...														
Action														
Understanding the State of the Environment														
Produce a State of Contaminated land report, and work with Local Authorities to remediate contaminated land and prevent further damage	0	0	0	+	+	0	0	+	+	0	0	0	0	0 +
Produce state of Scotland's soils report, including Climate Change interactions and the effects of atmospheric deposition on land	0	0	0	+	+	0	0	+	+	0	0	0	0	0 +
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES														
Comments – These actions are largely activities associated with monitoring and reporting which in <i>themselves</i> will not have environmental effects but will lead to a greater understanding of the land and soil environment which will therefore inform better decision making.														+
Protecting and Improving the Environment														
Monitor, assess and communicate the impacts of diffuse pollution and the effectiveness of control measures on the water environment	0	+	0	+	+	0	0	+	+	0	0	0	+	+
Develop, deliver and report on SEPA's	0	+	0	++	+	0	0	+	++	0	0	0	+	+

risk-based soil compliance monitoring on regulated activities that impact on soil.															
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															+
Comments – This basket of actions will likely make a positive contribution to many of the objectives, but most specifically in relation to land, water, biodiversity and human health. The soil compliance monitoring strategy will likely have more specific significant positive effects for soil quality and protection of human health.															
An Influential Authority on the Environment															
Support the Scottish Government in the development and implementation of the Scottish Soil Strategy and EU Soil Framework Directive	0	+	0	++	++	+	+	+	++	0	0	0	+	+	++
Provide advice on land quality, including land management, climate change and conservation to Scottish Government and all other key stakeholders	0	+	0	+	+	0	0	+	+	0	0	0	0	+	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															+
Comments – The support SEPA provides to Scottish Govt in implementing the Soil Strategy and Soils Directive will likely have very significant effects for soil, contaminated land and protection of human health. These legislative and policy drivers will have a profound effect on Scotland's soil resource and SEPA's influence over this is vital.															
Better Regulation															
Implement the Diffuse Pollution Regulations	0	++	0	++	+	0	0	+	+	0	0	0	+	+	
Assist in the development and implementation of Scottish Environmental and Rural Services project and engage in the Scotland Rural Development Programme	0	+	0	+	+	0	0	+	+	0	0	0	+	+	
SUMMARY - THIS ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															+

Comments – These actions will have specific benefits for soil and water as it aims to reduce the level of diffuse pollution from sources such as agriculture and urban development. There may also be wider benefits arising from reduced diffuse pollution for other objectives such as biodiversity and human health. More integrated approaches to environmental protection via the SRDP, SEARs will also make a positive contribution as such approaches may lead to better protection of the environment.															
How Will We Do This ?															
Work with partners to produce reports, gather data and raise awareness	O	o	o	+	+	o	o	+	+	o	o	o	o		
Comments - This action is orientated towards enhancing SEPA's collection and analysis of data on land and soil. Accordingly, it is likely to make only an indirect (and therefore minor) contribution to most of the objectives. It will, however, allow SEPA to better understand the state of Scotland's soil environment and activities influencing its use and quality. This should make a positive contribution to the objective to protect and enhance soil quality and function. By better understanding soil issues, it may also enable SEPA to make a significant contribution to protecting human health and communities. Biodiversity may also be protected through better understanding of soil issues and pressures.														O	+
Work with the Scottish Government to provide advice on policy development and directives	o	+	o	+++	+++	+	+	+	+	o	o	o	+		+
Comments – The support SEPA provides to Scottish Govt in implementing the soil strategy and Soils Directive will likely have very significant effects for soil, contaminated land and protection of human health. These legislative and policy drivers will have a profound effect on Scotland's oil resource and SEPA's influence over this is vital.															
Work with partners to implement SEARS	o	+	o	+	+	o	o	+	+	o	o	o	?		
Comments – The SEARs initiative seeks to promote more integrated approaches to rural service delivery across a range of public sector agencies. While aimed across all environmental issues, it will make the most direct contribution to land and soil as its primary focus is the agricultural / rural land use sector. It is difficult to judge the extent to which the action will make a contribution, but it is likely that a more integrated service will make a positive contribution towards soil protection, water protection and biodiversity. As a result, an indirect but positive contribution will also likely be made towards protecting human health.															
SUMMARY OF THE LAND AND SOIL OUTCOME															
OVERALL, THIS OUTCOME WILL LIKELY MAKE A POSTIVE CONTRIBUTION TO THE ENVIRONMENTAL OUTCOMES				TIMESCALE: MEDIUM / LONG		CUMULATIVE EFFECTS ? YES, POSITIVE				MITIGATION ACTIONS REQUIRED					
SUMMARY – Scotland's soil resource is generally considered to be of reasonable quality, but it remains poorly understood in comparison with other environmental media.															
As a result of the relatively poor understanding of Scotland's soil and due to emerging policy in this area, there is a strong research theme to many of the actions under this outcome, with significant state of the environment reporting and monitoring planned. These actions although not leading to environmental effects in themselves will help SEPA to better understand the pressures being placed upon the soil environment and therefore about how to consider soils when undertaking its regulatory and other activities.															
Overall. Most of the actions included in this outcome will make a positive contribution overall to most objectives and a significant															

