



Strategic Environment Assessment Environment Report Non-technical Summary for the Perth and Kinross Draft Waste Management Plan



What is this document?

This document provides a non-technical summary of the results of the Strategic Environmental Assessment (SEA) of Perth & Kinross Council's draft Perth and Kinross Waste Management Plan (WMP) which is available at www.pkc.gov.uk/wasteplan

The summary has been designed to help our consultees, including residents of Perth and Kinross and other interested stakeholders to easily understand the findings of the assessment. The detailed results are presented in the full Environment Report which can be found at www.pkc.gov.uk/wasteplan

Background to the Waste Management Plan

The purpose of the Perth and Kinross Council Waste Management Plan is to provide clear strategic direction for municipal waste management in Perth & Kinross. The Plan will be used to guide future decision-making and resource allocation by Perth & Kinross Council.

This Plan highlights current arrangements for waste management within Perth and Kinross and sets out the integrated actions required for the collection, recycling, recovery and disposal of municipal waste, which will be required for Perth & Kinross Council to move towards the Scottish Government's 'Vision for Zero Waste'.

Implementation of the Plan will contribute to Perth & Kinross Council's corporate vision, aims and objectives and ensure systems for municipal waste management are developed that will encourage efficient use of resources and minimise the environmental impact of waste at an acceptable cost.

The focus of the Plan is on municipal waste management (i.e. waste collected by the Council), this reflects priorities and targets set for local authorities by the Scottish Government. However the Plan also reviews the management of non-municipal wastes in Perth and Kinross.

What is SEA and how is it relevant to me?

“An assessment of the effects on the environment (including health and well-being) of a plan, programme or strategy (PPS). It is also an opportunity to avoid then mitigate adverse environmental effects and enhance environmental benefits.”

The main focus of the SEA is ensuring that environmental features (e.g. biodiversity, climate, air quality, human health, soil, material assets and water) are considered throughout development of the Plan. This ensures that the Plan is less likely to be detrimental to these features. The environmental features are considered through the SEA in two main ways-

- Initially, the SEA was used to gather information on all the environmental features in Perth and Kinross in order to predict what effects the Plan is likely to have on the environment and if they are considered “significant”.
- The second step of the SEA identified any “significant” environmental effects that the WMP may have and, if this occurs, informs decision makers of this. At that stage, decision makers can choose to amend the Plan to allow measures to be implemented that would reduce the harmful effects of the Plan. The final outcome of the Plan should produce minimum harm to the environment and maximise the positive benefits to the environment.


The SEA process is also about making the planning process transparent, with the information used in environmental assessment openly available to the public. The public have an opportunity to comment on the SEA process once the environmental report is published, along with the Draft Perth and Kinross Waste Management Plan.

The environmental assessment process carried out in producing this report follows the previous two SEA processes of Screening and Scoping. Through screening, it was identified that the Perth and Kinross WMP required a full SEA and, during the scoping process, the options/alternatives and the methodology by which the environmental assessment would be completed were determined. Copies of the screening and scoping reports along with feedback from Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage (SNH) and Historic Scotland (HS) is available at www.pkc.gov.uk

Table 1 below shows the Key Facts relating to the Perth and Kinross Waste Management Plan.

Table 1. Key facts relating to Perth and Kinross Waste Management Plan

Responsible Authority	Perth & Kinross Council
Title of PPS	Perth and Kinross Waste Management Plan
Purpose of PPS	To promote and implement sustainable municipal solid waste (MSW) management policies for Perth and Kinross while minimising the overall environmental impact of waste by managing it in the most environmentally acceptable and economically efficient way through the provision and co-ordination of appropriate wastes management facilities and services.
What prompted the PPS?	<ul style="list-style-type: none"> - Previous Strategies and plans out of date - New funding arrangements - New National recycling and composting targets – Vision for a Zero Waste Scotland - Legislative changes
Subject	Waste
Summary of nature/content of PPS	Future planning for Waste Management in Perth and Kinross to 2025/26
Period Covered by PPS	2010- 2025
Frequency of Updates	Next review 2013
Area covered by PPS (km²)	5285.81
Contact Point	Erin Scott. Waste Awareness Co-ordinator, Perth & Kinross Council 01738 475243. EScott@pkc.gov.uk



What options were considered for the plan?

The following three strategic options for the Plan were assessed:

Option 1: Complete implementation of programmed schemes/projects for increasing recycling composting rate, but continue to send residual waste to landfill.

