

# **Strategic Environmental Assessment of a proposed ban on the manufacture, supply and sale of wet wipes containing plastic**

**Environmental Report**

**October 2023**

# Non-Technical Summary

## Introduction

Marine litter poses a number of problems across the economy, environment, and society. These detrimental effects include damage to marine wildlife, as well as wider ecosystem deterioration, public health issues, impacts on aesthetics, and a wider range of economic impacts across industries reliant on our coastal and marine environment.

Marine litter threatens the realisation of a shared vision for 'clean, healthy, safe, productive, and biologically diverse marine and coastal environments, managed to meet the long term needs of nature and people'. It is essential that Scotland's marine and coastal resource is protected from the damage caused by marine litter, including sewage-related debris such as wet wipes containing plastic.

The Scottish Government has national and international commitments to protect the marine environment, and to take necessary measures to protect and conserve it. These include the reduction of sources of marine litter.

Taking these commitments into account, the Scottish Government is consulting on a proposal to ban the manufacturing, supply and sale of wet wipes containing plastic. The consultation, which will seek views on this proposal, is being undertaken with the purpose of bringing about environmental and ecosystem benefits through the reduction of the presence of plastic litter.

## What is a Strategic Environmental Assessment?

This Environmental Report summarises the findings from the Strategic Environmental Assessment (SEA) of the proposal to ban the manufacturing, supply and sale of wet wipes containing plastic. An SEA of the proposals is required by the Environmental Assessment (Scotland) Act 2005 ('the 2005 Act').

An SEA identifies the likely significant environmental impacts of plans and policies, and proposed reasonable alternatives to them. An SEA also identifies mitigation measures that are required to avoid or minimise any significant adverse effects and highlights opportunities for enhancements of beneficial effects. Taking place at an early stage in the plan or policy preparation process, it ensures that decision-making is informed by relevant environmental information. An SEA provides opportunities for the public to consider this information and use it to inform their views on the draft plan or policy.

A screening and scoping exercise on the proposed ban on the manufacturing, supply and sale of wet wipes containing plastic was undertaken by the Marine Directorate, in accordance with the requirements of the 2005 Act. In response to the screening, the Scottish Consultation Authorities<sup>1</sup> confirmed the need for an SEA due to the

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<sup>1</sup> Historic Environment Scotland (HES), Scottish Environment Protection Agency (SEPA) and Scottish Natural Heritage (SNH).

likelihood for significant environmental effects to occur. They also provided comment on the proposed scope and methodology of the assessment. Their views are taken into account in this Environmental Report, as per the requirements of the 2005 Act.

### **What are the proposals?**

Through the refreshed Marine Litter Strategy for Scotland the Scottish Government has committed to reducing the most problematic sources of marine litter, with the intention to benefit the marine environment.

Wet wipes containing plastic do not fully disintegrate in water or in the sewerage system if they are flushed down the toilet. If these wipes arrive in the marine environment they are a persistent and problematic source of marine litter.

Our long-held policy position in Scotland has been that appropriate and suitable alternatives exist to wet wipes containing plastic, and these are available on the market in Scotland and the UK, and that businesses and consumers should be encouraged to switch to, respectively, manufacturing and buying these alternatives. The Scottish Government has supported multiple behaviour change campaigns to discourage incorrect disposal of these plastic products, but these have seen limited success.

Taking into consideration the pressures created by marine litter on the environment and wildlife, the Scottish Government is therefore consulting on the proposed ban on the manufacture, supply and sale of wet wipes containing plastic. The proposed ban is based on evidence that wet wipes contribute to marine litter and sewer blockages, and the majority of wet wipes sold contain plastic. The proposal covers wet wipes intended for domestic use, with exemptions for those used in medical care or industrial / commercial settings.

### **How was the Strategic Environmental Assessment undertaken?**

The SEA provides a high-level and qualitative assessment of the potential environmental effects that are likely to result from the proposed ban on the manufacture, supply and sale of wet wipes containing plastic.

The assessment identifies the effects of the proposed ban on the SEA topics that are scoped into the assessment, specifically: biodiversity, flora and fauna; water quality, resources, and ecological status; and material assets. The assessment also considers the effects of the proposed ban on a series of key statements or SEA objectives. These SEA objectives reflect the scope of the assessment as well as the environmental protection objectives from relevant legislation. The assessment also considers the interaction of this proposal with relevant existing plans and strategies.

Economic impacts are assessed in a Business and Regulatory Impact Assessment (BRIA).

### **Which reasonable alternatives have been assessed?**

Reasonable alternatives, including business and public behaviour change measures have not solved the current issue. Wet wipes containing plastics are still manufactured, they are still purchased, and they are still disposed of down toilets and are littered. Alternative measures to reduce this form of pollution have made no impact. On this basis, we do not consider that there are any reasonable alternatives to the proposed ban on the manufacture, supply and sale of wet wipes containing plastic.

### **What is the current impact of wet wipes on the marine environment?**

Scotland's marine environment supports a diverse array of habitats, which in turn support a wide range of marine plants and animals. The presence of marine litter, especially plastic litter, exerts a negative pressure on all components of the marine environment. Scottish Government analysis investigated the average numbers of wet wipes found each year per 100m of beach surveyed in Scotland. This analysis shows that the trend in annual average wet wipe numbers over the period 2005 to 2022 is increasing by approximately 50 wet wipes every 10 years. Progress towards Good Environmental Status (GES) for elements including marine litter is monitored and measured under commitments in the UK Marine Strategy<sup>2</sup>.

### **What are the likely significant environmental effects of the proposed ban on the manufacture, supply and sale of wet wipes containing plastic?**

The proposed ban on the manufacture, supply and sale of wet wipes containing plastic is expected to provide a likely reduction in the risk of harm posed to species, habitats, and the marine environment as a whole. Marine litter is one of many stressors that have impacts on the marine environment. The proposed ban will not eliminate all marine litter, but it will reduce the pressure of plastic litter on ecosystems, as well as on the species and habitats within them.

### **What are the cumulative effects of the proposed ban on the manufacture, supply and sale of wet wipes containing plastic?**

As the proposal is for a single measure, there is no scope for cumulative effects of this proposal. The reduction in the presence of wet wipes containing plastic in the marine environment may contribute toward achieving GES. Wet wipes containing plastic are only one type of marine litter, and as such a ban on these alone would not achieve GES. In the long term, as part of a suite of current and possible future measures banning a variety of single-use plastic items, this proposal may result in positive impacts to Scotland's marine environmental.

## **Conclusion**

Overall, this assessment considers that the reduced risk of harm that would result from a ban on the manufacture, supply and sale of wet wipes containing plastic will potentially provide environmental benefits for the topics of biodiversity, flora and fauna, water quality, resources and ecological status, and material assets, and could

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<sup>2</sup> [updated UK Marine Strategy Part Two \(last accessed: 14/09/23\)](#).

help contribute to the achievement of the SEA objectives. This is because the proposed ban has the potential to result in reduced risk of harm to a range of marine species and habitats, as well as to the built sewer infrastructure.

Reasonable alternatives have previously been tried and have not made a discernible impact, therefore the proposed ban is the only route that has the potential to lead to significant beneficial environmental effects being realised.

### **How do I respond to the consultation?**

The consultation on the proposed ban on the manufacture, supply and sale of wet wipes containing plastic can be read <https://consult.defra.gov.uk/wet-wipes-1/wet-wipes-containing-plastic>. Responses to the consultation on the proposed ban should be submitted via the online form <https://consult.defra.gov.uk/wet-wipes-1/wet-wipes-containing-plastic> or in writing to Consultation Coordinator, Defra, 2nd Floor, Foss House, Kings Pool, 1-2 Peasholme Green, York, YO1 7PX, by 25 November 2023.

The consultation on this SEA Environmental Report is now open, along with the accompanying partial Business and Regulatory Impact Assessment. Views and opinions on this are now invited and should be provided by 25 November 2023.

Please send comments on the SEA and BRIA via: [WWSEAandBRIA@gov.scot](mailto:WWSEAandBRIA@gov.scot)

Or send by post to:  
Wet Wipe SEA and BRIA  
Scottish Government  
Area 1B North  
Victoria Quay  
Edinburgh  
EH6 6QQ

Following the consultation period, the responses received will be analysed, and a Post-Adoption Statement and a Final BRIA will be prepared. These documents will explain how issues raised in the SEA and partial BRIA, and associated views in response to the consultation, have been addressed.