contribution to the soil quality and human health objectives. In addition, some actions will make significant contributions to the water and derelict land objectives. Significant initiatives such as partnership working via SEARS and supporting the Scottish Government in transposing the Soils Directive and taking forward the Scottish Soils Strategy will make a significant contribution over the long term.

There are some duplicated tasks under this outcome which could be removed or amalgamated.

APPENDIX 2 (G)

ASSESSMENT OF THE WATER OUTCOME

WATER OUTCOME	AIR	WATER		SOIL		CLIMATE		BIODIVERSITY	HEALTH & POP'N	MATERIAL ASSETS			LANDSCAPE	OVERALL	
	Contribute to improving air quality and meeting national air quality objectives ?	Contribute to protection and enhancement of waterbodies ?	Contribute to reduction of flood risk ?	Contribute to the protection of soil quality and function	Contribute to reduction in rates of contaminated and derelict land ?	Contribute to reduction in greenhouse gas emissions ?	Contribute to effective adaptation to climate change ?	Contribute to protect and enhance biodiversity ?	Contribute to protection of human health and enhancement of communities ?	Promote use of renewable resources ?	Reduce energy consumption and promote energy efficiency ?	Reduce waste and encourage reuse and recycling ?	Contribute to protect and enhance landscape ?		
A. Will the Action...															
Action															
Understanding the State of the Environment															
Lead the further development o the Scottish Water Monitoring Strategy ensuring that it assesses the full range of impacts upon the water environment	0	+	0	0	0	0	0	0	+	0	0	0	0	0	
Produce an annual report on the state of the water environment and a summary report as part of the River Basin Management Plan by 2009	0	+	+	0	0	0	0	+	+	0	0	0	0	0 +	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES														0	+
Comments – Contributions from these actions are likely to be small as they focus on data gathering, review and reporting. These will, however, help inform SEPA's understanding of the water environment which will input to better decision and policy making. RBMP milestones have been scored as having no effect as completed RBMPs is an action that is identified (and assessed) separately.														0	+
Protecting and Improving the Environment															
Deliver improvements in the condition of the water environment in urban areas (such as Glasgow) thereby maximising the direct	0	++	++	+	+	0	+	++	++	0	0	0	+	++	

environmental benefits to the people of Scotland.															
Deliver improvements in protected areas which have been identified to protect important national uses (such as drinking water sources)	0	++	+	+	0	?	0	+	+	0	?	0	+	+	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES BUT WITH UNCERTAINTIES															
<p>Comments – This basket of actions will make very positive contributions to many objectives, particularly in respect of water quality, protecting human health and biodiversity. The Glasgow SDP will make a very significant difference to enabling sustainable development in the Glasgow area and will unlock some currently derelict sites for regeneration. The focus on poor urban water environments and promoting restoration schemes will also have very direct and very significant positive effects wherever these are implemented. River Basin planning will also make a significant contribution (see action under How Will We do This). The Glasgow SDP and the two RBMPs are all subject to SEA and more detailed assessments of these initiatives will be available through the Environmental Reports on these plans., There is some uncertainty regarding the energy requirements of measures to protect the water environment – eg some abatement technologies can be very energy intensive in order to achieve high levels of environmental protection. This may conflict with the climate objectives set out in the climate change outcome. Any conflict between these objectives should be resolved as these actions are implemented (see mitigation)</p>														?	++
An Influential Authority on the Environment															
Deliver Water Framework Directive obligations by working with SEPA's advisory groups to develop River Basin Management Plans and Area Management Plans by 2009	0	++	++	+	0	?	++	++	++	?	?	0	++ / ?	++ / ?	
Deliver Floods Directive obligations by working with local authorities and Scottish Water to develop a Preliminary Flood Risk Assessment by 2011	0	+	++	+	0	0	0	0	+	+	0	0	0	+	
SUMMARY - THESE ACTIONS WILL LIKELY MAKE NO SIGNIFICANT CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES															
<p>Comments – No significant contribution recorded as these actions <i>in themselves</i> will not lead to significant effects</p>														0	
Better Regulation															