Perth & Kinross Council to complete implementation of waste initiatives/projects currently programmed up to end of 20010/11. This will include roll-out of new kerbside recycling scheme, redevelopment of Recycling Centres and expansion of Recycling Points. Perth & Kinross Council to continue monitoring and maintenance of recycling facilities and household and commercial recycling schemes up to and beyond 2025/26.

Residual waste collected by the Council to continue to be sent landfill. This will require the Council to secure long term arrangements for access to licensed landfill sites up to and beyond 2025/26.

Option 2: In addition to Option 1, secure alternative treatment/disposal of residual waste (to landfill) that will ensure Council does not exceed the landfill allowance for biodegradable waste.

Perth & Kinross Council to complete implementation of waste initiatives/projects currently programmed up to end of 20010/11 and continue the monitoring and maintenance of recycling facilities and household and commercial recycling schemes up to and beyond 2025/26.

Residual waste collected by the Council to be sent for alternative (to landfill) residual waste treatment that will ensure the Council does not exceed the landfill allowance for biodegradable waste.

Option 3: In addition to Option 1, secure alternative treatment/disposal of residual waste (to landfill) that will ensure Council does not exceed the landfill allowance for biodegradable waste and will assist the Council in achieving the Scottish Government's zero waste targets.

Perth & Kinross Council to complete implementation of waste initiatives/projects currently programmed up to end of 20010/11, and continue the monitoring and maintenance of recycling facilities and household and commercial recycling schemes up to and beyond 2025/26 and meet recycling, waste to landfill and the 25% energy recover cap of 25% by 2025.

Residual waste collected by the Council to be sent for alternative (to landfill) residual waste treatment. This will require the Council to assess the range of available residual waste treatment technologies capable of enabling Perth & Kinross Council to deal with their post-collected waste obligations up to and beyond 2025.

SEA of the Waste Management Plan

Waste management, with the exception of avoiding waste in the first place, be it the treatment of waste into a product or its eventual disposal, will always have some form of impact, however these impacts have to be taken into context – the waste has been produced therefore something needs to be done with it. The decision as to how the waste will be dealt with is dependant on many factors in addition to environmental impacts including:

- Waste types
- Tonnages
- Available funding
- Collection methods
- Technology available
- Costs
- Longevity of infrastructure
- Targets, both legal obligations and aspirational

The assessment carried out on the three options suggests the Waste Management Plan (WMP) may have a combination of both positive and negative significant impacts. Overall, the majority of impacts are positive, with efforts towards reducing waste to landfill, moving up the waste hierarchy and utilising resources to their full potential via energy recovery. However, for each of the options there are some negative and some unknown impacts on the environment.

Selecting the preferred option

Through the assessment process, both positive and negative environmental impacts were identified for all three options.

Option 1, which would entail all residual waste produced in Perth and Kinross (50% of the overall waste arisings in Perth and Kinross) still being disposed of to landfill, and consequently producing the highest volume of landfill gases, proved to have the highest negative impact on the environment, specifically under SEA topics 'Biodiversity', 'Climatic Factors' and 'Material Assets'.

Options 2 and 3 were very similar throughout all of the assessment, with Option 3 shown to have more positive environmental impacts only under SEA topics 'Climatic Factors' and 'Material Assets'.

From a strategic environmental impacts position, both Options 2 and 3 could be considered by decision makers, with the final decision taken in conjunction with all other relevant factors. However, due to Option 3 having all of the same positive impacts as Option 2, as well as an increased positive impact for Climatic Factors and Material Assets, Option 3 is considered the preferred option.

Assessment of the options

The Environment Impact Matrix was undertaken and completed by a team of Perth & Kinross Council environment experts, with advice and input from members of Waste Services, Environmental Health and the Corporate Strategic Environmental Assessment team.

A summary of the main points are presented in the table below (Table 2). The full assessment matrix can be found in Appendix 3 of the Environment Report.

Section 5.6 of the full Environment Report also identifies possible cumulative and synergistic effects.