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# 1 Introduction

## 1.1 Background

- 1.1.1 The Marine Strategy Regulations 2010 are the main driver for addressing the problem of marine and coastal litter within Scotland and the UK as a whole. The Scottish Government has commitments under the UK Marine Strategy to collaborate with the other UK administrations to assess, monitor, and publish a programme of measures the UK will use to support progress towards achieving Good Environmental Status (GES) for elements including marine litter<sup>3</sup>. In addition, the Scottish Government will take necessary measures to protect and conserve the ecosystems and the biological diversity of UK territorial seas under the OSPAR Convention (the Convention for the Protection of the Marine Environment in the North-East Atlantic)<sup>4</sup>. OSPAR is the Scottish Government's key regional platform for collaboration with neighbouring countries on marine biodiversity, where we participate as part of the UK. Within the Marine (Scotland) Act 2010<sup>5</sup>, the management of marine litter falls under the scope of marine planning. The Scottish Government published an updated Marine Litter Strategy for Scotland<sup>6</sup> in 2022 with actions focused on, amongst others, preventing litter entering the marine environment.
- 1.1.2 The UK Marine Strategy defines GES in terms of 11 descriptors, one of which relates to marine litter. The high level objective for Descriptor 10 requires that 'the amount of litter and associated degradation products is reducing, and levels do not pose a significant risk to the environment and marine life'.
- 1.1.3 This objective recognises the limitations in data currently available to support a target for a specific percentage reduction in coastal litter and, based on current expert advice, has been included in the UK's set of GES targets. Table 1 describes the targets and indicators for 2018-2024.

**Table 1: UK Marine Strategy Part One updated targets and indicators for Descriptor 10**

<b>Descriptor 10 Marine Litter: Perspective for 2018 to 2024</b>		
<b>High level objective for GES</b>	The amount of litter and its degradation products on coastlines and in the marine environment is reducing and levels do not pose a significant risk to the environment and marine life.	
<b>Criteria and targets for measuring progress towards GES in future</b>	Presence of litter (beaches)	A decrease in the total amount of the most common categories of litter found on surveyed beaches.

<sup>3</sup> [Marine strategy part one: UK updated assessment and Good Environmental Status - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/marine-strategy-part-one)

<sup>4</sup> [Convention | OSPAR Commission](https://www.ospar.com/)

<sup>5</sup> [Marine \(Scotland\) Act 2010](https://www.gov.uk/government/legislation/marine-scotland-act-2010)

<sup>6</sup> [Marine litter strategy - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/marine-litter-strategy-2022/pages/introduction.aspx)



	Presence of litter (seabed)	A decrease in the number of items of litter on the seabed.
	Presence of floating litter	A downward trend in the number of northern fulmars with more than 0.1 g of plastic particles in their stomach.
	Presence of micro-litter	Develop an appropriate indicator to measure micro-litter in the marine environment.
<b>Operational targets</b>	<p>We will work nationally and with other countries in OSPAR to:</p> <p>a) establish the feasibility of setting appropriate reduction targets and/or threshold values for litter on beaches, on the sea floor, sea surface, and microplastics, taking into account regional or sub-regional specificities;</p> <p>b) develop an indicator for micro-litter in sediment;</p> <p>c) establish, if practicable, whether the amount of litter and micro-litter ingested by marine animals adversely affects the health of the species concerned; and</p> <p>d) develop appropriate measures to reduce litter types harmful to the marine environment.</p>	
<b>Indicators to be used to assess the status</b>	<ul style="list-style-type: none"> <li>• Beach litter surveys - OSPAR</li> <li>• Floating litter using plastic in fulmar stomachs - OSPAR</li> <li>• Seafloor litter surveys - OSPAR</li> </ul>	

- 1.1.4 Scottish Water is the public body which oversees Scotland's water infrastructure. In 2020 they dealt with approximately 36,000 blockages, most of which were caused by inappropriately flushed items<sup>7</sup> including sanitary items, the majority of which were wet wipes.
- 1.1.5 Consumer behaviour in domestic settings or lack of awareness of the issues contributes to these inappropriately flushed sanitary items. Generally, wet wipes used in medical or industrial settings are disposed of appropriately through correct waste streams.
- 1.1.6 Wet wipes containing plastic are a type of single-use plastic item for which suitable alternatives exist. There are various products on the market which are made of cotton, paper, or other non-plastic substrates.
- 1.1.7 Consumer behaviour is difficult to influence and change. Public behaviour campaigns generally only have a short-term impact. A more effective solution would be to remove inappropriate items from sale, where suitable alternatives exist.
- 1.1.8 The Scottish Government wishes to consult on a proposal to ban the manufacture, supply and sale of wet wipes containing plastic. Exemptions will be proposed for wet wipes used in medical and industrial settings.

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<sup>7</sup> [Plastics - Scottish Water](#)

## 1.2 Strategic Environmental Assessment

- 1.2.1 The Environmental Assessment (Scotland) Act 2005 ('the 2005 Act') requires that public plans, programmes, and strategies be assessed for their potential effects on the environment<sup>8</sup>. A Strategic Environmental Assessment (SEA) is the process used to fulfil this requirement and includes consultation with both the public and the Consultation Authorities<sup>9</sup>. The 2005 Act also sets out the information that is required to be provided in this Environmental Report.
- 1.2.2 A screening and scoping exercise on the proposed ban on the manufacture, supply and sale of wet wipes containing plastic was undertaken by Scottish Government, in accordance with the requirements of the 2005 Act. A combined Screening and Scoping Report was published in June 2023, setting out the proposed approach to the SEA, including the proposed scope and level of detail. Comments were invited from the Scottish Consultation Authorities.
- 1.2.3 The outcome of the screening exercise and the consultation responses confirmed the need for an SEA due to the likelihood for significant environmental effects to arise. The proposed scope of the assessment and methodology was broadly accepted by the Scottish Consultation Authorities (see Appendix A).

## 1.3 Purpose and structure of this report

- 1.3.1 The purpose of this Environmental Report is to document the findings of the SEA on the proposed ban on the manufacture, supply and sale of wet wipes containing plastic.
- 1.3.2 The views of the public and the Consultation Authorities on the proposed ban on the manufacture, supply and sale of wet wipes containing plastic and the findings of this Environmental Report are now being sought through a public consultation process.
- 1.3.3 The remainder of this Environmental Report is structured as follows:
- Section 2 provides information on action to date, the proposed ban on the manufacture, supply and sale of wet wipes containing plastic, and the policy context;
  - Section 3 presents the approach to the SEA and the methods used;
  - Section 4 describes the relevant components of the environment that could be affected by the proposal to ban the manufacture, supply and sale of wet wipes containing plastic;
  - Section 5 sets out the results of the assessment; and
  - Section 6 considers the next steps in the implementation of the ban and the SEA process.
- 1.3.4 The Non-Technical Summary precedes Section 1.

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<sup>8</sup> [Environmental Assessment \(Scotland\) Act 2005 \(legislation.gov.uk\)](#) Accessed on 18 May 2023.

<sup>9</sup> Historic Environment Scotland (HES), Scottish Environment Protection Agency (SEPA), and NatureScot (NS).

## 2 Wet wipes containing plastic

### 2.1 Background

- 2.1.1 Our long-held policy position in Scotland has been that appropriate and suitable alternatives exist to wet wipes containing plastic, and these are available on the market in Scotland and the UK, and that businesses and consumers should be encouraged to switch to, respectively, manufacturing and buying these alternatives. The Scottish Government has supported multiple behaviour change campaigns to discourage incorrect disposal of these plastic products, with limited success. We have supported Water UK's Fine to Flush<sup>10</sup> standard which excludes products containing plastic, and that do not disintegrate during average sewerage conditions. The majority of domestic wet wipe products on the market continue to contain plastic.
- 2.1.2 In October 2020 we launched a public consultation on items listed under Article 5 of the EU Single-Use Plastics Directive. Responses from this consultation supported the development of legislation banning some of the most problematic single-use plastic products, including plastic beverage stirrers, cutlery, straws, and plates. The Environmental Protection (Single-use Plastic Products) (Scotland) Regulations 2021<sup>11</sup> came into force in Scotland in 2022. Responses also provided evidence for further policy development, with 94% in favour of market restrictions on additional single-use plastic products, including wet wipes containing plastic<sup>12</sup>.

### 2.2 Wet wipes

- 2.2.1 Wet wipes are single-use cleansing products which are used in a variety of settings. Domestic versions include baby wipes, moist toilet tissue, cosmetic and make-up removing wipes, hand wipes, intimate care wipes, and household surface cleaning wipes. They can provide convenient hygiene solutions while away from the home or when no running water is available. Medical settings use wipes for disinfection, sanitary, and intimate care purposes. Industry also use wipes for a variety of cleaning purposes.
- 2.2.2 Wet wipes can be manufactured using either synthetic or natural fibres. Synthetic fibres can include synthetic polymers such as polyethylene or polyester. The molecular structure of such materials provides durability and strength. Natural fibres can include cotton, bamboo, or wood pulp in the form of cellulose.
- 2.2.3 Wet wipes containing plastic do not fully disintegrate in water or in the sewerage system if they are flushed down the toilet. If these wipes arrive in the marine environment they are a persistent and problematic source of marine litter.