Continue to develop the CAR levels of authorisation so as to further promote a risk based approach to regulating impacts on the water environment	0	+	0	0	0	?	0	+	+	0	?	0	0	?	+	
Progressively improve the compliance by operators with the conditions of their licence.	0	+	0	0	0	?	0	+	+	0	?	0	0	?	+	
SUMMARY - THIS ACTION WILL LIKELY MAKE A POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OBJECTIVES														?	+	
Comments – As noted above, there is some uncertainty regarding the energy requirements of measures to protect the water environment – eg some abatement technologies can be very energy intensive in order to achieve high levels of environmental protection.. This may conflict with the climate objectives set out in the climate change outcome. Any conflict between these objectives should be resolved as these actions are implemented (see mitigation).														?	+	
How Will We Do This ?																
Work with partners to contribute to River Basin Management Plans	0	++	++	+	0	?	++	++	++	?	?	0	++	?	++	?
Comments – RBMPs will be the primary mechanism for planning for the protection and enhancement of Scotland's waterbodies from 2009. Although the action to work in partnership to prepare the RBMP will not make a significant contribution to any of the objectives, the RBMP itself and the Programme of Measures it contains will. The draft RBMP due to be published in December 2008 will be subject to a separate Environmental Report which will be published alongside. Although the RBMP has yet to be drafted, it is likely that it will make a significant contribution to the protection of water status, flooding, climate change adaptation (in respect of water issues), biodiversity (as water quality is measured by "ecological status" and the protection of human health (eg via protection of drinking water and bathing waters). A question mark is recorded for greenhouse gas emissions and for reducing energy use as some water pollution abatement processes may be high energy users and therefore may increase the amount of emissions. Further, a question mark is also recorded for use of renewable energy as the RBMP may have effects on hydro based renewables development. These issues will be considered in SEA of the RBMP and Programme of Measures. Landscape has the potential to benefit from catchment based planning for water management, but there is also a question mark about the effects of some of the measures.														++	?	
Review licences of activities which cause water impacts – work with partners to deliver reductions in diffuse pollution	0	++	+	++	0	0	0	+	+	0	0	0	?	++	++	
Comments – Review process likely to be positive for both water and land as focuses on diffuse pollution.														++	++	
Apply restoration powers	0	++	+	0	0	0	0	+	+	0	0	0	+	+	+	
Comments – Although unclear what this may cover exactly, the ability to require restoration of waterbodies where appropriate under the Water Framework Directive will make positive contributions to water quality where such powers are applied. This may also benefit biodiversity and landscape where waterbodies are restored to good														+	+	

ecological status.															
Apply authorisations / work with partners to prevent deterioration of waterbodies	0	++	++	0	0	0	0	++	++	0	0	0	+	++	0
Comments – This is a core part of SEPA’s work to implement the water framework directive and is aimed directly at protecting and enhancing water quality through a combination of regulation and partnership working. Accordingly, it will make a significant contribution to protecting water quality, addressing flood risk, enhancing biodiversity and protecting human health.															
Promote Scottish Water investment on improvements in sewers	0	++	++	+	+	?	?	+	++	0	?	0	0	++	?
Comments – This action will likely deliver improvements to Scotland’s sewerage system which will likely have significant benefits for water and flooding objectives as well as for the protection of human health. In addition, investment in the system will enable new development which may assist regeneration of derelict or contaminated land. Improving the system will likely result in development of new waste water treatment facilities, which may increase energy use and emissions, although the extent is unclear.															

SUMMARY OF THE WATER OUTCOME

OVERALL, THIS OUTCOME WILL LIKELY MAKE A SIGNIFICANT POSITIVE CONTRIBUTION TO THE ENVIRONMENTAL OUTCOMES	TIMESCALE: MEDIUM / LONG	CUMULATIVE EFFECTS ? YES, POSITIVE	MITIGATION ACTIONS REQUIRED
<p>SUMMARY – Water quality in Scotland is generally good and has been improving, largely due to a reduction in point source pollution. Challenges do, however remain, particularly with respect to poor urban water quality, polluted run off from roads and from rural uses of land, demand for water for drinking and for commercial uses and the effects of climate change on water quality and river flows. SEPA is responsible for protecting the water environment in a manner which promotes sustainable water use.</p> <p>Accordingly, the actions under this outcome have a wide range of challenges to address and this Environmental Report has found that in most cases the actions will make significant contribution to the protection of water quality and, therefore, to the protection of human health. Of particular importance are those actions that focus on developing sewerage capacity, on enhancement of poor quality waterbodies and on ensuring compliance with water environment legislation and licences. The completion and implementation of the River Basin Management Plans will be a particularly important way of bringing many of these actions together in a co-ordinated way and should have a very significant role in contributing to a wide range of the SEA objectives, including biodiversity, landscape and flood risk as well as water quality and human health.</p> <p>The Glasgow Strategic Drainage Plan will have significant effects in terms of improving water quality and enabling the release of new areas for development which will enhance ability to regenerate parts of the city. This plan is being subject to a SEA separately and the specific effects arising from this action are recorded there.</p> <p>As with other actions under other outcomes, there is a strong research theme, with significant state of the environment reporting and monitoring planned. These actions although not leading to environmental effects in themselves will help SEPA to better understand the pressures being placed upon the water environment and to consider this when undertaking its regulatory and other activities.</p>			<p>(a) No potential adverse effects identified, although it would be useful to be vigilant regarding possible conflicts between some of the actions in this outcome associated with regulating emissions to water and those under the climate outcome seeking to ensure that regulatory activities do not compromise climate objectives. See also mitigation for the climate outcome)</p> <p>(b) Clarification of the intention of the action to “apply restoration powers”.</p>