Table 2 Environment Assessment Matrix

Symbol Key			
++ Major Positive	O No effect	-- Major negative	ST Short Term
+ Positive	? Unknown	- Negative	MT Medium term
			LT Long term

SEA Objective Perth and Kinross Waste Management Plan	Option 1	Comments	Option 2	Comments	Option 3	Comments
Biodiversity						
To protect and where possible, enhance biodiversity, flora and fauna from the impact of waste management activities.	+/- LT	<ul style="list-style-type: none"> Landfill restoration could improve biodiversity on old sites. Continued use of landfill as main disposal option and may require new land take with negative impacts on biodiversity. 	+/- LT	<ul style="list-style-type: none"> Landfill restoration could improve biodiversity on old sites. Vast reduction in the need and use of landfill in Perth and Kinross. Emissions from residual waste treatment facilities could negatively impact on biodiversity. 	+/- LT	<ul style="list-style-type: none"> Landfill restoration could improve biodiversity on old sites. Vast reduction in the need and use of landfill in Perth and Kinross. Emissions from residual waste treatment facilities could negatively impact on biodiversity.
Human Health						
To protect the living conditions, amenities and health of residents from detrimental effects of waste management activities e.g. noise, traffic, dust, littering, odour and particulates.	O	<ul style="list-style-type: none"> This option is not expected to have any significant positive or negative impacts on human health. 	+/- MT	<ul style="list-style-type: none"> While there is no conclusive evidence of negative impacts between human health and waste treatment facilities PKC are aware that there is much public concern on this subject. 	+/- MT	<ul style="list-style-type: none"> While there is no conclusive evidence of negative impacts between human health and waste treatment facilities PKC are aware that there is much public concern on this subject.



<p>To protect community and employee safety and wellbeing from waste activities and related anti-social behaviour – littering and fly-tipping.</p>	<p>+/- LT</p>	<ul style="list-style-type: none"> • With increased awareness of waste and littering issues, PKC will continue to maintain and improve the cleanliness of the area. 	<p>+/- LT</p>	<ul style="list-style-type: none"> • With increased awareness of waste and littering issues, continue to improve the cleanliness of the area. • Increasing waste collections and facilities could potentially lead to an increase in occupational health risk. 	<p>+/- LT</p>	<ul style="list-style-type: none"> • With increased awareness of waste and littering issues, PKC will continue to improve the cleanliness of the area. • Increasing waste collections and facilities could potentially lead to an increase in occupational health risk.
<p>Soil</p>						
<p>To ensure soil protection is taken into account with regard to waste management activities and as far as is practicable, prevent contamination of land.</p>	<p>+/- LT</p>	<ul style="list-style-type: none"> • Recovery of organic waste through composting – PAS 100/110 output applied to soils. • Council owned closed landfill sites remediated and restored. • May require additional landfill capacity and therefore land take. 	<p>+/- LT</p>	<ul style="list-style-type: none"> • Recovery of organic waste through composting – PAS 100/110 output applied to soils. • Council owned closed landfill sites remediated and restored. • While residual treatment facilities would require land take, would be a much smaller footprint. • Residual treatment will still produce small volume of residues that may need to be landfilled. 	<p>+/- LT</p>	<ul style="list-style-type: none"> • Recovery of organic waste through composting – PAS 100/110 output applied to soils. • Council owned closed landfill sites remediated and restored. • While residual treatment facilities would require land take would be a much smaller footprint. • Residual treatment will still produce small volume of residues that may need to be landfilled.
<p>Water</p>						
<p>To protect water courses from, and reduce adverse effects of, waste management activities.</p>	<p>O</p>	<ul style="list-style-type: none"> • No significant positive or negative impacts have been identified. 	<p>O</p>	<ul style="list-style-type: none"> • No significant positive or negative impacts have been identified. 	<p>O</p>	<ul style="list-style-type: none"> • No significant positive or negative impacts have been identified.
<p>To improve the quality of water and wastewater discharges resulting from waste management activities.</p>	<p>+/- LT</p>	<ul style="list-style-type: none"> • PKC waste management sites utilise SUDS and grey water reuse, this could be rolled out to further sites where applicable. 	<p>+/- LT</p>	<ul style="list-style-type: none"> • PKC waste management sites utilise SUDS and grey water reuse, this could be rolled out to further sites where applicable. 	<p>+/- LT</p>	<ul style="list-style-type: none"> • PKC waste management sites utilise SUDS and grey water reuse, this could be rolled out to further sites where applicable.
<p>Air</p>						
<p>To minimise adverse impacts of waste management activities on the air quality and public health.</p>	<p>?</p>	<ul style="list-style-type: none"> • No significant positive or negative impacts have been identified however there are a number of unknowns such as facility locations and type if facilities. 	<p>?</p>	<ul style="list-style-type: none"> • No significant positive or negative impacts have been identified however there are a number of unknowns such as facility locations and type if facilities. 	<p>?</p>	<ul style="list-style-type: none"> • No significant positive or negative impacts have been identified however there are a number of unknowns such as facility locations and type if facilities.