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<sup>10</sup> [Fine to Flush - a major new development in the fight against fatbergs | Water UK](#)

<sup>11</sup> [The Environmental Protection \(Single-use Plastic Products\) \(Scotland\) Regulations 2021 \(legislation.gov.uk\)](#)

<sup>12</sup> [Introducing market restrictions on single-use plastic items in Scotland – analysis of consultation responses \(www.gov.scot\)](#)

## 2.3 Definition of plastic

- 2.3.1 The definition of plastic has evolved over time. This reflects the complexity of the issue, as plastic and its structure, base components, and modification factors are considered in greater detail.
- 2.3.2 The EU Single-Use Plastics Directive<sup>13</sup> uses the definition that plastic means ‘a material consisting of a polymer as defined in point 5 of Article 3 of Regulation (EC) No 1907/2006, to which additives or other substances may have been added, and which can function as a main structural component of final products, with the exception of natural polymers that have not been chemically modified’.
- 2.3.3 Further detail is provided by the Directive, that ‘plastics manufactured with modified natural polymers, or plastics manufactured from bio-based, fossil or synthetic starting substances are not naturally occurring’ and should therefore be addressed by the Directive. This definition of plastics therefore covers ‘polymer-based rubber items and bio-based and biodegradable plastics regardless of whether they are derived from biomass or are intended to biodegrade over time’.
- 2.3.4 This is the international definition of plastics, as set out by the EU, and is the definition used by Scottish Government in recent regulations including the Environmental Protection (Single-use Plastic Products) (Scotland) Regulations 2021.
- 2.3.5 The joint UK-wide consultation document prepared by the UK Government, Scottish Government, Welsh Government, and the Northern Ireland Executive on the proposed ban on the manufacture, supply and sale of wet wipes containing plastic defines plastic as ‘a material consisting of polymer to which additives or other substances may have been added, and which can function as a main structural component of final products, with the exception of natural polymers that have not been chemically modified’. This reflects the definition used in The Environmental Protection (Plastic Straws, Cotton Buds and Stirrers) (England) Regulations 2020<sup>14</sup>, mirroring the EU definition.

## 2.4 Effects of management actions to date

- 2.4.1 Scottish Government has encouraged business behaviour change with support of the development of and promotion of the Water UK Fine to Flush standard. The standard was championed by all of the UK water organisations, and requires the product design to exclude plastic as an ingredient and enable full disintegration during the normal flushing process.
- 2.4.2 Wet wipes can be made without plastic. Large manufacturers have proven this is commercially viable, with brands such as Andrex (owned by Kimberly-Clark) making this switch and meeting the Fine to Flush standard.

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<sup>13</sup> [EU Single-Use Plastics Directive](#)

<sup>14</sup> [The Environmental Protection \(Plastic Straws, Cotton Buds and Stirrers\) \(England\) Regulations 2020 \(legislation.gov.uk\)](#)

- 2.4.3 Scottish Government has also encouraged public behaviour change with support of campaigns run by Scotland’s Marine Litter Strategy Steering Group<sup>15</sup> members Scottish Water and the Marine Conservation Society, including ‘Nature Calls’, ‘Keep the Cycle Running’ and ‘The 3 Ps’. Each campaign has had a clear message of not misusing our sewage systems.
- 2.4.4 Wet wipes containing plastics were included as an addition to the public consultation on proposed actions to restrict to market single-use plastic products listed in Article 5 of the EU Single Use Plastic (SUP) Directive. The consultation analysis<sup>16</sup> (section 5), published in March 2021, was used to inform the Business and Regulatory Impact Assessment for legislation to implement the SUP Directive. The Directive does not include banning wet wipes containing plastic, thus the Environmental Protection (Single-use Plastic Products) (Scotland) Regulations 2021 does not include wet wipes. The consultation response analysis showed widespread support for future market restrictions of these products, with 94% of respondents in favour.

## 2.5 Proposal to ban the manufacture, supply and sale of wet wipes containing plastic

- 2.5.1 Through the refreshed Marine Litter Strategy for Scotland the Scottish Government has committed to reducing the most problematic sources of marine litter, with the intention to benefit the marine environment.
- 2.5.2 The proposed ban on the manufacture, supply and sale of wet wipes containing plastic is based on evidence that wet wipes contribute to marine litter and sewer blockages, and the majority of wet wipes sold contain plastic.
- 2.5.3 Taking into consideration the pressures created by marine litter on the environment and wildlife, the Scottish Government is therefore consulting on the proposed ban on the manufacture, supply and sale of wet wipes containing plastic. The proposed ban is informed by the intention to reduce the risk of harm to the marine environment and associated flora and fauna, water quality, and sewer infrastructure. This would also contribute to efforts to achieve GES for marine litter under the UK Marine Strategy.
- 2.5.4 The proposal covers a ban of the manufacture, supply and sale of wet wipes containing plastic, as continuing to allow wet wipes containing plastic to be manufactured and exported to other countries will not help to solve the global problem of marine litter. The proposal covers wet wipes intended for domestic use, with exemptions for those used in medical care or industrial / commercial settings.

## 2.6 Policy context overview of the proposal to ban the manufacture, supply and sale of wet wipes containing plastic

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<sup>15</sup> [Marine Litter Strategy Steering Group - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/marine-litter-strategy-2021/pages/15-marine-litter-strategy-steering-group.aspx)

<sup>16</sup> [5 Consideration of future market restrictions \(Q5\) - Market restrictions on single-use plastic items: consultation analysis - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/5-consideration-of-future-market-restrictions-q5/pages/5-consideration-of-future-market-restrictions-q5.aspx)

- 2.6.1 The Marine Strategy Regulations 2010 are the main driver for addressing the problem of marine and coastal litter within Scotland and the UK as a whole. The Scottish Government has commitments under the UK Marine Strategy to collaborate with the other UK administrations to assess, monitor, and publish a programme of measures the UK will use to support progress towards achieving GES for elements including marine litter. In addition, the Scottish Government will take necessary measures to protect and conserve the ecosystems and the biological diversity of UK territorial seas under the OSPAR Convention. OSPAR is the Scottish Government's key regional platform for collaboration with neighbouring countries on marine biodiversity, where we participate as part of the UK. Within the Marine (Scotland) Act 2010, the management of marine litter falls under the scope of marine planning. The Scottish Government published an updated Marine Litter Strategy for Scotland in 2022 with actions focused on, amongst others, preventing litter entering the marine environment.
- 2.6.2 Wet wipes are a problematic and persistent form of marine litter. As such, it remains a long-held policy position that appropriate and suitable alternatives exist to wet wipes containing plastic, that these are available on the market in Scotland and the UK, and that businesses and consumers should be encouraged to switch to, respectively, manufacturing and buying these alternatives.
- 2.6.3 The Scottish Government has supported Water UK's Fine to Flush standard which excludes products containing plastic, and that do not disintegrate during average sewerage conditions. The majority of domestic wet wipe products on the market continue to contain plastic.
- 2.6.4 In October 2020 we launched a public consultation on items listed under Article 5 of the EU Single-Use Plastics Directive. Responses from this consultation supported the development of legislation banning some of the most problematic single-use plastic products, including plastic beverage stirrers, cutlery, straws, and plates. The Environmental Protection (Single-use Plastic Products) (Scotland) Regulations 2021 came into force in Scotland in 2022. Responses also provided evidence for further policy development, with 94% in favour of market restrictions on additional single-use plastic products, including wet wipes containing plastic.
- 2.6.5 This policy position was strengthened by the publication of the updated Marine Litter Strategy, which contained an action to consider how legislation could be applied to support the move to alternatives to wet wipes containing plastic. The Strategy was launched by the then Minister for Environment and Land Reform, in September 2022.

## 3 The approach to the assessment

### 3.1 Purpose of the assessment

- 3.1.1 The purpose of this SEA is to assess the potential for likely significant environmental effects to arise from the proposed ban on the manufacture, supply and sale of wet wipes containing plastic.

### 3.2 Scope of the proposal

- 3.2.1 The evidence base will include all available data on wet wipes as beach litter in Scotland, as well as regional trends analyses for the same.
- 3.2.2 The potential economic and social impacts that may result from the implementation of the proposal does not form part of the scope of this SEA. A partial Business and Regulatory Impact Assessment (BRIA) will also be undertaken to assess the economic impacts of this proposal, with the final assessment informed by the responses to the public consultation.

