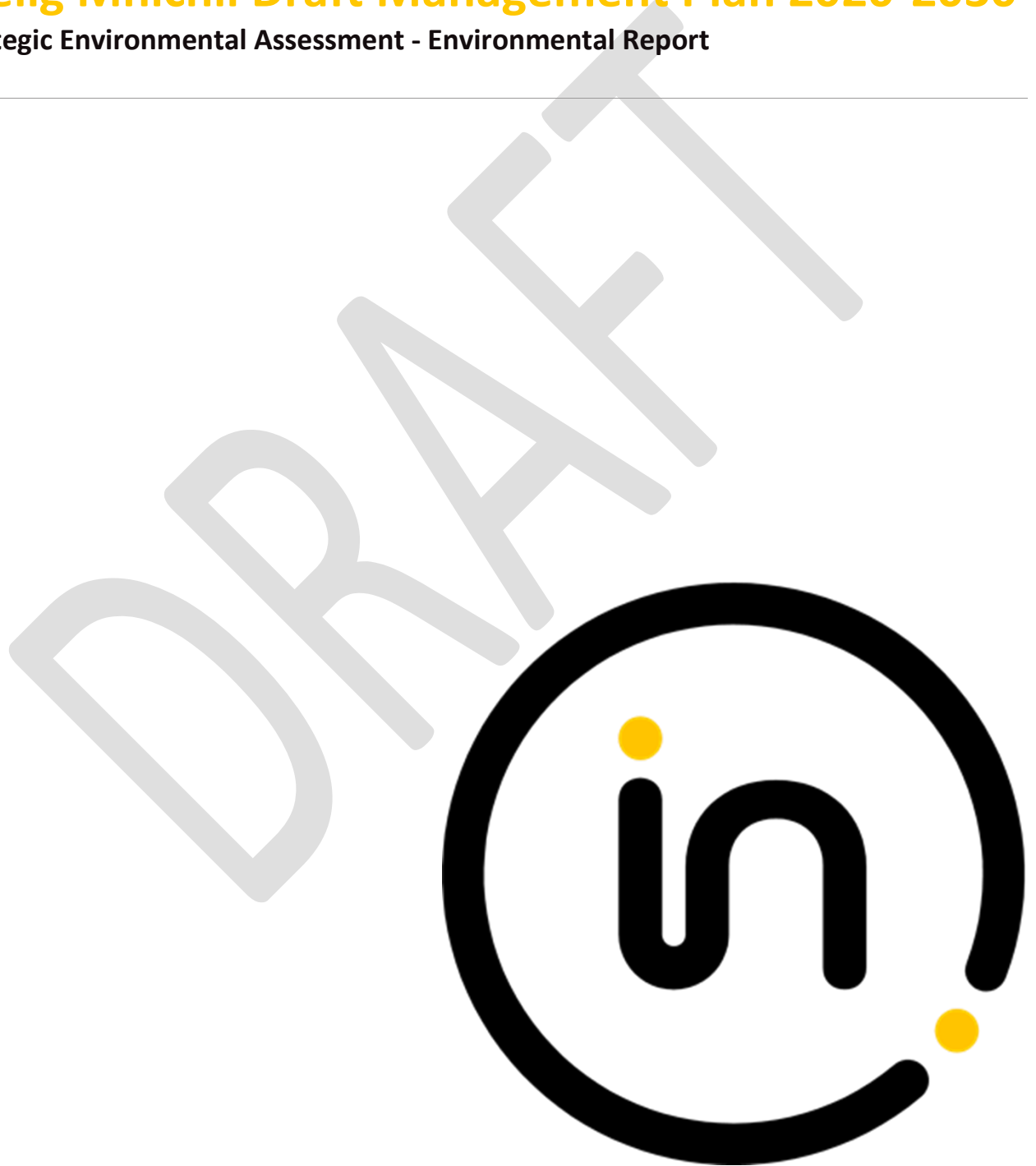


## NATIONAL MONUMENTS SERVICE

### **Sceilg Mhichíl Draft Management Plan 2020-2030**

#### **Strategic Environmental Assessment - Environmental Report**



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## DOCUMENT RELEASE FORM

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Sceilg Mhichíl Draft Management Plan 2020-2030

Strategic Environmental Assessment - Environmental Report

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## NON-TECHNICAL SUMMARY

**This document has been prepared for National Monuments Service (NMS), part of the Department of Housing, Local Government and Heritage (DHLGH) by Intertek Energy and Water (Intertek). It is the Environmental Report resulting from the Strategic Environmental Assessment (SEA) of the Draft Sceilg Mhichíl Management Plan 2020-2030 (hereafter referred to as the 'Proposed Plan').**

### Purpose of the Environmental Report

This Non-Technical Summary (NTS) outlines the process, methods, outcomes, and future stages of the SEA which have been undertaken for the Proposed Plan.

