

Post-adoption Statement for Aberdeen Adapts

PART 1

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PART 2

A Post-adoption Statement for the plan entitled


Aberdeen Adapts: Climate Adaptation Framework

The Responsible Authority is:

Aberdeen City Council (ACC) leading on behalf of city stakeholders

PART 3

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INTRODUCTION

This document referred to here as the Post-Adoption SEA Statement) has been prepared in accordance with Section 18 of the Environmental Assessment (Scotland) Act 2005.

AVAILABILITY OF DOCUMENTS

Website

The full PPS as adopted, along with the Environmental Report and Post-Adoption SEA Statement are

available on the Responsible Authority's website at:

<http://www.aberdeencity.gov.uk/>

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Key Facts

Name of Responsible Authority	Aberdeen City Council (ACC) leading on behalf of city stakeholders.
Title of the PPS	Aberdeen Adapts – Climate Adaptation Framework
What Prompted the PPS	Aberdeen Adapts seeks to improve the resilience of the city to climate impacts, understanding the impact of climate change on buildings, infrastructure, services, the natural environment, people and the economy. The development of a Framework also helps participating public sector partners to ensure compliance with Public Bodies Duties and climate reporting requirements, within the Climate Change Act (Scotland) 2009, aside from other topic specific statute.
Subject	Climate adaptation
Period Covered by the PPS	Aberdeen Adapts sets goals to 2050. Implementation programmes will be developed every 5 years.
Frequency of Updates	Aberdeen Adapts will be reviewed every 5 years. This is to align with updates to the UK Climate Risk Assessment, Climate Ready Scotland; the Scottish Adaptation programme and UK Climate Projections. Progress reports will be produced every year to align with Public Bodies reporting requirements.
Area covered by the PPS	Aberdeen City
Purpose and/or objectives of the PPS	Aberdeen Adapts is a key document that sets a long-term framework for collaborative action, to strengthen Aberdeen's capacity to prepare for, respond to and manage the impacts of climate change.
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1. Strategic Environmental Assessment Process

Aberdeen City Council has prepared and carried out the process of strategic environmental assessment (SEA) for Aberdeen Adapts: Climate Adaptation Framework, as required under the Environmental Assessment (Scotland) Act 2005. The process includes the following activities:

1. Considering the views of the Scottish Environment Protection Agency, NatureScot (formerly Scottish Natural Heritage) and Historic Environment Scotland during the screening process, regarding aspects of Aberdeen Adapts likely to have significant positive or negative effects on the environment and to determine whether full SEA was required.
2. Taking into account the views of the Scottish Environment Protection Agency, Nature Scot and Historic Environment Scotland about the scope and level of detail that was appropriate for the environmental report.
3. Preparing an environmental report on the likely significant effects on the environment of Aberdeen Adapts: Climate Adaptation Framework, including:-
 - The baseline data relating to the current state of the environment including the evolution of the environment without Aberdeen Adapts, as well as identification of areas likely to be significantly affected;
 - Links between the plan and other relevant policies, plans, programmes and environmental objectives;
 - Existing environmental problems affecting the plan;
 - The plan's likely significant effects on the environment (positive and negative);
 - The mitigation measures envisaged;
 - An outline of the reasons for selecting the alternatives chosen;
 - Monitoring measures to ensure that any unforeseen environmental effects will be identified allowing for appropriate remedial action to be taken.
4. Consulting on the environmental report.
5. Taking into account the environmental report and the results of consultation in making final decisions regarding Aberdeen Adapts.
6. Committing to monitoring the significant environmental effects of the implementation of the Aberdeen Adapts to identify any unforeseen adverse significant environmental effects and to taking appropriate remedial action.

The findings were used to inform the Aberdeen Adapts Framework. Measures to work with partners to adapt to climate change and enhance the positive effects of Aberdeen Adapts, include:

- Reducing fragmentation; and protecting and enhancing biodiversity.
- Reducing emissions during any project development and protecting air quality.
- Making efficient use of water and protecting the water environment.
- Protecting soil health and stability
- Protecting and enhancing valued landscapes, their character and setting.
- Minimising risks to people in Aberdeen and their health.
- Protecting the historic environment.

2. Effects of the Environmental Considerations on the Plan

Table 2.1 summarises how environmental considerations have been integrated into Aberdeen Adapts: Climate Adaptation Framework. This includes the measures that were taken to offset adverse effects or enhance positive effects, details of how the cumulative and other indirect effects of Aberdeen Adapts have been considered and how these protective objectives were taken into account in the framework in accordance with Section 18 (3)(a-b).

Table 2.1: Environmental Considerations

Environmental Problems relevant to Aberdeen Adapts

SEA topics	Environmental Problem	Integrated into the Plan?	How integrated/Taken into Account or Reason for not being Taken into Account
Climatic factors	<ul style="list-style-type: none"> • An increase in the frequency and severity of pluvial, fluvial, coastal and groundwater flood events. • An increase in erosion, landslip and landslide. Coastal erosion, especially in soft coastal areas for example north of the mouth of the Don. • Warmer temperatures resulting in an increase in pests and disease; and impacting air quality and health. • A reduction in summer rainfall, presenting low flows in water courses and affecting water quality. 	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts highlights the risks affecting the city from climate change and is focussed on goals and actions to adapt to the impacts of climate change. • It includes priorities for addressing climate change in the planning, build, maintenance and protection of city buildings, infrastructure and heritage. To adapt through nature, for a healthy, protected and productive natural environment. For encouraging healthy and empowered communities and strong, robust businesses, with the capacity and knowledge to adapt. To increase capacity to adapt, developing long term collaborative working between the public, private and community sectors. As well as to increase awareness and understanding of the climate impacts for Aberdeen and ways local communities, businesses and organisations can adapt. • Aberdeen Adapts includes action to encourage research programmes to address adaptation gaps and build knowledge of adaptation measures that work for Aberdeen. • In addition, it includes the action to establish a resource of information on climate risks, impacts actions for the city and wider region.
Air quality	<ul style="list-style-type: none"> • Increasing levels of NO2 and PM10 will result in poorer air quality in Aberdeen. • Higher temperatures may result in increased mortality. • Air quality is influenced by weather conditions, therefore warmer temperatures will result in a reduction in air quality. • Potential impact of climate change on air 	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts includes a goal for managing flooding, shade and shelter through the expansion of blue and green infrastructure. This recognises that it can help to improve air quality and reduce pollution. • Under a goal of prioritising health and wellbeing it includes an action to support ongoing monitoring and actions to improve city air quality and measures to integrate climate risk in air quality planning. In addition, it includes an action to inform health and social care providers on climate impacts for Aberdeen, to support local adaptation in this sector.