### 3.3 Scope of the assessment

- 3.3.1 The scope of any potentially significant environmental effects is largely limited to: the reduction of risk of harm posed to species and habitats exposed to pollution from wet wipes; a reduction in the risk of harm as a result of water quality affected by micro and nano plastic pollution; and a reduction in risk of harm caused to sewer infrastructure by blockages.
- 3.3.2 An initial review of the related assessment work (see Section 3.6) suggests that potentially significant environmental effects are likely to fall under the SEA topics of biodiversity, flora and fauna; water quality, resources, and ecological status; and material assets.
- 3.3.3 The rationale for scoping in or out each of the SEA topics is provided in Table 2.

**Table 2. Proposed scoping in / out of SEA topics**

<b>SEA Topic</b>	<b>In / out</b>	<b>Reasons for inclusion / exclusion</b>
Biodiversity, flora and fauna	In	The proposal is considered to reduce the risk of harm to biodiversity and the marine environment by reducing the anthropogenic pressure of plastic pollution, and therefore this topic will be scoped in.
Population	Out	The proposal would not result in significant increases and/or decreases in human population numbers, changes to immigration or emigration, etc. These topics are scoped out of the SEA. Social and economic effects will be considered in other impact assessments.
Human health	Out	The proposal would not result in any significant human health issues. Sewage-related debris, including wet

SEA Topic	In / out	Reasons for inclusion / exclusion
		wipes, can be a vector for infection and disease. This is a small risk to human health, and is not likely to be improved significantly by the proposal as other forms of sewage-related debris will still exist. This topic is scoped out of the SEA.
Soil, geology and hydrodynamic processes	Out	The proposal would be unlikely to have an impact on soil, geology or hydrodynamic processes. This topic will therefore be scoped out.
Water quality, resources, ecological status	In	The proposal may have an impact on water quality in terms of microplastic pollution. This topic will be scoped in.
Air	Out	The proposal would be unlikely to result in significant changes to emissions to air from a change in manufacturing processes. This topic is scoped out of the SEA.
Climatic factors	Out	The proposal is unlikely to result in significant increases or decreases of emissions of greenhouse gases. This is scoped out of the SEA.
Material assets	In	The proposal is likely to impact built assets or natural assets as defined in the SEPA guidance. The proposal will potentially influence the number of sewer blockages experienced by Scottish Water each year. This topic will be scoped in. <a href="http://sepa.org.uk">Material assets (sepa.org.uk)</a>
Cultural heritage	Out	The proposal is unlikely to have effects on cultural heritage. This is scoped out of the SEA.
Landscape / seascape	Out	The proposal is unlikely to have effects on landscape and/or seascape. The proposal is likely to result in a reduction of one type of beach litter, but it will not eliminate it as a whole, and therefore will not have a significant impact on seascape. These issues are therefore scoped out of the SEA.

### 3.4 Relevant plans, programmes and strategies

3.4.1 The following is a list of plans, programmes and strategies (PPS) relevant to this SEA, with additional information outlining how these PPS impact the objectives and assessment of this plan. This includes plans at the national, UK, and European / international level.

- The Marine (Scotland) Act 2010 – the Act is relevant here as the management of marine litter falls under the scope of marine planning.



- Scotland's Marine Assessment 2020<sup>17</sup> - includes assessments for beach litter, seafloor litter, and microplastics in surface water.
- Marine Litter Strategy for Scotland – the updated Strategy and action plan which was published in 2022 focuses on, amongst other issues, preventing litter entering the marine environment.
- National Litter and Flytipping Strategy<sup>18</sup> - the strategy covers land-based litter issues, some of which impact upon types and volumes of marine litter.
- Scottish Water Improving Urban Waters – Route Map<sup>19</sup> - includes actions to improve the functioning of the sewer system.
- The UK Marine Strategy - the main driver for addressing the problem of marine and coastal litter within Scotland and the UK as a whole.
- Environmental Protection Act 1990 – the law under which Scotland will be able to introduce a ban on the manufacture, supply and sale of wet wipes containing plastic.
- OSPAR Convention – the main facility through which the Scottish Government interacts with neighbouring countries in the NE Atlantic, collaborating on measures to protect and conserve the ecosystems and the biological diversity of UK territorial seas. The Scottish Government contributes to work under the Regional Action Plan for Marine Litter<sup>20</sup>.
- EU Single-Use Plastics Directive – provides a definition of plastic that has been used in this report, and has provided a basis for Scottish Government work on a variety of single-use plastic items.

## 3.5 Reasonable alternatives

- 3.5.1 Scottish Water resolves approximately 36,000 sewer blockages per year. Customer awareness campaigns have been shown to result in a reduction of the numbers of blockages, but this effect wanes over time. The Scottish Government and Scottish Water have a multi-year plan in place to reduce the pathways for sewage-related debris (SRD) reaching the marine environment via Combined Sewer Overflows (CSOs). This includes improved monitoring of outfalls, and targeted improvements to sewer infrastructure and capture of solid items. However 'end of pipe' solutions for marine litter are not effective and are not the preferred solution. Our first principle is to prevent litter reaching the marine environment, to stop the problem at source and prevent plastic items becoming litter in the first place.
- 3.5.2 The UK has a voluntary water industry standard, Fine to Flush, administered by the industry body Water UK. Wipes which pass the specification tests for flushability can be labelled as Fine to Flush. Uptake of the standard has been limited. The two main manufacturers of wet wipes in the UK still use plastic in most of their products. Major retailers continue to stock wet wipes containing plastic, including their own brand products. In addition, demand for anti-bacterial wipes has increased due to Covid-19.

<sup>17</sup> [Scotland's Marine Assessment 2020 | Scotland's Marine Assessment 2020](#)

<sup>18</sup> [National Litter and Flytipping Strategy - gov.scot \(www.gov.scot\)](#)

<sup>19</sup> [Microsoft Word - Improving Urban Waters - Route Map - FINAL \(002\) \(scottishwater.co.uk\)](#)

<sup>20</sup> [The second OSPAR Regional Action Plan on Marine Litter](#)

- 3.5.3 The industry body EDANA established a voluntary flushability standard for wet wipes, GD4<sup>21</sup>, in 2008. The GD4 Guidelines assess the compatibility of wet wipes with waste water infrastructure. Meeting these guidelines allows wet wipes to be labelled as 'flushable'. It should be noted that this standard has been developed into what could be considered a more stringent Fine to Flush standard (see 2.4.1 and 3.5.2).
- 3.5.4 Some major retailers in the UK have had strands of their own brand ranges certified as Fine to Flush. However, there are other retailers that have made no commitments or stated they have no plans to make changes.
- 3.5.5 As noted in 2.1.2, a further finding of the single-use plastic consultation was that 94% of the respondents were in favour of market restrictions on additional single-use plastic products, including wet wipes containing plastic.
- 3.5.6 In conclusion, business and public behaviour change measures have not solved the current issue. Wet wipes containing plastics are still manufactured, they are still purchased, and they are still disposed of down toilets and are littered. Sales of some wet wipe products are growing. Alternative measures to reduce this form of pollution have failed, including:
- The inability of the market to move customers to plastic-free alternatives despite their availability,
  - The lack of implementation of a voluntary plastic-free, flushable industry standard across manufacturers,
  - The failure of behaviour change campaigns to stop inappropriate flushing of products, and
  - Labelling of some products as 'flushable' or 'do not flush' causes confusion for the consumer, as these labels are voluntary, and are not consistently applied across all available products. Labelling is a reserved power, it is not within the power of the Scottish Government to enforce companies to brand products with 'do not flush' labels.
- 3.5.7 On this basis, we do not consider that there are any reasonable alternatives to the proposed ban on the manufacture, supply and sale of wet wipes containing plastic.

## 3.6 Assessment methodology

- 3.6.1 The SEA has presented a high level and qualitative account of the potential environmental effects that might be expected to arise from the proposed ban on the manufacture, supply and sale of wet wipes containing plastic.
- 3.6.2 The assessment has been informed by a desk-based review of available data on beach litter. This environmental baseline review is presented at Section 4.
- 3.6.3 The potential implications of the proposed measure were then assessed against the SEA objectives. The SEA objectives that were applied in the assessment are presented in Table 3.

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<sup>21</sup> [Flushability \(edana.org\)](http://edana.org)

- 3.6.4 A ban on the manufacture, supply and sale of wet wipes containing plastic is expected to reduce the prevalence of plastic litter, and in turn microplastics, which have adverse effects on the marine environment, as well as causing blockages and damage to sewer infrastructure.
- 3.6.5 Each of the SEA topics, and the associated objectives and questions, will be assessed against the scoring criteria (see Table 4) to determine whether the proposed ban is likely to have a positive, negative, or no overall effect, or whether there is uncertainty about the effect. Commentary will be provided to explain the rationale of each conclusion.