Climatic Factors					
To reduce GHG emissions from waste production and disposal.	+/- LT	<ul style="list-style-type: none"> By increasing the volume of waste collected for recycling, there will be a small reduction in waste disposed of to landfill. Half of the waste collected will still be disposed of to landfill creating GHG gases, while methane capture is undertaken at current landfill, a proportion will escape to the environment. 	+ LT	<ul style="list-style-type: none"> Would achieve significant reduction in waste to landfill therefore significant reduction in GHG production. Residual waste treatment facilities may result in the production of energy and heat without using fossil fuels. 	<ul style="list-style-type: none"> Would achieve significant reduction in waste to landfill therefore significant reduction in GHG production. Residual waste treatment facilities may result in the production of energy and heat without using fossil fuels. This option benefits from the increased recovery of recyclates.
Material assets and resource efficiency					
To maximise waste prevention, reuse, recycling and recovery rates by viewing waste as a resource.	+/- LT	<ul style="list-style-type: none"> Makes a commitment to increase recycling and composting rates. Identifies waste prevention and the need to move up the waste hierarchy. Continues to use landfill as the main waste disposal option. 	+ LT	<ul style="list-style-type: none"> Makes a commitment to increase recycling and composting rates. Identifies waste prevention and the need to move up the waste hierarchy. Reduces waste to landfill. May recover extra materials for recycling and composting. 	<ul style="list-style-type: none"> Makes a commitment to increase recycling and composting rates. Identifies waste prevention and the need to move up the waste hierarchy. Reduces waste to landfill. Would recover extra materials for recycling and composting via residual waste treatment.
To collect and/or treat waste at the nearest and appropriate stations.	?	<ul style="list-style-type: none"> Allows for the collection of materials at the kerbside or local recycling centres and points with the use of localised bulking facilities. However it is not possible to identify locations of future waste treatment facilities. 	?	<ul style="list-style-type: none"> Allows for the collection of materials at the kerbside or local recycling centres and points with the use of localised bulking facilities. However it is not possible to identify locations of future waste treatment facilities. 	<ul style="list-style-type: none"> Allows for the collection of materials at the kerbside or local recycling centres and points with the use of localised bulking facilities. However it is not possible to identify locations of future waste treatment facilities.

Mitigation and enhancement (how do we make things better?)

Proposed mitigation and enhancement measures set out in the full environmental report provide considerable scope for further avoiding, reducing and offsetting environmental effects. Where positive effects have been identified we have considered how we can enhance these and make them even better.

For each environmental topic we assessed we have identified the following mitigation and enhancement measures as seen in Table 3.

Table 3 Mitigation and enhancement measures

Biodiversity - To protect and where possible, enhance biodiversity, flora and fauna from the impact of waste management activities we will ...
<ul style="list-style-type: none"> • Ensure any facilities used by Perth & Kinross Council are run by competent operators and meet all regulatory standards.
Human Health - To protect the living conditions, amenities and health of residents from detrimental effects of waste management activities e.g. noise, traffic, dust, littering, odour and particulates and To protect employee and community safety and wellbeing from waste activities and related anti-social behaviour – littering and fly-tipping we will...
<ul style="list-style-type: none"> • Provide education and awareness to reassure residents about impacts of any waste management facilities that may be used in the future by PKC. By providing up-to-date, relevant and researched information to residents would allow them to make informed opinions. • Take account of Health and Safety standards (as per sections for occupational workers in WRAP's Scoping Report on the Health Effects of Fortnightly Collections http://www.ciwm.co.uk/mediastore/FILES/18156.pdf) • As an enhancement measure, maintain Perth and Kinross's national reputation as a clean and litter free area.
Soil - To ensure soil protection is taken into account with regard to waste management activities and as far as is practicable, prevent contamination of land we will...
<ul style="list-style-type: none"> • Ensure that any residues produced via residual waste treatment were further treated and recovered or disposed of to the correct landfill facility. <p>Our enhancement measures for soil include:</p> <ul style="list-style-type: none"> • By continuing to compost as much organic waste as possible, and producing good quality PAS 100/110 compost, allow for that compost to be applied to, and consequently improve soils in Perth and Kinross.
Water - To protect water courses from, and reduce adverse effects of, waste management activities and to improve the quality of water and wastewater discharges resulting from waste management activities we will utilise the following enhancement measures –
<ul style="list-style-type: none"> • Further roll out of sustainable urban drainage systems to additional sites. • Reuse of rainwater for vehicle cleaning.
Air - To minimise adverse impacts of waste management activities on the air quality and public health we will...
<ul style="list-style-type: none"> • Streamline vehicle movements and/or using more efficient engines and fuels. Further develop travel staff plans. • Ensure any facilities employed to treat waste from Perth and Kinross are run by competent operators who are able to undertake these duties and comply with all regulatory standards and meet any emissions targets.
Climatic Factors - To reduce GHG emissions from waste production and disposal we will...
<ul style="list-style-type: none"> • Continue to support and provide opportunities to households and businesses in Perth and Kinross to reduce their waste, thereby lessening the volume of waste going to landfill. Ensure landfill operators used

by Perth and Kinross are competent and meet all regulatory standards.