	quality in the city, especially in the 3 Air Quality Management Areas in the city.		<ul style="list-style-type: none"> Aberdeen Adapts applies air quality policy from the local development plan which ensures that proposed developments which are likely to have negative effects on air quality will not be permitted unless measures to mitigate the impact of air pollutants can be agreed.
Biodiversity (flora and fauna)	<ul style="list-style-type: none"> Potential loss of habitats from flooding and erosion. Potential loss of semi-natural habitats, greenspace and wildlife to developments and other land uses Potential decline in species population, loss of species and changes in wildlife distribution and numbers. Potential increase in pests and diseases. Potential wildlife disturbance and habitat degradation during the development of blue/green infrastructure at some sites. City trees will be vulnerable to severe weather events, with wetter ground affecting stability during storms; and an increased risk of wildfire. Pressure on the River Dee SAC, through low flows and from reduced rainfall. Pressure on European Protected Species. 	Yes	<ul style="list-style-type: none"> Aberdeen Adapts includes a goal of space for nature that covering monitoring and improving green space connections. It includes actions to: assess the vulnerability of Aberdeen's natural environment to climate change and establish processes to monitor change; and to review and strengthen local plans, policy and strategy, as more is learned about climate impacts for the natural environment. It includes an action to protect and expand the Green Space Network and increase naturalised green spaces in the city, to improve habitat connections. In addition, it includes action to integrate climate resilience in the management of Aberdeen's parks, gardens and greenspaces; and to promote partnership work to reduce the risk of wildfire. Aberdeen Adapts includes a goal for healthy trees and woodlands which covers and action on the health of city trees and woodlands and an action to expand Aberdeen's tree coverage, planting resilient species. In addition, it includes a goal for protecting watercourses and coastline covering actions to slow down the flow of water and to reduce the risk of erosion. Aberdeen Adapts includes a goal for managing flooding, shade and shelter which covers actions to expand the use of blue-green infrastructure which can enhance biodiversity, reduce fragmentation and encourage natural flood management.
Soil	<ul style="list-style-type: none"> Potential loss, erosion and a reduction in soil quality, as a result of heavy rainfall and flooding. Soil compaction and soil sealing from development, reducing the ability of soil to absorb heavy rainfall and pollutants. Potential reduction in soil function, with impacts for biodiversity and food growing. Soil contamination. Loss of carbon from soil, due to development. 	Yes	<ul style="list-style-type: none"> Aberdeen Adapts includes a goal for productive soils and an action to encourage management and protection for soil during planning, development and construction processes, to maintain soil function, quality and stability. This acknowledges the risks to soil quality, soil function and soil stability. Aberdeen Adapts, includes a goal for managing flooding, shade and shelter to promote use of green blue infrastructure to filter and slow down run off during heavy rainfall and reduce the risks of diffuse pollution to watercourses. It aims to encourage uptake of grey and green sustainable urban drainage systems (SUDs), swales and raingardens to manage run off during heavy rainfall.

			<ul style="list-style-type: none"> • Aberdeen Adapts aims to encourage greater use of porous and permeable surfaces, as well as the sustainable development of city brownfield sites to help to reduce soil compaction.
Water	<ul style="list-style-type: none"> • Projections for an increase in the severity and frequency of heavy rainfall result in flooding, sediment and diffuse pollutants entering water courses affecting water quality and the health of invertebrates and fish. • Potential low flows in water courses, will be a risk to freshwater ecosystems and species (Atlantic Salmon, Brown Trout, fresh water pearl mussels). • Increased need to abstract water for new development. • Potential increase in incidences of algal bloom as a result of warmer temperatures and low river flows and invasive non native species. 	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts recognises that strong catchment planning can help protect water quality and quantity, as well as reduce impacts from climate change including, temperature, flooding and pollution on aquatic life, especially on the River Dee (SAC). • Aberdeen Adapts includes a goal for protecting watercourses and coastline which covers actions to: investigate opportunities to re-introduce meanders to watercourses, where appropriate, to slow down water flow; and to encourage sustainable river bank management to reduce erosion. • Aberdeen Adapts, includes a goal for managing flooding, shade and shelter to promote use of green blue infrastructure to filter and slow down run off during heavy rainfall and reduce the risks of diffuse pollution to watercourses. It aims to encourage uptake of grey and green sustainable urban drainage systems (SUDs), swales and raingardens to manage run off during heavy rainfall. It adopts Aberdeen Local Development Plan policies concerning SUDs, as well as drainage and flood management. • It includes a goal for healthy trees and woodlands which aims to increase uptake of measures such as wet woodland in river catchments and the use of riparian woodland buffers. • Aberdeen Adapts goal to provide space for nature includes supporting work to tackle invasive non-native species. • Aberdeen Adapts includes a goal for secure utilities and communications which encourage sustainable water use in homes and businesses, to protect water quality and availability. It adopts Aberdeen Local Development Plan policies for water-saving technologies.
Landscape	<ul style="list-style-type: none"> • Potential increase in the frequency and severity of severe weather events could cause erosion, flooding and landslip. This could result in the erosion of landscape features, as well as changes to land form, land use, land cover and setting. • New development, results in a reduction in greenspace able to act as natural flood management. 	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts includes a goal for managing flooding, shade and shelter which covers actions to expand the use of blue-green infrastructure. • It includes an action to protect and expand Aberdeen's Green Space Network and increase naturalised green spaces in the city, to improve habitat connections, under the goal of space for nature. • In addition it seeks to protect landscapes through assessing the vulnerability of Aberdeen's natural environment and integrating resilience in the management of greenspace. • Aberdeen Adapts is a high level framework that will seek to improve the

			visual amenity and landscape character of areas consistent with the LDP policy.
Population	<ul style="list-style-type: none"> • People will be vulnerable to an increase in the frequency and severity of severe weather. • A projected growth in city population. • Changing city demographics, including a projected growth of 45% in over 65s by 2039. • Climate impacts may be greater for some socio-economic groups as they may be less able to respond to and adapt to climate change. 	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts includes a goal for Prepared Communities and an action for use of Climate Just mapping to target action and reduce the risk of communities being disadvantaged in being able to prepare and respond to climate change. Understanding the need to assess where people may be vulnerable to climate change and develop actions to help people prepare and respond. • It aims to develop a platform of support, information and learning, to build community capacity to prepare for severe weather. • As well as work with Community Planning Partners and local communities to increase the number of community resilience plans in place in Aberdeen.
Human Health	<ul style="list-style-type: none"> • Potential impacts from climate change on the physical and mental health, as well as the safety of local people. This includes impacts from flooding, erosion, damp, air pollution, temperature increase and disease. • People with pre-existing health problems may be more likely to experience detrimental physical impacts. • Lack of provision of walking and cycling as a means of transport and for informal recreation. 	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts goals include prioritising health and wellbeing acknowledging that climate change can affect health. The Framework aims to reduce the impacts of climate change on the safety, health & wellbeing of local people. • This should take into account the needs of all sectors of society, • Actions include embedding climate change in health and social care planning and in business continuity arrangements. • Actions include informing health and social care providers on climate impacts for Aberdeen, to support local adaptation in this sector which aim to increase understanding of the health impacts of climate change. Areas included are a need to cascade information on the health impacts from climate change relevant to the city. • The Framework also promotes the development of blue green infrastructure understanding; this has benefits for health and wellbeing, as well as wider benefits.
Cultural Heritage	<ul style="list-style-type: none"> • An increase in flooding and water penetration may result in irreplaceable damage, degradation and/or erosion of heritage and archaeological sites. • Historic assets and archaeological sites may be vulnerable to land use management change. • Cultural assets currently in disrepair or not regularly maintained could be vulnerable to a changing climate. 	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts includes goals for protecting buildings and historic assets and actions covering maintenance of historic and cultural assets to improve the resilience to a changing climate. • Actions in Aberdeen Adapts aim to assess the vulnerability of city heritage sites, and places of local importance and protect those at risk. • It includes the need to identify ways to adapt city heritage, in a sympathetic way and address skills gaps in the care and repair of traditional buildings, to help conserve local history without loss of character. • It includes the need to refer to appropriate guidance on adapting historic