**Table 3. SEA objectives**

<b>SEA Topic</b>	<b>SEA Objective</b>
Biodiversity, flora, and fauna	<ul style="list-style-type: none"> <li>To work towards achieving 'Good Environmental Status' for marine litter;</li> <li>To safeguard and enhance marine and coastal ecosystems, including species, habitats and their interactions;</li> <li>To protect and conserve the ecosystems and the biological diversity of UK territorial seas.</li> </ul>
Water quality, resources, ecological status	<ul style="list-style-type: none"> <li>To work towards achieving 'Good Environmental Status' for marine litter;</li> <li>To safeguard and enhance marine and coastal ecosystems, including species, habitats and their interactions;</li> <li>To protect and conserve the ecosystems and the biological diversity of UK territorial seas.</li> </ul>
Material assets	<ul style="list-style-type: none"> <li>To work towards achieving 'Good Environmental Status' for marine litter;</li> <li>To work towards reducing sewer blockages and damage to infrastructure.</li> </ul>

**Table 4. Key to assessment scores**

<b>Score key</b>		Where more than one symbol is presented in the table below, it indicates that the SEA has found more than one score for that question.
+	Positive effect	
0	No overall effect	
-	Negative effect	
?	Uncertain effect	

### 3.7 Mitigation and monitoring proposals

- 3.7.1 The proposal is expected to only provide positive effects on the topics identified as in scope of the SEA, therefore mitigation proposals have not been considered.

3.7.2 We will monitor the environmental impacts of the proposed ban through the abundance of wet wipes found as marine litter on Scottish beaches.

## 4 Environmental baseline

### 4.1 Introduction

- 4.1.1 This section of the Environmental Report describes the character of the environment which may be affected by the proposed ban on the manufacture, supply and sale of wet wipes containing plastic. The focus of this baseline information is therefore on: biodiversity, flora and fauna; water quality, resources, and ecological status; and material assets. This reflects the scope of the assessment as described in Section 3.3.
- 4.1.2 Marine litter is caused by a range of materials, but the most common of these is plastic.
- 4.1.3 Marine litter poses a number of problems across the economy, environment, and society. These detrimental effects include damage to marine wildlife, as well as wider ecosystem deterioration, public health issues, impacts on aesthetics, and a wider range of economic impacts across industries reliant on our coastal and marine environment.
- 4.1.4 Marine litter threatens the realisation of a shared vision for 'clean, healthy, safe, productive, and biologically diverse marine and coastal environments, managed to meet the long term needs of nature and people'. It may also impact upon Scotland's strategic objectives, most notably to become a greener, wealthier and fairer, safer and stronger, and healthier Scotland. It is essential that Scotland's marine and coastal resource is protected from the damage caused by marine litter, including sewage-related debris such as wet wipes containing plastic.

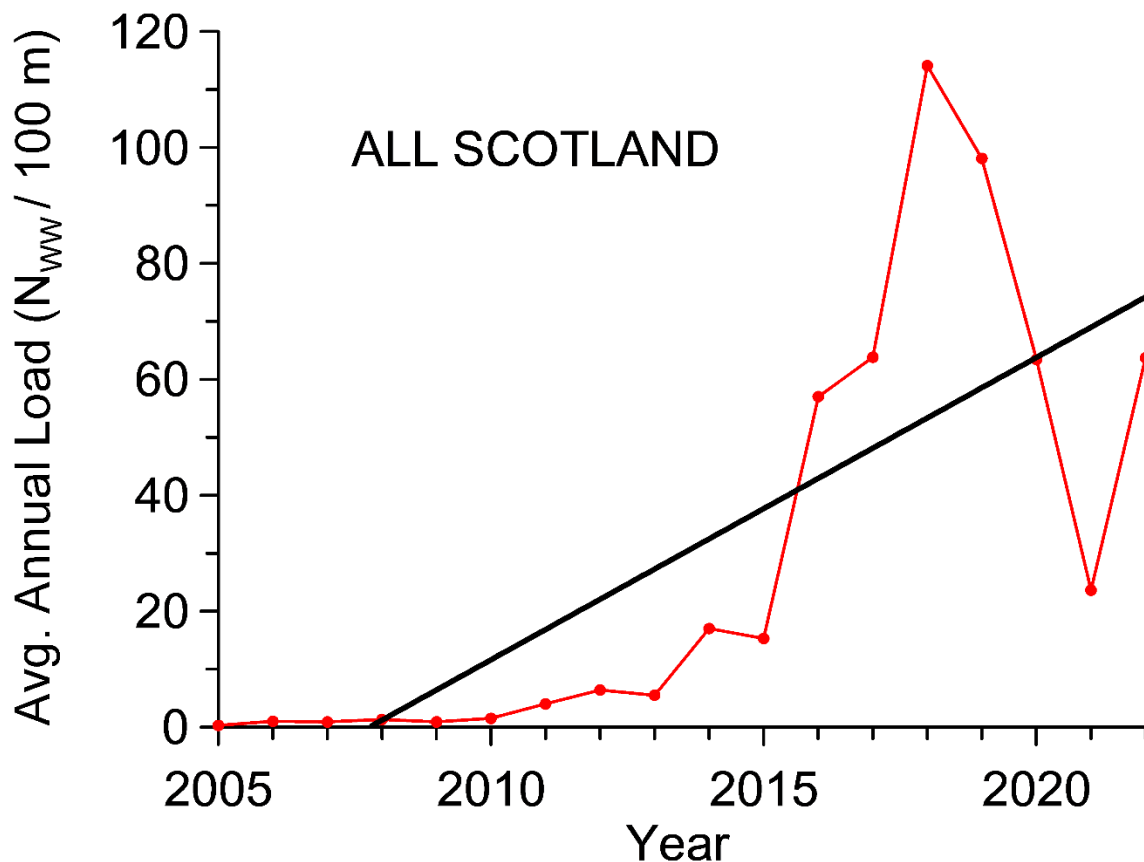
### 4.2 Biodiversity, flora and fauna

- 4.2.1 This section of the SEA identifies and characterises current environmental baseline conditions for biodiversity, flora and fauna. It considers current pollution of coastal and marine environments and the effect this has on associated species and habitats, and their interactions.
- 4.2.2 Marine litter causes negative impacts to biodiversity, flora and fauna through ingestion, entanglement, entrapment, and smothering. Plastic marine litter may also act as a vector for contaminants. The inherent nature of the origin of items of sewage-related debris, i.e. items used for sanitary purposes or having contact with bodily fluids, means they can also be vectors of disease. Reduced pressure from this type of sewage-related debris could reduce the risk of harm caused to biodiversity, flora and fauna.
- 4.2.3 The impacts described above can cause impairments to how individuals of a species move, seek prey, feed, avoid predators, reproduce, and interact with other individuals of the same species and individuals of other species. These impacts can cause impairments to the functioning of a habitat, the number and variety of species it can host, the number of individuals from each species it can host, and the functions it can provide including nesting sites, spawning grounds, and nursery grounds. In turn, this can affect the

ecosystem services that we benefit from including the availability of commercial food species, and carbon sequestration.

- 4.2.4 The environmental baseline for this topic is drawn from national data on beach litter, including that of sewage-related debris items such as wet wipes, and environmental research studies undertaken by Scottish Government and other organisations as appropriate.
- 4.2.5 The Marine Conservation Society (MCS) runs two strands of its UK-wide beach litter citizen science surveys: Beachwatch, which runs all year round, and through which MCS has been collecting data for over 30 years; and the Great British Beach Clean (GBBC) which gives a snapshot of beach litter over the period of a week every September.
- 4.2.6 Both MCS and the Marine Directorate use both the Beachwatch dataset (all year round surveys) and the GBBC dataset (September surveys) to derive statistics describing wet wipe loadings, and loadings of all SRD, around Scotland. The MCS also derives statistics around the whole of the UK. Note that SRD includes all sanitary items, such as sanitary towels, cotton buds, pant liners, etc., as well as wet wipes.

**Figure 1. Linear trend model using all available data on wet wipes found per 100m of surveyed beaches in Scotland (2005-2022).**



- 4.2.7 Figure 1 shows how the annual average number of wet wipes calculated for all surveys on Scottish beaches (i.e. the Beachwatch dataset) has changed

from 2005 to 2022. The years 2005 to 2010 had low numbers (on average less than 5 wet wipes per 100m of surveyed beach). After 2010 numbers began to rapidly increase to a maximum in 2018 (114 wet wipes per 100m surveyed beach). After 2018 there was a decline that may have been associated with the Covid-19 pandemic, but numbers since 2021 have again begun to increase.