APPENDIX 3 – OUTCOME OF SCOPING

In August 2007, SEPA consulted Scottish Natural Heritage and Historic Scotland on the proposed scope and level of detail of the assessment. This is a requirement under the Environmental Assessment (Scotland) Act 2005. The table below summarises the views expressed by these organisations and SEPA's response to it.

View Expressed	SEPA's Response
Scottish Natural Heritage	
In respect of natural heritage issues recommended that reference is also made to: <ul style="list-style-type: none"> • Natural Heritage Trends (Scotland), SNH 2001 • Natural Heritage Trends – the Seas around Scotland, SNH 2004 	Included in the assessment of other relevant plans, programmes and strategies.
Reasonably comprehensive list of the key legislation and strategies which provide a context for SEPA's activities	Noted.
We would also commend the NHF prospectus on 'Coasts and Seas' (also 2002) which relates to SEPA responsibilities for coastal and estuarine areas. Perhaps best would be to refer to all six of these national prospectuses (all 2002) which cover respectively Forests and Woodlands, Hills and Moors, Coasts and Seas, Settlements, Farmland, and Fresh Waters. Each has some bearing on SEPA activity; for example the Settlements prospectus on the role of sustainable urban drainage in sustainable settlements.	Included in the assessment of other relevant plans, programmes and strategies.
Under the 'Soil' heading we suggest that the Prevention of Environmental Pollution from Agricultural Activity code should be listed as it is now so central to the control of diffuse pollution.	Included in the assessment of other relevant plans, programmes and strategies.
Under the 'Water' heading we recommend inclusion of <ul style="list-style-type: none"> SPP7 Flooding National Flooding Framework Strategic Framework for Scottish Freshwater Fisheries (current consultation) A range of legislation relating to flooding eg the Flood Protection Act 1961 and Coast Protection Act 1949 may also be relevant in the responsibilities they set out, dependent on the actual plan content.	Included in the assessment of other relevant plans, programmes and strategies.
Advised that landscape should be scoped 'in' rather than 'out', though clearly the extent of appraisal against this factor will be is dependent on the activities featuring in the Plan.	Landscape has been assessed in the environmental assessment
Proposed approach is a very high level assessment. It is likely to be helpful in the comments column to include some detail as to which of the activities under that checklist heading lead to the impacts noted, and to highlight where different activities may lead to different effects.	Assessment has been refined since scoping to provide more detailed assessment of activities.
Suggest that as part of considering whether the Plan will protect and enhance biodiversity, you should consider specifically whether the proposals of the Plan will be such as to provide protection for Natura sites and SSSIs in so far as these might be adversely affected in the absence of action by SEPA.	The alternatives do assess effects of SEPA not preparing a corporate plan. Effects of not undertaking an action have not been included as many actions are required by legislation..
Any planned activities being likely to have a significant effect on a Natura site then the Environmental Report should include an appropriate assessment of these effects under Section 48(1) of the Habitats Regulations 1994 as amended.	There are no activities in the Corporate Plan that are likely to have significant effects on a Natura site.
It will be important to clarify whether the significant effects of an activity are likely to result from an individual instance of that activity as well as cumulatively from repeated instances of the activity; or if the significance of the effects only results from repeated activity.	A section outlining potential for cumulative effects is included in the assessment matrices.
We suggest that for a high level plan like this, it would be valuable to flag up any environmental issues which it will be important to address in environmental assessment of lower level plans or project EIAs.	This is included in the mitigation chapter (5)
Content with proposed six week consultation period.	Noted.
Historic Scotland	
Content that historic environment has been scoped out of the assessment	Historic environment has not been included within the scope of the assessment.
Content with proposed six week consultation period.	Noted.