			<p>buildings including Historic Environment Scotland's Climate Change impacts Guide for the Historic Environment.</p> <ul style="list-style-type: none"> • Aberdeen Adapts is a collaborative process which engaged with stakeholders including; Aberdeen City Council officers, Aberdeen Heritage Trust, Archaeology Unit and Historic Environment Scotland on actions to protect cultural heritage. • Aberdeen Adapts includes actions for the care and protection of traditional buildings and assets.
Material Assets	<ul style="list-style-type: none"> • An increase in heavy rainfall and flooding may cause damage to buildings and erosion of infrastructure. • Increased summer temperatures and a reduction in summer rainfall will increase need for water management and efficiency measures in buildings and demand for cooling. 	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts includes goals for protecting buildings and historic assets, as well as responsive transport and infrastructure. This in turn aims to encourage sustainable use and management of material assets. • Aberdeen Adapts seeks to build understanding of the impact of climate change on buildings and infrastructure. Actions include assessing the vulnerability of Aberdeen's buildings and heritage to climate change. • Actions under a goal for secure utilities and communications include promoting natural solutions to the cooling and ventilation of buildings vulnerable to heat in Aberdeen. • Actions cover integrating climate change into the design, planning, upgrade maintenance and management of local transport networks.

3. Effects of the Environmental Report on Aberdeen Adapts

Table 3.1 summarises how the Environmental Report has been taken into account within Aberdeen Adapts: Aberdeen’s Climate Adaptation Framework in accordance with Section 18 (3) (a-b) of the Environmental Assessment (Scotland) Act 2005. This table describes how the Environmental Report has been taken into account in the Framework and what specific changes were made, particularly where significant negative and cumulative effects were identified. It also highlights when the mitigation is to be considered if there is the need for a more detailed assessment at a later stage.

Table 3.1: Environmental Report

SEA Topic	Findings from Environmental Report	Integrated into the Plan?	How integrated/Taken into Account or Reason for not being Taken into Account	When should mitigation be considered?
<p>Air and Climatic factors</p>	<p>We found that the effects of Aberdeen Adapts on the environment are significantly positive for air and for climatic factors. Aberdeen Adapts will put in place long-term cumulative measures to adapt the city to climate change; and address impacts from flooding, erosion, heavy rainfall, rise in sea level, storm surge; heatwave, drought and storms.</p> <p>Due to the nature of some of these impacts and time to establish approaches there may be a time-lag effect. Climate resilience for land, coastline, waterways and people will have cross boundary implications. The incremental installation of adaptation measures would have cumulative positive benefits.</p> <p>In the longer term, the development of blue green infrastructure will have a cumulative positive impact on air quality through time crowding and nibbling, especially in Air Quality Management Areas in the city. Measures to increase the resilience of transport infrastructure will reduce traffic congestion. The development of natural cooling measures; and the promotion of property protection and maintenance measures will have an indirect positive effect on air quality.</p> <p>Depending on the timing of some individual project developments, there is the possibility that dust nuisance will be generated, with potential cross-</p>	<p>Yes</p>	<p>The development and implementation of the Framework will enhance positive effects, building on and replicating nature conservation, transport, open space, flood management and planning objectives to maximise opportunities to increase resilience to climate impacts. In support of SEA preferred options, implementation of Aberdeen Adapts will:</p> <ul style="list-style-type: none"> • Encourage the development of blue/ green infrastructure. Where possible target Air Quality Management Areas to support the Air Quality Management Plan. • Develop actions to increase the community resilience; material assets and the natural environment; reducing the risk of coastal erosion and to banks of river courses; and support flood management. • Aberdeen Adapts will apply air quality policy to avoid impacts. Planning applications which have the potential to have a detrimental impact on air quality will not be permitted unless measures to mitigate the impact of air pollutants can be agreed. 	<p>When projects are being planned, developed and implemented by partners.</p> <p>Consider throughout Implementation Plan phases.</p>

	boundary effects but it is not considered that there will be significant and indirect air pollution issues for Aberdeen arising from Aberdeen Adapts.			
Water	<p>The overall goals and priorities of Aberdeen Adapts will improve water quality, promote efficient use of water and reduce risks of water pollution of the general water environment and any underground water reserves and aquifers through time-crowding effects, cross boundary and time-lag effects.</p> <p>If Aberdeen Adapts did not go ahead, there will be cumulative, long-term effects with a reduction in water quality through nibbling effects.</p>	Yes	<p>The development and implementation of Aberdeen Adapts will enhance water efficiency, encouraging measures such as rainwater harvesting. These measures should support the Aberdeen Local Development Plan and the Strategic Development Plan.</p> <p>Aberdeen Adapts will enhance the development of natural flood management measures and will seek to re-naturalise and restore areas to a natural hydrological response. Necessary permissions will be sought through planning and Controlled Activities Regulations, as required.</p> <p>Aberdeen Adapts will develop, encourage and promote appropriate measures to reduce risk of run-off.</p> <p>Aberdeen Adapts will encourage naturalised watercourses with riparian buffer strips. Where there are existing culverts, opportunities to reinstate them as open watercourses will be explored, which would enhance their biodiversity value. Applying policy presumption against excessive engineering or culverting, with natural treatment preferred, where possible.</p> <p>Aberdeen Adapts will encourage Environmental Impact Assessment, Drainage Impact Assessment and Flood Risk Assessment, for projects as required.</p> <p>Mitigation measures</p> <ul style="list-style-type: none"> • Development of flood management measures and actions to reduce run off and manage flood risk will have positive effects on water management. • Aberdeen Adapts includes goals and actions for the development of water efficiency measures. • It includes actions to protect and conserve 	<p>When projects are being planned, developed and implemented by partners.</p> <p>Consider throughout Implementation Plan phases.</p>