- 4.2.8 The overall trend over the full period 2005 to 2022 shown in Figure 1 suggests that over that period the average number of wet wipes per 100m of surveyed beach is increasing by about 50 wet wipes every 10 years.
- 4.2.9 In addition to this data, some additional statistics can be presented.
- 4.2.10 The average number of wet wipes per 100m of surveyed beach from all MCS beach litter surveys in Scotland (i.e. the Beachwatch dataset) from 2015 to 2022 was found to be 81.
- 4.2.11 The average number of wet wipes per 100m of surveyed beach from all GBBC surveys in Scotland from 2015 to 2022 was found to be 48, and that during the GBBC in 2022, wet wipes (both those that contain plastic and those that are plastic-free) were the 2nd most commonly found item in Scotland<sup>22</sup>.
- 4.2.12 MCS has recently adopted using the median figures in their analysis, to bring this in line with the analysis methodology used by OSPAR. This gives a mixed picture across the years when comparing Scotland to the rest of the UK.
- 4.2.13 MCS noted that between 2015 and 2022, the median number of SRD items found per 100m of surveyed beach in Scotland has exceeded the UK median by 33% in 2015, 60% in 2018, 27% in 2019, and 48% in 2020, was less than the UK median in 2017 by 33% and in 2021 by 50%, and was equivalent to the UK median in 2016 and 2022.
- 4.2.14 In 2019 the Marine Directorate published a report on Pilot Scottish Beach Litter Performance Indicators (SBLPI). These proposed indicators aim to allow the Scottish Government to monitor the state of litter on its beaches, as well as to evaluate the success of its policies in reducing sources of marine plastics and litter. Regional analyses of trends in abundance of wet wipes found as beach litter have been conducted.
- 4.2.15 Wet wipes are one of the items used in the SBLPIs. Scotland's Marine Assessment 2020<sup>23</sup> (SMA2020) showed the number of wet wipes found on our beaches in the Clyde, Forth, and East Coast (North) regions was increasing at a faster rate than any other single item. Each of these three regions has shown an increasing trend of more than 2 standard deviations per decade, the category of greatest change within the SBLPIs.
- 4.2.16 Two additional key messages of the SMA2020 report were:
  - The proportion of sanitary items in the Clyde and Forth regions is approximately ten times higher than elsewhere in Scotland; and

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<sup>22</sup> [Great British Beach Clean 2022 Results | Marine Conservation Society \(mcsuk.org\)](#)

<sup>23</sup> [Beach litter | Scotland's Marine Assessment 2020](#)

- Sanitary items are on the increase in the Clyde region and in Firth of Forth harbours.

4.2.17 The overall conclusion from this section is that wet wipes containing plastic are a prevalent and persistent marine litter item in Scotland and their numbers are increasing. Their presence is adding to plastic pollution within the marine environment, which will be posing the types of risk of harm to biodiversity, species and habitats as described in 4.2.2 and 4.2.3.

### 4.3 Water quality, resources, and ecological status

4.3.1 This section of the SEA identifies and characterises current environmental baseline conditions for water quality, resources and ecological status. It considers current microplastic pollution in coastal and marine environments and the effect this has on water quality and the overall ecosystem.

4.3.2 Plastics degrade over time and through exposure to sunlight and wave action in the marine environment. Plastic breaks down into fragments, and eventually into micro and nano plastic fragments which are not visible to the human eye. These fragments can be ingested by species at all trophic levels, from zooplankton to the largest marine mammals. In turn, micro and nano plastics can be ingested by humans, through consumption of commercial species. A reduction in this anthropogenic pressure and an associated improvement in water quality could reduce the risk of harm caused to the health and resilience of marine species as well as ultimately to human health.

4.3.3 The impacts described above can affect the fitness of individuals of a species, which in turn can cause impairments to how those individuals seek prey and feed, which ultimately may affect how they move, avoid predators, reproduce, and interact with other individuals of the same species and individuals of other species. If micro and nano plastic pollution causes these extra burdens to individuals, this can lead to cumulative negative effects on one or more species. This may lead to a reduction in the population of particular species, as well as increases in population of other species, which overall can affect the ecological status of the whole ecosystem.

4.3.4 The Marine (Scotland) Act 2010 provides a framework to help balance competing demands on Scotland's seas. It includes a duty to protect and enhance the marine environment. The management of marine litter falls under the scope of marine planning within the Act.

4.3.5 Please see 4.2.5 to 4.2.14 above.

4.3.6 The overall conclusion from this section is that wet wipes containing plastic are a prevalent and persistent marine litter item in Scotland. Their presence is adding to micro and nano plastic pollution within the marine environment, which will be posing the types of risk of harm to water quality and marine ecological status as described in 4.3.2 and 4.3.3.



## 4.4 Material assets

- 4.4.1 This section of the SEA identifies and characterises current environmental baseline conditions for material assets and evaluates how these baseline conditions are likely to change due to the introduction of the proposed ban. The scope of built assets is defined within this Report as new or existing infrastructure required for managing sewage and waste water.
- 4.4.2 The UK's sewer system was designed to manage waste water with the added debris of toilet paper only. It was not designed for the waste management of plastic debris. UK sewers allow domestic waste water to mix with rainwater. During periods of heavy rainfall, holding tanks are designed to overflow to prevent sewage backing up into homes and dwellings, and as a result release untreated dilute sewage into rivers, waterways, and the sea through CSOs.
- 4.4.3 Physical screens are used on some CSOs to prevent larger solid debris from entering waterways and causing litter and pollution. These screens cannot capture every single item, and in particular small items such as cotton buds or flexible items such as wet wipes can pass through these screens and end up in the waterway.
- 4.4.4 A reduction in pressure on the sewer assets from sewage-related debris such as wet wipes could reduce the risk of harm caused by a poorly functioning sewer system, or harm from planned spills of untreated sewage from CSOs.
- 4.4.5 The impacts described above can lead to the impairment of an effectively functioning sewer system, through the blockage of pipes, damage to screens which in turn can lead to more sewage-related debris entering waterways, and the overflowing of sewage during heavy rainfall.
- 4.4.6 Scottish Water acknowledge some assets need to be upgraded or improved, and aim to achieve this through the Improving Urban Waters – Route Map.
- 4.4.7 In 2020 there were around 36,000 blockages within the public waste water network that Scottish Water needed to resolve<sup>24</sup>. Over 80% of these were due to inappropriate disposal of items, including wet wipes, nappies and sanitary towels. These 36,000 blockages cost around £7 million to clear. Reducing inappropriate disposal of sanitary items in the sewer network will help to reduce the number of blockages, which in turn will help reduce environmental pollution incidents. A ban on wet wipes containing plastic will not eliminate blockages entirely, as wet wipes not containing plastic and other SRD items will continue to arrive in the sewer system as long as incorrect disposal of such items continues to occur.
- 4.4.8 Scottish Water aims to improve understanding of the source of SRD pollution by increasing monitoring of CSOs through expanding the network of permanent Event Duration Monitoring (EDM) facilities across the CSOs in Scotland. The intention is to install approximately 1000 EDM facilities in CSOs that are discharging to the highest priority waters (including all designated shellfish and bathing waters) in 2023 and 2024. There will be

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<sup>24</sup> [Plastics - Scottish Water](#)

further evidence gathering and consideration of the installation of EDM facilities in approximately a further 2,600 CSOs, with the consideration of further monitoring as part of Scottish Water's Improving Urban Waters - Route Map.

- 4.4.9 Development of solutions will be prioritised at CSOs confirmed as being high priority as a result of significant SRD impacts on the environment. The intention is that solutions for 108 CSOs will be designed and developed by 2024. Further CSO solutions will be designed and developed at CSOs confirmed as being medium priority, subject to Scottish Water investment prioritisation and planning<sup>25</sup> by 2027. Implementation of solutions should reduce the quantity of SRD released during spill events.
- 4.4.10 The overall conclusion from this section is that wet wipes, including those containing plastic, are a prevalent and persistent item of sewage-related debris found in the sewer system in Scotland. Their presence is adding to plastic debris found within the sewer infrastructure, which will be posing the types of risk of harm to material assets as described in 4.4.2 to 4.4.5.