- The procurement process and service delivery plans will be developed to allow them to be flexible enough to take account of climate adaptation. Monitoring of waste operations will be carried out to identify whether extreme weather events are causing operational difficulties.

Material Assets -To maximise waste prevention, reuse, recycling and recovery rates by viewing waste as a resource and to collect and/or treat waste at the nearest and appropriate stations we will...

- Continue to support and promote waste prevention and reuse activities such as Real Nappies, bicycle repair and re-sale through the Bike Station, WRAP home composting initiatives and local furniture reuse projects.

Main Themes

The main themes which will be incorporated into the draft waste management plan are -

- Promoting the SEA objectives by utilising the objectives when developing assessment criteria for the residual waste treatment procurement exercise
- Assumed mitigation through meeting modern regulatory standards and ensuring operator competency
- Provide education and awareness to reassure residents about impacts of any waste management facilities that may be used in the future by PKC. By providing up-to-date, relevant and researched information to residents would allow them to make informed opinions.
- In terms of enhancement, Perth & Kinross Council will strive to continue to improve on existing good practice such as keeping Perth and Kinross litter free and utilising Sustainable Urban Drainage Systems and re-using water

Monitoring and Adoption

Monitoring is an important element of our SEA as it enables the results of the environmental assessment to be compared with the environmental effects that occur as a result of the implementation of the Waste Management Plan. If unforeseen effects occur then remedial action will be taken. A description of the monitoring programme has been included in the Environmental Report and this includes proposed indicators and suggested responsibility for monitoring the environmental effects of adopting the Plan.

The monitoring programme will be amended to take account of any consultees comments. A finalised monitoring programme will be included in the SEA Post-Adoption Statement, after the Waste Management Plan has been adopted.

Consultation and how to comment

Perth & Kinross Council will be undertaking a wide ranging consultation to gain the views of all our stakeholders on the results of the SEA as well as the draft Waste Management Plan.

Consultation events will provide forums for all interested parties and individuals to express their views on how the development of planning guidance for marine energy development should be progressed.

Dates and venues for the consultation events are to be confirmed but are likely to take place between 14th December and 22nd December. Confirmed dates will be detailed on www.pkc.gov.uk/wasteplan

The consultation will focus on the following topics:

Focus of the Consultation:

- The results of the Environmental Report
- How best to avoid, reduce or offset environmental effects and enhance positive effects
- The monitoring of the Waste Management Plan
- Issues associated with the preparation and delivery of the waste management plan and how these affect the environment

The consultation period for the SEA is between 15th December 2009 and 29th January 2010. The report will be available, along with the draft Perth and Kinross Waste Management Plan on the Perth & Kinross Council website (www.pkc.gov.uk/wastemanagementplan) and hardcopies available on request, phone 01738 476476, email wasteplan@pkc.gov.uk or visit Council offices at 2 High Street, Perth and Pullar House, Kinnoull Street, Perth.

Next Steps

Table 4 lists future milestones in the development of the Waste Management Plan and its SEA, and the dates when these are expected to be completed.

Table 4. Anticipated PPS-making and SEA milestones


Expected date	Milestone
15 December 2009	Publication of the Environmental Report. Consultation commences
29 January 2010	Consultation ends
Spring 2010	Publication of the Waste Management Plan
2010/2011	Adoption of the final Waste Management Plan Publication of Post-Adoption SEA Statement, which will: <ul style="list-style-type: none">• Highlight how the SEA and consultation responses have influenced the development of the Waste Management Plan.• State the framework for monitoring the environmental effects of the Waste Management Plan to (a) identify any unforeseen adverse effects at an early stage; and (b) undertake appropriate remedial action

Further information

Further information on the SEA can be found at: www.pkc.gov.uk/wastemanagementplan

All comments on the Environmental Report and the Waste Management Plan should be sent to:

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Perth and Kinross Waste Management Plan
Perth & Kinross Council
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