			<p>waterquality, availability and the habitats they provide will have positive effects on water quality and quantity, including the River Dee SAC.</p> <ul style="list-style-type: none"> • Changes to timescales for action may be amended to protect water quality where data from SEPA and NatureScot indicate potential pollution in the Dee or when data indicates that there has been an increase in peak or low flow incidents. 	
Soil	<p>The overall assessment is positive and negative. Potential for soil sealing and compaction in the construction of measures to protect the built environment, such as flood protection schemes, as well as in the construction of some forms of blue-green infrastructure to protect the natural environment. It should be noted, however, any negative impacts would be assessed on a case by case basis.</p>	Yes	<ul style="list-style-type: none"> • Those undertaking any works on projects for Aberdeen Adapts will be required to ensure that every effort is made to minimise the risk of soil sealing, compaction and pollution resulting from such works. • Implementation of the Framework will enhance positive effects developing measures to strengthen policy, improve understanding and protect soil function and quality. This includes the use of permeable/ porous surfaces. • Aberdeen Adapts will develop blue-green infrastructure which can reduce soil saturation and filter pollutants benefiting soil health. 	<p>When projects are being planned, developed and implemented by partners.</p> <p>Consider throughout Implementation Plan phases.</p>
Biodiversity	<p>There are significant positive effects and some negative. Actions to protect biodiversity from climate change may also have positive secondary effects for air, health and soil.</p> <p>The development of some flood alleviation projects and blue-green infrastructure may have a cumulative impact on biodiversity and could result in fragmentation of habitats. Cumulatively and over a long-term time frame Aberdeen Adapts would protect biodiversity and habitats from the effects of climate change by monitoring for pests, disease and invasive non-native species; improving greenspace; considering resilience in the management of parks and greenspaces; increasing BGI; measures to improve connectivity; managing resources</p>	Yes	<ul style="list-style-type: none"> • Enhance the positive effects, through measures to protect habitats and wildlife, develop blue-green infrastructure and natural flood management schemes • Avoid fragmentation through application of the Green Space Network Policy to maintain habitat links and connections. This measure is consistent with the mitigation identified by the Strategic Development Plan and Local Development Plan. • Carry out Habitat Regulations Appraisal (HRA) where a proposal is likely to affect Natura 2000 sites, which will outline site specific mitigation measures. • Aberdeen Adapts will seek to ensure blue-green 	<p>When projects are being planned, developed and implemented by partners.</p> <p>Consider throughout Implementation Plan phases.</p>

	responsibly; and encourage tree planting and protection. This will have cumulative positive effects. In order to fulfil Aberdeen Adapts' goals some projects may directly affect habitats and species through fragmentation or disturbance. There may also be direct and indirect cross boundary impacts on mobile species and time lag factors for biodiversity.		<p>infrastructure schemes are appropriate to habitats, referring to habitat data, carrying out HRA, where relevant. Landscape Character Assessment and Green Space Network Policy will be applied.</p> <ul style="list-style-type: none"> • Ecological Assessments to be completed where the development of a flood scheme or other adaptation measure is likely to affect a designated site or protected species, with specific mitigation measures. • Reduce the impact by integrating environmental improvement measures as part of adaptation schemes. 	
Cultural Heritage	Some of Aberdeen Adapts individual projects could have a direct and long term effect on the landscape setting of historic buildings, archaeological sites and conservation sites. However, the majority of Aberdeen Adapts objectives are unlikely to have a significant negative impact on cultural heritage. Measures to protect cultural heritage from the impacts of climate change are likely to have significant positive effects on the protection of heritage sites and archaeological remains.	Yes	<ul style="list-style-type: none"> • Proposed projects will be required to enhance the setting of any heritage assets, consistent with Aberdeen Local Development Plan policy. • Identify and assess risks to locations of any historic or archaeological site in Aberdeen. Action will be taken to identify any cultural heritage sites at risk to avoid significant environmental impacts. • Action will be taken to identify the skills, knowledge and retrofit requirements to protect heritage sites and archaeological remains. 	<p>Various stakeholders with lead partner oversight and responsibility.</p> <p>When projects are being planned, developed and implemented by partners.</p>
Landscape	There is the potential for significant positive effects and some negative on the landscape. The development of actions to safeguard the natural environment, including blue-green infrastructure and measures to increase the resilience of the natural environment will have positive effects on landscape character and visual impact. However, there is the potential for the development of some flood alleviation schemes to fragment the landscape.	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts will seek to implement blue-green infrastructure and flood alleviation projects that are appropriate and proportionate to the landscape setting, to avoid and mitigate adverse effects on landscape. • Landscape impact will be mitigated through screening or sensitive siting within the landscape where appropriate. • Projects will take into account Landscape Character Assessment and improve landscape in line with Aberdeen Local Development Plan policy. • Green Space Network (GSN) policy will be applied so that habitat links are maintained and 	<p>When projects are being planned, developed and implemented by partners.</p> <p>Consider throughout Implementation Plan phases.</p>

			enhanced and fragmentation is avoided. Aberdeen Adapts aims to maintain and enhance connectivity in the development of green space networks, blue-green infrastructure and flood alleviation schemes.	
Material Assets	Potential for significant positive effects on material assets arising from implementation of projects. Measures to adapt buildings and infrastructure to climate change will provide long term protection of fixed assets and reduce the cumulative impact of climate change on material assets. The use of natural materials, promoting a resilient waste infrastructure is encouraged. However, it is recognised that some adaptation measures such as green walls take time to establish.	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts will enhance the positive effects, building on and replicating community benefit, public space and access objectives. • Detailed assessment of climate risks to city buildings and infrastructure and to identify the knowledge and appropriate retrofit requirements so that significant positive environmental impacts can be enhanced for material assets. • Where blue-green infrastructure is integrated into buildings ensure there is appropriate structural assessment. 	<p>When projects are being planned, developed and implemented by partners.</p> <p>Consider throughout Implementation Plan phases.</p>
Population and human health	The cumulative effects of adaptation action for community resilience, food security and business resilience are likely to have overall positive effects on population. The promotion of research, innovation and development and installation of adaptation measures may provide opportunities for job creation and market diversification. Aberdeen Adapts can help to prevent, reduce and manage the health impacts from climate change; reducing risk of damp; helping to improve air quality and the impacts of severe weather on mental and physical health. In addition, protecting and enhancing blue-green infrastructure can have a positive effect on human health.	Yes	<ul style="list-style-type: none"> • Aberdeen Adapts aims to adapt the positive effects building on open space, community, health, flood management and planning objectives. • Increased awareness of the climate impacts on health and wellbeing. 	<p>When projects are being planned, developed and implemented by partners.</p> <p>Consider throughout Implementation Plan phases.</p>

4. Taking Consultation Opinions into Account

As required by Section 18 (3) (c) and (d) of the Environmental Assessment (Scotland) Act 2005, the opinion expressed during the consultation were given due consideration. Table 4.1 summarises how opinions expressed during the consultation have been taken into account.

Table 4.1: Analysis of Comments

Body/Person making comment	Comment	Response	Resulting change
Historic Environment Scotland (HES)	We note that the historic environment has been scoped in to the assessment. On the basis of the information provided, we are content with this approach and are satisfied with the scope and level of detail proposed for the assessment, subject to the detailed comments provided below.	Welcomed and noted.	None.
	Alternatives: We note that the three alternatives proposed are a do-nothing, do minimum and do optimum and we are content that these are reasonable alternatives.	Welcomed and noted.	None.
	SEA Objectives: We welcome the identification of SEA Objectives for the historic environment and particularly the tailored questions that have been created to test the options. These questions should serve well in aiding the consideration of the likely effects of the options and alternatives on historic environment assets. As is noted in Section 5.1 of the report it is considered that the strategy is likely to have a positive effect on the historic environment through adapting to the challenges for the historic environment associated with climate change. We welcome that the questions recognise both the likely positive effects from the strategy and the potential that the choice of approach proposed may lead to negative effects on such considerations as the character of sites and their setting.	Welcomed and noted.	None.
	Mitigation and Monitoring - We welcome the approach outlined for mitigation measures. Given the likely positive effect on the historic environment in relation to a number of the objectives of the plan you may wish to consider that the enhancement of positive effects is also included in this table in order to ensure their delivery. This would also be applicable to the monitoring of the significant environmental effects of the strategy.	Welcomed and noted.	Included
	Consultation period for the Environmental Report: We note that you intend to consult on the strategy and its environmental report for a period of 8 weeks. We can confirm that we are content with this timescale. Please note that, for administrative purposes, we consider that the consultation period commences on receipt of the relevant documents by the SEA Gateway.	Welcomed and noted.	None.
	We welcome the preparation of this strategy and in particular the focus given to the threat to Aberdeen's historic environment posed by the effects of climate change.	Welcomed and noted.	None.