## 4.5 The likely evolution of the baseline in the absence of the proposed ban

- 4.5.1 Without the proposed ban on the manufacture, supply and sale of wet wipes containing plastic the current situation will be likely to continue, if not to deteriorate further. As noted at Section 2.4, business and public behaviour change measures implemented to date have not altered the situation, and the use of wet wipes has increased due to the Covid-19 pandemic. Certain manufacturers have produced wet wipes that do not contain plastic and meet the Fine to Flush standard, but these are generally restricted to moist toilet tissue wipes, and there is no incentive or push to change the formulation of other types of wet wipe. Only a ban on the manufacture, supply and sale of wet wipes containing plastic will result in manufacturers changing to produce non-plastic wet wipes.
- 4.5.2 Without the proposed ban, wet wipes containing plastic will continue to be flushed down the toilet and littered, posing a threat to biodiversity, habitats and species. Wet wipes that arrive in water bodies or in the sea will break down into micro and nano plastics, causing pollution and reducing the water quality status, which in turn will affect the species and habitats within the water body. Wet wipes that arrive in the sewer system will continue to cause blockages and potential damage to infrastructure.

## 4.6 Enhancement measures

- 4.6.1 If a ban on wet wipes containing plastic were implemented, the alternative products on the market would be made from cotton, paper, or other non-plastic substrates. It is expected that these would not pose the same risk of harm to the marine environment, nor would they add to the burden of marine plastic litter that currently exists. Despite this, there is a benefit of continuing

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<sup>25</sup> [Prioritisation of Sewer Overflows in Scotland - Scottish Water](#)

with awareness raising campaigns to make the public aware that these items could still end up as litter, and that proper disposal is still required.

## 5 Results of the SEA

### 5.1 Overview

- 5.1.1 The purpose of this section is to report the results of the SEA.
- 5.1.2 It is considered that a ban on the manufacture, supply and sale of wet wipes containing plastic has the potential to lead to significant beneficial environmental effects across all of the topics that were scoped in to this SEA.
- 5.1.3 An overview of the implications of the proposed ban on the marine environment is provided in this section. This will be presented through the biodiversity, flora and fauna topic, the water quality, resources and ecological status topic, and the material assets topic (see Section 3.3) and associated SEA objectives and questions.

### 5.2 Environmental assessment

**Table 5. Assessment of each SEA topic, objective and question against the scoring criteria, in considering a ban on the manufacture, supply and sale of wet wipes containing plastic**

SEA Topic	SEA Objective	SEA Questions	Score	Commentary
Biodiversity, flora, and fauna	To work towards achieving 'Good Environmental Status' (GES) for marine litter.	To what extent will the proposed ban of wet wipes containing plastic affect the attainment of GES for marine litter?	+	The reduction in the presence of wet wipes containing plastic in the marine environment may contribute toward achieving GES. Wet wipes containing plastic are only one type of marine litter, and as such a ban on these alone would not achieve GES. In the long term, as part of a suite of current and possible future measures banning a variety of single-use plastic items, this proposal may result in positive impacts to the environmental baseline.
	To safeguard and enhance marine and	To what extent will the proposed ban of wet	+	The reduction in the presence of wet wipes containing plastic in the marine environment

	<p>coastal ecosystems, including species, habitats and their interactions.</p> <p>To protect and conserve the ecosystems and the biological diversity of UK territorial seas.</p>	<p>wipes containing plastic enhance marine ecosystems, and the species and habitats contained therein.</p> <p>To what extent will the proposed ban of wet wipes containing plastic affect the biological diversity of UK territorial seas as a whole?</p>	+	<p>will reduce the pressure of plastic litter on ecosystems, as well as on the species and habitats within them. A reduction in risk of harm posed to these ecosystems will contribute toward their safeguarding and enhancement, through a reduction in negative pressures and increased resilience.</p> <p>The reduction in the presence of wet wipes containing plastic in the marine environment will reduce the pressure of plastic litter on ecosystems. A reduction in pressure on biological diversity at the Scottish scale will contribute to overall protection of biological diversity within UK territorial seas.</p>
Water quality, resources, and ecological status	<p>To work towards achieving 'Good Environmental Status' for marine litter.</p> <p>To safeguard and enhance marine and coastal ecosystems,</p>	<p>To what extent will the proposed ban of wet wipes containing plastic affect the attainment of GES for marine litter?</p> <p>To what extent will the proposed ban of wet wipes containing plastic</p>	+	<p>The reduction in the presence of wet wipes containing plastic in the marine environment may contribute toward achieving GES. Wet wipes containing plastic are only one type of marine litter that results in micro and nano plastic pollution, and as such a ban on these alone would not achieve GES. In the long term, as part of a suite of current and possible future measures banning a variety of single-use plastic items, this proposal may result in positive impacts to the environmental baseline.</p> <p>The reduction in the presence of wet wipes containing plastic in the marine environment will reduce the pressure of micro and nano</p>

	<p>including species, habitats and their interactions.</p> <p>To protect and conserve the ecosystems and the biological diversity of UK territorial seas.</p>	<p>affect the water quality and ecological status of marine ecosystems?</p> <p>To what extent will the proposed ban of wet wipes containing plastic affect the water quality and ecological status of UK territorial seas as a whole?</p>	+	<p>plastic litter on ecosystems, as well as on the species and habitats within them. A reduction in risk of harm posed to these ecosystems will contribute toward their safeguarding and enhancement, through a reduction in negative pressures and increased resilience.</p> <p>The reduction in the presence of wet wipes containing plastic in the marine environment will reduce the pressure of micro and nano plastic litter on ecosystems. A reduction in pressure on biological diversity at the Scottish scale will contribute to overall protection of biological diversity within UK territorial seas.</p>
Material assets	<p>To work towards achieving 'Good Environmental Status' for marine litter.</p> <p>To work towards reducing sewer blockages and</p>	<p>To what extent will the proposed ban of wet wipes containing plastic affect the attainment of GES for marine litter?</p> <p>To what extent will the proposed ban of wet wipes containing plastic affect the status and</p>	+	<p>The reduction in the presence of wet wipes containing plastic in the marine environment may contribute toward achieving GES. Wet wipes containing plastic are only one type of marine litter, and as such a ban on these alone would not achieve GES. In the long term, as part of a suite of current and possible future measures banning a variety of single-use plastic items, this proposal may result in positive impacts to the environmental baseline.</p> <p>A reduction in the presence of wet wipes containing plastic entering the sewer system may reduce the risk of damage to sewer infrastructure and may reduce the number of</p>

	damage to infrastructure.	efficient working of sewer infrastructure?		spills of sewage and sewage-related debris into the marine environment. Wet wipes not containing plastic may still enter the sewer system, however these may be less rigid and could tear more easily meaning they would be less likely to accumulate in the sewer infrastructure and less likely to cause obstructions.
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## 5.3 Proposals for monitoring

5.3.1 In order to ensure the intended benefits of a ban are being realised, the following monitoring is proposed:

- Beach litter monitoring – beach survey data from organisations such as the Marine Conservation Society can be used to monitor changes in numbers of wet wipes found on Scottish beaches following the implementation of a ban.
- Regional trends – data analyses by Marine Directorate can be used to demonstrate changes of numbers of wet wipes found on Scottish beaches over time.
- Sewer infrastructure monitoring – increased capability of monitoring of sewer outputs and improved and increased screening of sewer outfalls by Scottish Water can be used to monitor the number of blockages in the infrastructure and the types of debris being caught and removed.

## 5.4 Conclusion

5.4.1 Overall, this assessment considers that the reduced risk of harm that would result from a ban on the manufacture, supply and sale of wet wipes containing plastic will potentially provide environmental benefits for the topics of biodiversity, flora and fauna, water quality, resources and ecological status, and material assets, and could help contribute to the achievement of the SEA objectives. This is because the proposed ban has the potential to result in reduced risk of harm to a range of marine species and habitats, and to the built sewer infrastructure.

5.4.2 Reasonable alternatives have previously been tried and have not made a discernible impact, therefore the proposed ban is the only route that has the potential to lead to significant beneficial environmental effects being realised.



## 6 Next steps

- 6.1.1 The consultation on the proposed ban on the manufacture, supply and sale of wet wipes containing plastic can be read at <https://consult.defra.gov.uk/wet-wipes-1/wet-wipes-containing-plastic>. Responses to the consultation on the proposed ban should be submitted via the online form at <https://consult.defra.gov.uk/wet-wipes-1/wet-wipes-containing-plastic> or in writing to Consultation Coordinator, Defra, 2nd Floor, Foss House, Kings Pool, 1-2 Peasholme Green, York, YO1 7PX, by 25 November 2023.
- 6.1.2 The consultation on this SEA Environmental Report is now open, along with the accompanying partial Business and Regulatory Impact Assessment. Views and opinions on this are now invited and should be provided by 25 November 2023.
- 6.1.3 Please send comments on the SEA and partial BRIA via: [WWSEAandBRIA@gov.scot](mailto:WWSEAandBRIA@gov.scot)
- 6.1.4 Or send by post to:
- Wet Wipe SEA and BRIA  
Scottish Government  
Area 1B North  
Victoria Quay  
Edinburgh  
EH6 6QQ
- 6.1.5 Following the consultation period, the responses received will be analysed, and a Post-Adoption Statement and a Final BRIA will be prepared. These documents will explain how issues raised in the SEA and partial BRIA, and associated views in response to the consultation, have been addressed.