Body/Person making comment	Comment	Response	Resulting change
Historic Environment Scotland (HES)	SEA Activities to date: We welcome that our comments at previous stages have been taken account of in the assessment process.	Welcomed.	None.
	Options Considered The options considered for the assessment (Do Nothing/Do Minimum/Do Optimum) are reasonable alternatives and we welcome that a full assessment has been provided for these scenarios.	Welcomed.	None.
	Relationship with other PPS and environmental objectives: In noting the reference to “The Scottish Historic Environment Policy 2016” in this section we would take this opportunity to highlight the recent changes in the policy framework for the historic environment. The new Historic Environment Policy for Scotland came into effect on the 1st of May, when it replaced the former Historic Environment Scotland Policy Statement.	Noted, welcomed and updated	Updates to Table 5.1 and to Appendix 9.1
	Environmental Problems relevant to Aberdeen Adapts: The identification of relevant issues for the historic environment including the effects of climate change is welcomed. As we note in response to the strategy itself, work is currently being undertaken by the Our Place in Time working group on Climate Change in relation to the various effects of climate change on different types of historic environment assets. This work should further inform and aid in the delivery of this strategy.	Noted and welcomed.	Reference to this work is included in the Framework.
	Assessment of Option 1 – Do Nothing: We are content to agree with the finding here in that the absence of the strategy is likely to have an adverse effect on the historic environment.	Noted	None
	Assessment of Option 2 – Do Minimum: As the do minimum alternative involves an ad hoc approach it is unlikely to bring the larger scale benefits of a coordinated approach. While we are content to agree with the negative effect identified we would note that even an ad hoc approach may provide for positive effects to individual historic environment assets, as identified in the Do Minimum assessment for Material Assets.	Noted and updated	Information and scoring updated under cultural heritage to reflect the positive and negative effects.
Historic Environment Scotland (HES)	Assessment of Priority 1 - Protecting Buildings and Infrastructure As this priority and its goals speak directly to the environment objective of protecting the historic environment resource we are content to agree with the findings. In terms of significance of the positive effects resulting from the strategy we would reiterate our comments on this subject in our response to the Do Optimum option.	Noted and updated	Information and scoring updated under cultural heritage to reflect the positive and negative effects.
Scottish Environment Protection Agency (SEPA)	Alternatives: We are satisfied with the alternatives outlined and that the findings of the assessment will inform the choice of the preferred option. This should be documented in the Environmental Report.	Noted.	None.
	Objectives, Actions and Projects - Under ‘2. Safeguarding the natural environment’: consider assessing the vulnerability of all land (not just buildings and infrastructure) to then inform the assessment of habitats at greatest risk.	Agreed	Updated actions under 2 safeguarding the natural environment

Body/Person making comment	Comment	Response	Resulting change
	Relationship with other Plans, Policies and Strategies (PPS) - Some of the PPS included have themselves been subject to SEA. You have prepared an analysis of the relevant PPS but it is not clear if you have used the key SEA findings for these. This will ensure the current SEA picks up environmental issues or mitigation actions which may have been identified elsewhere.	Agreed	Prepared summaries of key SEA findings and mitigation measures of related PPS and used this to inform the Environmental Report. Relevant mitigation measures are summarised in section 7.
	Baseline information - SEPA holds significant amounts of environmental data which may be of interest to you in preparing the environmental baseline, identifying environmental problems, and summarising the likely changes to the environment in the absence of the PPS, all of which are required for the assessment. Many of these data are now readily available on SEPA's website. Other sources of data for issues that fall within SEPA's remit are referenced in our SEA topic guidance notes for air, soil, water, material assets and human health.	Welcomed and noted.	Considered in the baseline.
	Environmental problems: We consider that the environmental problems described highlight the main issues of relevance for the SEA topics within our remit.	Welcomed and noted.	None.
	Scoping in / out of environmental topics: We agree that all environmental topics should be scoped into the assessment.	Welcomed and noted.	None.
	Methodology for assessing environmental effects: We are content with the proposed detailed assessment matrix and particularly welcome the commentary box to explain the rationale behind the assessment results. We also welcome the link between effects and mitigation / enhancement measures in the proposed assessment framework and the consideration of mitigation of impacts.	Welcomed and noted.	Considered in the assessment.
	Where it is expected that other plans, programmes or strategies are better placed to undertake more detailed assessment of environmental effects this should be clearly set out in the Environmental Report.	Noted	Considered in completion of assessment.
Scottish Environment Protection Agency (SEPA)	When it comes to setting out the results of the assessment in the Environmental Report please provide enough information to clearly justify the reasons for each of the assessments presented. It would also be helpful to set out assumptions that are made during the assessment and difficulties and limitations encountered.	Noted	Considered in completion of assessment and noted in the commentary section.
	Proposed SEA objectives: We are content with the proposed SEA objectives to be used in the assessment.	Welcomed and noted.	None.
	Mitigation and enhancement - We would encourage you to use the assessment as a way to improve the environmental performance of individual aspects of the final option; hence we support proposals for enhancement of positive effects as well as mitigation of negative effects. It is useful to show the link between potential effects and proposed	Noted	Considered in completion of assessment.

Body/Person making comment	Comment	Response	Resulting change
	<p>mitigation / enhancement measures in the assessment framework. We would encourage you to be very clear in the Environmental Report about mitigation measures which are proposed as a result of the assessment. These should follow the mitigation hierarchy (avoid, reduce, remedy or compensate).</p> <p>One of the most important ways to mitigate significant environmental effects identified through the assessment is to make changes to the plan itself so that significant effects are avoided. The Environmental Report should therefore identify any changes made to the plan as a result of the SEA. Where the mitigation proposed does not relate to modification to the plan itself then it would be extremely helpful to set out the proposed mitigation measures in a way that clearly identifies: (1) the measures required, (2) when they would be required and (3) who will be required to implement them. The inclusion of a summary table in the Environmental Report such as that presented below will help to track progress on mitigation through the monitoring process.</p>		
	<p>Monitoring - We note that consideration is given to a monitoring approach but further work is required on the choice of indicators. It would be helpful if the Environmental Report included a description of the measures envisaged to monitor the significant environmental effects of the plan.</p>	<p>Welcomed and noted.</p>	<p>Updated</p>
	<p>Consultation period - We are satisfied with the proposal for an 8 week consultation period for the Environmental Report.</p>	<p>Welcomed and noted.</p>	<p>None.</p>
	<p>Outcomes of the Scoping exercise- We would find it helpful if the Environmental Report included a summary of the scoping outcomes and how comments from the Consultation Authorities were taken into account. We welcome proposals for the inclusion of a summary of how the comments provided by the Consultation Authorities at the Scoping stage have been taken into account in the preparation of the Environmental report.</p>	<p>Noted and updated.</p>	<p>A summary of the scoping outcomes and information on how comments from the Consultation Authorities were taken into account and response is included in the Environmental Report.</p>
<p>Scottish Environment Protection Agency (SEPA)</p>	<p>We would also note that the type of decisions made through shoreline management plans (hold the line, managed realignment etc.) have the potential to have positive or negative effects on coastal historic environment assets dependant on the policy chosen.</p>	<p>Noted and updated</p>	<p>Information updated under cultural heritage.</p>
	<p>Overall we are content to agree with the findings of the assessment of the priorities and their associated goals. We particularly recognise the importance of working together in order to achieving the goals of the strategy and the positive effects this can have on the historic environment resource of Aberdeen.</p>	<p>Welcomed</p>	<p>None</p>
	<p>Mitigation and Monitoring: It is unclear why no proposed mitigation measures have been presented for the historic environment. Given the important influence that the strategy, its goals and its actions, will have on other plans, programmes and strategies in adapting to</p>	<p>Noted and updated</p>	<p>Information on mitigation and monitoring measures that were identified for Aberdeen Adapts</p>

Body/Person making comment	Comment	Response	Resulting change
	the effects of climate change it would have been beneficial to offer guidance here on mitigation and enhancement opportunities.		through the SEA have been added to these sections.
	We note that the monitoring framework is subject to modification and refinement. We would suggest that, in terms of obtaining information on the performance of the strategy against the historic environment objectives your Council should be the primary source. This is of particular importance as Historic Environment Scotland would not hold the type of information required such as adverse effects on the historical features and their settings. It is also unclear why the amount of opposition to development is relevant to the monitoring of effects of the strategy on the historic environment. In light of these we would advise that the monitoring framework be updated with details on this presented within the post adoption statement.	Noted and updated	Sources of information and relevant text has been updated accordingly.
	We support the goals, priorities and action areas set out in Aberdeen Adapts. Aberdeen Adapts sets goals to 2050. Implementation programmes will be developed every 5 years.	Welcomed	None
	The Environmental Report provides a good assessment of the effects of Aberdeen Adapts on the environment, how significant negative effects could be addressed by mitigation and how any significant effects on the environment will be monitored.	Welcomed	None
	The mitigation measures are summarised in a table as 'broad' measures to help mitigate the negative or enhance the positive effects of the preferred options. However, the measures are very broad, for example 'work with partners' is used and more detail would help understand the actions that are proposed and could be incorporated into the Strategy itself. It would be helpful if they followed the mitigation hierarchy (avoid, reduce, remedy or compensate) and any changes to the Plan itself as a result are identified.	Noted	This section was expanded with more detail on the mitigation measures.
	Table 7.1 sets out the proposed mitigation measures/enhancement in more detail. The final column 'Who is responsible for undertaking the mitigation?' is generally 'Various stakeholders, with lead project managers taking overarching responsibility'. Although it is recognised that the Adaptation Strategy is a high-level policy document and that an Implementation Strategy is to follow in due course, where actions are identified it would be helpful if the 'stakeholders' involved could be identified and 'lead project managers' could be more specific.	Noted	Detailed information will be set out in the Implementation Programme. However, this section has been updated to give more details.
	Table 8.1 Monitoring Plan. Again an overall 'responsible party' would help to focus the report.	Noted	Governance is indicated in the report.
Nature Scot (formerly Scottish Natural	Scope of assessment and level of detail - Subject to the specific comments set out in the annex to this letter, NatureScot is content with the scope and level of detail proposed for the environmental report.	Welcomed and noted.	None.

Body/Person making comment	Comment	Response	Resulting change
Heritage (SNH))	1.Objectives - We note the objectives are currently tentative and subject to change. We support many of the objectives and actions identified in section 3.2, in particular those listed under 'Safeguarding our natural environment'.	Welcomed and noted.	None.
	2. Relationship with other Plans, programmes or strategies (PPS): We recommend the PPS considered also include 'Green infrastructure: Design and Placemaking' (2011).	Noted	This has been updated to include this PPS.
	3. Environmental Problems: Under the environmental problems presented in table 4.6, Biodiversity, we suggest that the second bullet point is amended to read 'Potential loss of semi-natural habitats, greenspace and wildlife to developments and other land uses.' This would take into account the potential for negative effects on these areas from, for example, flood management schemes. Under human health, we recommend that the following problem is added, as this increases reliance on means of transport requiring fossil fuels: -Lack of provision for walking and cycling as a means of transport and for informal recreation.	Noted	Both points have been updated.
	4. Baseline Information - The UK Climate Projections Project led by the Met Office and funded by UK Government, is expected to publish new projections in November 2018. The Dynamic coast website provides information on the National Coastal Change Assessment, which looks at rates of coastal change across Scotland to inform strategic planning: http://www.dynamiccoast.com/about_project.html . The Aberdeen Landscape Study may provide helpful baseline or trend information, as could the habitat and open space surveys of Aberdeen which are being carried out this summer.	Welcomed	Baseline information updated
	5. Assessment matrix - Under the topic 'Biodiversity, Flora and Fauna' there is some repetition in the questions. We suggest that these are rephrased to avoid this. For example, will the option/objective/response: <ul style="list-style-type: none"> - Affect the conservation objectives of any international, national or locally designated site? - Affect populations of any protected species, their habitats, resting places or roosts? - Protect and avoid fragmentation of semi natural habitats and native species relying on them? - Provide opportunities for habitat enhancement, creation and/or restoration? - Protect and enhance areas of trees, woodland or hedges? - Seek to promote watercourses as valuable landscape features and wildlife habitats? - Protect and enhance the services provided to society by semi-natural habitats and their wildlife? 	Welcomed and noted.	The assessment matrix has been updated to show all the suggested questions and text amendment.

Body/Person making comment	Comment	Response	Resulting change
	<p>- Avoid the spread of invasive non-native species?</p> <p>For the topic 'Climatic Factors', we recommend that in the penultimate bullet point, the word 'maximise' is replaced with 'sustainable'. This is to ensure that the potential adverse environmental impacts are taken into account in promoting the use of renewable resources.</p>	Noted	Updated
NatureScot (formerly Scottish Natural Heritage (SNH))	Scope of assessment and level of detail: NatureScot is content with the scope and level of detail in the Environmental Report.	Welcomed	None
	Assessment process: Support Section 6 which sets out the assessment of environmental effects, including Tables 6.1 to 6.3 which contain detailed assessments (do nothing, minimum, or optimum). Welcome and generally agree with the commentary and scoring provided and recognise that this is consistent with the higher level and strategic nature of the Strategy. We agree with the assessment finding that overall, Option 3 (Do Optimum), is the best in terms of its effects on the environment.	Welcomed	None
	The commentary provided in Tables 6.1-6.7 is helpful in justifying the scoring but it would benefit from more explanation of the type of effect (i.e. long-term, short-term and medium-term reversibility or irreversibility of affects, risks, duration (permanent, temporary).	Noted	
	Cumulative and synergistic effects assessment: We are satisfied with the assessment provided, and welcome consideration of both positive and negative effects in the assessment.	Welcomed	None
	Proposed mitigation measures: Table 7.1: The mitigation provided is rather high level and general and we encourage a more focussed approach wherever possible, with a clear link between the assessment findings and mitigation required, including links with stakeholders responsible for delivering mitigation.	Noted	Table 7.1 has been updated to give more detailed information.
	Mitigation measures should follow the mitigation hierarchy (avoid, reduce, remedy, compensate and enhance) as appropriate. We recommend the recording of residual effects post-mitigation as a separate column.	Noted	
	Monitoring: Table 8.1: As for mitigation, we suggest more specific monitoring measures identifying the responsible authorities, and timescales. Some measures appear to be difficult to monitor e.g. degree of habitat fragmentation and it is not clear as to the relevance of some of the measures to the strategy e.g. "Number of reports of disturbance to dolphins and grey seals and other marine wildlife."	Noted	Updated