## 7 Privacy Notice

### 7.1 Who we are

7.1.1 We are the Marine Directorate of Scottish Government. Our head office is located at Victoria Quay, Edinburgh, EH6 6QQ.

### 7.2 Why we need your personal information?

7.2.1 We are seeking views on this SEA. If you contact us for this reason you might be including some personal information, such as your name or email address. We do not need this information for the purposes of informing the Final SEA, but if you do supply these we have a duty to process that information in accordance with the law.

### 7.3 What we do with your data

7.3.1 We will use your comments sent via email or post. We will collate all the information received this way, which will help inform the next steps in this area. All responses will be anonymised.

7.3.2 Where personal data is received by email or letter, only the information required to inform the SEA will be extracted. Personal data, such as email addresses, postal addresses, and any other information which can identify an individual, will be deleted at the end of this project as it is not necessary for our purpose.

### 7.4 How long is your data kept

7.4.1 We only keep your personal information for the minimum amount of time necessary, until the end of this project, once the proposed ban has been introduced, or a decision is otherwise taken on the ban.

### 7.5 What are your rights

7.5.1 You have a right of access to any personal data we hold about you by making a [Subject Access Request \(SAR\)](#).

7.5.2 In addition, if you believe that the data we hold is inaccurate or incomplete you can ask us to update our records by contacting [dpa@gov.scot](mailto:dpa@gov.scot)

7.5.3 To find out more about the rights you have over your personal data, please visit the ICO website [Your data matters | ICO](#)

### 7.6 Complaints

7.6.1 If you have concerns about the way we process and handle your personal information, in the first instance you should raise your concerns with our Data Protection Officer by email to [DataProtectionOfficer@gov.scot](mailto:DataProtectionOfficer@gov.scot)

7.6.2 If you feel that your data has been collected or processed unlawfully, you have the right to raise a complaint with the Information Commissioners Office:

The Information Commissioner  
Wycliffe House  
Water Lane  
Wilmslow  
Cheshire  
SK9 5AF  
Tel: 0303 123 1113  
Website: [www.ico.org.uk](http://www.ico.org.uk)  
You can also [report any concerns online](#)

## 8 Appendix A: Addressing responses from the statutory consultees following the screening and scoping reports produced for the SEA

Reference	Response from statutory consultee	Commentary / action taken by Scottish Government
<b>NatureScot comments</b>		
Table - Proposed Scoping In / Out of SEA Topics	We agree with the topics scoped into the assessment.	
Assessment Methodology	<p>It would be useful to have more detail in relation to how the assessment will be carried out and how the environmental effects will be assessed. This is often done through the use of SEA questions and assessment matrices, for example. SEA Objectives can be supported by a list of more detailed criteria or questions which can be added to an additional column in Table 3: SEA Objectives to help focus the assessment and aid in considering the likely significant of environmental effects. For example, the water environment could ask: <i>“To what extent will the proposed ban of wet wipes affect the ecological status of water courses/bodies?”</i> In conjunction with this, assessment matrices are often used to present the findings of the assessment using a scoring system (e.g. +/++/-/?/0) as well as commentary to provide detail and explain the level of significance of any environmental effects. It would be useful to draft an example assessment matrix which includes the score, commentary, and enhancement measures.</p>	SEA questions and assessment matrix used. Suggested question included, and other questions added in similar format.

	<p>We note under Section 4.4 <i>Identifying mitigation and monitoring proposals</i> that the proposals are expected to only provide positive effects and so mitigation measures have not been considered however it would perhaps be useful to consider any potential enhancement measures.</p>	Short section added
Table - SEA Objectives	<p>We welcome the SEA Objective to enhance marine and coastal ecosystems as well as safeguarding in line with NPF4's objective to secure positive effects for biodiversity.</p> <p>Some of the objectives could be more ambitious and measurable. For example, the objectives which aim "<i>to work towards achieving 'Good Environmental Status'</i>". This will also be challenging to assess and monitor. We recommend amending this as follows: "<i>To achieve 'Good Environmental Status'...</i>"</p> <p>Similarly, in relation to the Material Assets topic, we think the wording could be more ambitious and measurable. It would also be useful to be more specific in relation to the type of infrastructure damage. As such, we recommend amending as follows: "<i>To work towards</i>" with "<i>Reduce further damage to infrastructure...</i>"</p>	<p>Banning wet wipes containing plastic will not result in all plastic items being banned, and marine plastic litter will still exist. Therefore this proposed ban will not result in GES being achieved, this will only be done through a wider set of policy and actions to tackle the wider problem of marine litter and marine plastics.</p> <p>Banning wet wipes containing plastic will not result in all sewage-related debris items being banned, and such items will still enter the sewage system. Therefore this proposed ban will not result in a definite and measurable reduction in damage to infrastructure.</p>
Identifying mitigation and monitoring proposals	<p>We note that the proposals are only expected to provide positive effects and so mitigation proposals have not been considered. In terms of monitoring, the use of SEA questions (or another more detailed,</p>	See above.

	robust assessment method), as noted above, will increase transparency and support the monitoring process.	
Consideration of reasonable alternatives	We note the consideration of reasonable alternatives and Scottish Government's conclusion that there are no reasonable alternatives to the proposed ban.	
Initial Environmental Baseline	<p>It is interesting to note that the ban itself will not have a significant impact on the environmental baseline but the impact will be indirect through improving the ecosystem and reducing the source of marine litter.</p> <p>It would be useful to have a fuller summary of the existing environmental problems under each of the scoped in topics as well as the likely future changes to the environment without the plan.</p> <p>We recommend including a list of relevant plans, programmes and strategies (PPS) such as Scotland's National Marine Plan and the Scottish Biodiversity Strategy with some commentary outlining how these PPS impact the objectives and assessment on this plan.</p>	<p>Banning wet wipes containing plastic will not result in all plastic items being banned, and marine plastic litter will still exist. Therefore this proposed ban will not result in a significant change to the environmental baseline, this will only be done through a wider set of policy and actions to tackle the wider problem of marine litter and marine plastics.</p> <p>This has been done.</p> <p>Section added.</p>
Next steps	We are content with the proposed 12 week consultation.	
<b>SEPA comments</b>		

Assessment Methodology	We support the use of SEA objectives as assessment tools as they allow a systematic, rigorous, and consistent framework with which to assess environmental effects. However, it would have been useful for the scoping report to have included more detail on how the assessment will be set out. The results of the assessment in the Environmental Report should provide enough information to clearly justify the reasons for each of the assessments presented. It is also helpful to set out assumptions that are made during the assessment and difficulties and limitations encountered.	Further SEA questions have been included.
Mitigation and monitoring proposals	<p>It is noted that the proposals are only expected to provide positive effects therefore mitigation measures have not been considered. However, we encourage you to use the assessment to think about proposals for enhancement of positive effects.</p> <p>Section 4.4.2 states; “We will monitor the environmental impacts of the proposed ban through the abundance of wet wipes found as marine litter on Scottish beaches.” Who will carry out the monitoring, and how will it be carried out and funded? Will the Scottish Government use the data collected by other existing bodies working in this area?</p>	<p>Short section added.</p> <p>National and European level data collection programmes will supply the data, as outlined in the environmental baseline information.</p>
Consideration of alternatives	We agree with the statement in section 4.5.2 that there aren’t any reasonable alternatives we therefore support the proposed ban.	
Initial environmental baseline	Section 5.2.2 mentions that the environmental baseline is expected to include information and data from beach litter surveys and environmental research studies, including “The number of wet wipes per 100m of surveyed beach from litter surveys, including: ...” – there is some ambiguity as to whether the use of the terms “... expected to include ...” and “... including ...” suggest that data may be found from other sources. What is the proposed complete list of data sources to inform the environmental baseline and do these data sources relate to	All data sources are outlined in the environmental baseline section. These are well established and ongoing data collection projects.

	continuing data collection projects that allow them to be used in future monitoring of the impact of any proposed ban or will new data collection projects have to be established and funded? If new data collection projects are required who will fund them?	
Consultation period	We are satisfied with a consultation period of 12 weeks for the Environmental Report.	
<b>Historic Environment Scotland comments</b>		
Consultation period	We are content with the 12 week period you propose for consultation on the proposal and its accompanying environmental report.	





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