5. Reasons for adopting Aberdeen Adapts: Climate Adaptation Framework

Consistent with Section 18(3)(e), Aberdeen Adapts considered the following reasonable options under Section 4.1 of the Environmental Report:

Table 5.1- Options Considered

Option	Description of Option
Option 1 – Do Nothing	Under this option city stakeholders carry on with business as usual and do not take steps to adapt to a changing climate.
Option 2 – Do minimum	Under this option city stakeholders are responsible for developing individual plans and strategies to adapt to climate change, which will result in an ad hoc, inconsistent approach to adaptation.
Option 3 – Do optimum (Preferred)	Under this option city stakeholders work in partnership across all sectors to develop an adaptation framework that addresses climate risks for Aberdeen, sets shared objectives and highlights areas for action and collaboration across the whole city.

Option 3 was adopted in the light of the other two alternatives discussed for the following reasons:

- The results of the environmental assessment indicate that not only does the preferred option have the least adverse effect on the environment; it is also likely to have significant positive effects on the environment compared with the other two options.
- The preferred option is consistent with other relevant international, national, regional and local plans and programmes as well as environmental protective objectives listed in Section 5.1 of the environmental report.
- Aberdeen Adapts: Climate Adaptation Framework outlines goals to build resilience to the impacts of climate change.
- Aberdeen Adapts considers how to maximise the opportunities presented by the collaborative development and implementation of adaptation actions.
- It promotes best practice in the planning, design and implementation of projects so that the likelihood of remedial action being required is much reduced.
- Where there are negative effects, they are more likely to be minimised and mitigated as a result of Aberdeen Adapts.
- Where there are positive effects, Aberdeen Adapts indicates actions to build on these.
- The identification of future monitoring ensures aims to ensure that monitoring will track progress, measure the effectiveness of systems and ensure flexibility so that action is appropriate to levels of change and identify any gaps in adaptation.

6. Monitoring Measures

Aberdeen City Council is required under to Section 18(3)(f) of the Environmental Assessment (Scotland) Act 2005 to monitor the significant environmental effects when the plan is implemented.

A monitoring report in Table 6.1 below will form the basis of constant monitoring of significant effects.

Table 6.1: Monitoring Plan

Effects	What sort of information is required? (indicators)	Where will information be obtained from?	Are there gaps in the existing information and how can it be resolved?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Biodiversity	Evidence of qualitative and quantitative impact on the qualifying features of the River Dee Special Area of Conservation SAC.	SEPA. NatureScot. Dee Catchment Management Plan.	Project detail and implementation.	When projects under Aberdeen Adapts are being implemented to enhance positive effects. Changes to timescales for action may be amended to protect water quality where data from SEPA and NatureScot indicate potential pollution in the Dee or when data indicates that there has been an increase in peak or low flow incidents.	NatureScot, Scottish Environment protection Agency SEPA, Dee Catchment Partnership, North East Scotland Biodiversity Partnership	As and when necessary	A review of the actions proposed under Aberdeen Adapts, with advice from relevant parties.
	Number of reports of disturbance to marine wildlife.	Habitat Regulations Appraisal, Nature Scot and JNCC	Project detail and implementation.	When projects under Aberdeen Adapts are being implemented.	Aberdeen Adapts, Aberdeen City Council and relevant partnership organisations.	As and when necessary	A review of the actions proposed under Aberdeen Adapts, with advice from relevant parties.

Effects	What sort of information is required? (indicators)	Where will information be obtained from?	Are there gaps in the existing information and how can it be resolved?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Water abstraction	Scottish Water	Project detail and implementation.	When there are changes to water supply / demand projections. This will need to be monitored ahead of abstraction rate license.	Scottish Water	As and when necessary.	A review of the actions proposed under Aberdeen Adapts with advice from Scottish Water and SEPA.
	Habitat fragmentation	Open Space Strategy, Nature Conservation Strategy, North East Scotland Biodiversity Partnership, and Greenspace Network, North East Scotland Biological Records Centre (NESBReC)	Project detail and implementation.	If ecological surveys, assessments or monitoring suggests negative impact on habitats and species are likely	Governance - covering Aberdeen Adapts, Aberdeen City Council Environmental Services and Policy Teams, NatureScot, SEPA, Dee Catchment Partnership, North East Scotland Biodiversity Partnership.	GIS	A review of the project proposed under Aberdeen Adapts with advice from NatureScot.
Climate	Evidence of qualitative and quantitative data on the mitigation measures proposed.	Aberdeen City Council and partners	Some indicators in place – additional indicators to be developed as projects progress in the implementation phase.	Ongoing monitoring should take place in the Implementation phase.	Governance - Aberdeen Adapts	Annual progress report	Ongoing monitoring.

Effects	What sort of information is required? (indicators)	Where will information be obtained from?	Are there gaps in the existing information and how can it be resolved?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Air	Levels of nitrogen dioxide and particulate matter.	Aberdeen City Council Local Air Quality Management: Progress Reports. Low Emissions Strategy. Local Transport Strategy.	Project detail and implementation.	If when projects under Aberdeen Adapts are being implemented and when Air Quality monitoring in the City shows a change in PM10 and Nitrogen Dioxide.	Governance - Aberdeen Adapts, working with Aberdeen City Council, Environmental Health.	As part of the Air Quality ongoing monitoring.	A review of the project proposed under Aberdeen Adapts with advice from Environmental Health.
Water	Evidence of qualitative and quantitative impact on the qualifying features of the River Dee Special Area of Conservation SAC. Including low and peak flow data.	SEPA	Water Scarcity Plan and Water Resources Management Plan	When projects under Aberdeen Adapts are being implemented to enhance positive effects. Changes to timescales for action may be amended to protect water quality where data from SEPA and Nature Scot indicate potential pollution in the Dee or when data indicates that there has been an increase in peak or low flow incidents.	SEPA	Website data on water levels	Water efficiency

Effects	What sort of information is required? (indicators)	Where will information be obtained from?	Are there gaps in the existing information and how can it be resolved?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Water	<p>Enhancing positive effects</p> <p>Water quality in rivers and freshwater bodies</p>	<p>Dee Catchment Management Plan</p> <p>NatureScot on the impact on the qualifying interests of the River Dee SAC</p> <p>North East Flood Risk Management Plan</p> <p>Scottish Environment Protection Agency</p>	<p>Project detail and implementation.</p>	<p>When projects under Aberdeen Adapts are being implemented.</p> <p>When data from SEPA and Nature Scot indicate potential reduction in water availability and quality from the Dee, timescales for action may need to be adjusted.</p> <p>When data indicates that there has been an increase in flood incidents timescales for action may need to be adjusted.</p> <p>When data indicates that there has been an increase in flood incidents or pollution from run off and sediment action should be taken.</p>	<p>SEPA, Nature Scot Relevant and statutory agencies working with Aberdeen Adapts.</p>	<p>As and when necessary</p>	<p>A review of the project proposed under Aberdeen Adapts with advice from statutory agencies like Scottish Water, NatureScot, SEPA.</p>
	<p>Evidence of changes to coastal erosion.</p>	<p>Dynamic Coast: Scotland's Coastal Change Assessment</p>	<p>Project detail and implementation.</p>	<p>Pathways developed to indicate appropriate timeline for mitigation measures.</p>	<p>Aberdeen City Council and relevant partners.</p>	<p>Report</p>	<p>Feasibility studies, planning and development of a Shoreline Plan.</p>

Effects	What sort of information is required? (indicators)	Where will information be obtained from?	Are there gaps in the existing information and how can it be resolved?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Water	Changes to the extent of areas potentially vulnerable to flooding.	SEPA (flood maps). North East Flood Risk Management Plan	Flood maps and plan undergo regular review.	Where there are changes to flood map data or where changes to flood risk are indicated in the North East Flood Risk Management. Where there are changes to climate projections and projected increases in winter rainfall.	SEPA. North East Flood Risk Management	As and when necessary.	Addressed as part of Flood Risk management plan – planning cycles.
	Number of recorded flooding incidents.	SEPA, ACC Flooding and Coastal Management, evidence from project partners	Improved flood monitoring.	Where there are changes to flood reporting, flood maps or to flood risk are indicated in the North East Flood Risk Management. Where there are changes to climate projections and projected increases in winter rainfall.	SEPA. North East Flood Risk Management	As and when necessary.	Addressed as part of Flood Risk management plan – planning cycles.
	Potential visual impact of projects if they involve construction and development.	Any sites which occupy an especially visible and prominent location within the context of the whole city should not be allocated.	When projects are being implemented.	At the development stage.	Various stakeholders, with lead project managers taking overarching responsibility.	Report	

Effects	What sort of information is required? (indicators)	Where will information be obtained from?	Are there gaps in the existing information and how can it be resolved?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Potential for projects to have negative impacts on the landscape when the siting, size, and operation of proposed projects are determined	Landscape appraisal Landscape character assessment	When projects are being implemented.	Landscape impact will be mitigated through screening or sensitive siting within the landscape where appropriate. When projects under Aberdeen Adapts are being implemented and when landscape appraisal from developments in the city indicate a pressure on landscape and townscape setting.	Various stakeholders, with lead project managers taking overarching responsibility.	A review the project proposed under Aberdeen Adapts with advice from planning.	A review of the project location under Aberdeen Adapts.
Cultural Heritage	Evidence of adverse effects on the historical features and their setting.	Aberdeen City Council, Archaeology Service. Aberdeen Heritage Trust	Project detail and implementation. Ongoing climate risks assessment, giving consideration to policy and guidance from Historic Environment Scotland.	When projects under Aberdeen are being implemented. When climate risk assessments indicate changes in pressure on historic buildings, archaeological sites and conservation areas.	Steering Group covering Aberdeen Adapts, Aberdeen City Council, Archaeology Service. Aberdeen Heritage Trust working with Development Management, developers and HES.	As and when necessary	A review of the project proposed under Aberdeen Adapts, with advice from relevant stakeholders.

Effects	What sort of information is required? (indicators)	Where will information be obtained from?	Are there gaps in the existing information and how can it be resolved?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Evidence of potential significant positive effects derived from appropriate retrofitting of traditional buildings and adapting heritage assets and sites.	Aberdeen City Council, Archaeology Service. Aberdeen Heritage Trust	Yes. Further work is required to assess site specific climate risks. Ongoing monitoring of climate risk process and of the Implementation Programme.	When projects under Aberdeen are being planned and implemented. Changes to timescales or levels for action may be amended based on data from climate projections or climate risk process.	Steering Group covering Aberdeen Adapts, Aberdeen City Council, Archaeology Service. Aberdeen Heritage Trust working with Development Management, developers and HES.	As part of Aberdeen Adapts monitoring	Integrate adaptation into any wider retrofit programmes.
Population & Human health	Evidence of enhanced positive effects for population and human health.	Aberdeen Adapts, NHG Grampian, Aberdeen Community Planning Partnership, Aberdeen Health and Social Care Partnership,	Yes. Project detail and implementation.	When projects under Aberdeen are being planned and implemented. Changes to timescales or levels of action may be amended based on data from climate projections or climate risk process.	Steering Group covering Aberdeen Adapts working with relevant stakeholders.	As part of Aberdeen Adapts monitoring	A review of the project proposed under Aberdeen Adapts, with advice from relevant stakeholders.

Effects	What sort of information is required? (indicators)	Where will information be obtained from?	Are there gaps in the existing information and how can it be resolved?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Uptake of property protection measures	Aberdeen City Council, Flooding and Coastal Management	None	When projects under Aberdeen are being planned and implemented. Changes to timescales or levels of action may be amended based on data from climate projections or flood risk.	Aberdeen City Council, Flooding and Coastal Management	As part of monitoring for Aberdeen Adapts and the North East Flooding and Coastal Management Plan.	Promote, encourage uptake
Material Assets	Building condition and suitability. Evidence of significant positive effects derived from retrofitting buildings, where required and adapting heritage assets.	Aberdeen Adapts project monitoring. Scottish Housing Survey data. Asset Management Plans.	Project detail and implementation. Further work is required to assess site specific climate risks. Ongoing monitoring of climate risk process and of the Implementation Programme.	When projects under Aberdeen are being planned and implemented. Changes to timescales or levels of action may be amended based on data from climate projections or climate risk process.	Steering Group covering Aberdeen Adapts, working with planners, developers and asset managers.	As part of Aberdeen Adapts monitoring.	A review of the project proposed under Aberdeen Adapts, with advice from planning.

Conclusion

It is our view that this SEA has had a positive effect on the development of Aberdeen Adapts: Climate Adaptation Framework. The SEA process has identified the key environmental issues, constraints and trends, as well as the likely significant positive and negative effects on the environment. Including the effects that were not anticipated at the start of the planning process.

The process has, therefore, enabled appropriate mitigation measures to be set against such effects, and incorporated into the Framework. With the incorporation of mitigation measures and alongside ongoing monitoring of the significant effects identified, it is considered that the proposals included in Aberdeen Adapts: Climate Adaptation Framework are in line with sound environmental principles.

The mitigation measures incorporated in the assessment of Aberdeen Adapts identify measures that will prevent, reduce or offset any significant adverse effects on the environment when implementing the Framework.

Overall, the environmental assessment has helped to guide the preference for options on how we drive adaptation policies, plans, programmes, strategies and projects.