SEA is the process for environmental assessment of Plans, Programmes and Strategies (PPS) and is undertaken in parallel with the preparation of the PPS to ensure that any environmental effects are considered during the Proposed Plan's preparation and adoption. It is required under the European Commission (EC) SEA Directive (2001/42/EC), which has been transposed into Irish law in 2004 through the following:

- European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, (S.I. 435 of 2004) as amended in 2011; and
- Planning and Development (Strategic Environmental Assessment) (Amendment Regulations 2011, (S.I. No. 201 of 2011), amending the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).

The aim of the NTS is to assist the reader in understanding what the potential environmental effects of implementing the Proposed Plan are likely to be, should the Plan be implemented by NMS.

The Environmental Report is the main consultation document of the SEA and provides a description of the environment of Sceilg Mhichíl and the surrounding area in terms of the environmental baseline and the assessment of potential significant environmental effects, alongside proposed measures to mitigate and monitor environmental effects during the lifetime of the Proposed Plan.

### Context and Objectives of the Proposed Plan

As required under the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Convention 1972, Ireland is obligated to ensure every World Heritage Site (WHS) within its territory has an appropriate management structure in place. The Proposed Plan will replace the existing Sceilg Mhichíl Management Plan 2008 – 2018. The Proposed Plan was developed by the DHLGH, in conjunction with the Office of Public Works (OPW), along with input from local interest groups, non-governmental organisations (NGO's) and other interested parties through public consultation.

The Proposed Plan provides a framework for the ongoing proactive management of the site, helping ensure that its Outstanding Universal Value is protected and managed for future generations.

The aim of the Proposed Plan is to protect and preserve the Sceilg Mhichíl WHS whilst addressing cultural and natural heritage issues in an integrated manner. This is in recognition of both the biological and historical importance of Sceilg Mhichíl and that measures which seek to protect the cultural heritage of the site may not always be in harmony with protecting the natural heritage.

The Proposed Plan contains 11 Management Objectives, which reflect the vision and priorities for the site, taking into account comments and views expressed in the consultation process. Within each Objective is a set of specific Actions to support the overarching objective. The 11 Objectives are listed below, with the specific Actions detailed in Appendix C of this report and in the Proposed Plan.

- **Objective 1:** To have in place an effective management framework to protect the Outstanding Universal Value of Sceilg Mhichíl.
- **Objective 2:** To improve liaison with local interest groups and other relevant parties.
- **Objective 3:** To preserve the cultural heritage of the island and sustain its' Outstanding Universal Value.
- **Objective 4:** To identify and conserve the natural heritage of the island.
- **Objective 5:** To further promote the importance of the WHS to ensure continued coordination by government departments, agencies and other statutory bodies with responsibilities for making and implementing national policies and undertaking activities that may impact on Sceilg Mhichíl and its environs.
- **Objective 6:** To manage visitors to Sceilg Mhichíl effectively.
- **Objective 7:** To maintain an appropriate standard of safe, regulated visitor access system that supports conservation aims.
- **Objective 8:** To increase understanding of and appreciation for Sceilg Mhichíl and its environs.
- **Objective 9:** To maintain and enhance the landscape setting of Sceilg Mhichíl.
- **Objective 10:** To monitor those factors with the potential to impact on the built and natural environment of Sceilg Mhichíl.
- **Objective 11:** To establish a research framework for Sceilg Mhichíl.

## Current Environmental Conditions and SEA Objectives

An environmental baseline was prepared for the relevant SEA environmental receptors which were agreed during the scoping stage. The baseline has informed the environmental assessment that evaluates the environmental effects that could result from implementation of the Proposed Plan. Environmental receptors, which are the most sensitive to the potential effects of the Proposed Plan, are Biodiversity, Flora and Fauna, Climatic Factors, Soils, Landscape and Visual Amenity, Material Assets and Infrastructure, Cultural Heritage, Population and Human Health. Assessment of likely significant effects on the environment was carried out against a range of SEA objectives for these topics. The agreed upon SEA objectives were kept broad to allow for a wide range of environmental topics to be considered.

The environmental baseline identified a number of environmental problems that have been deemed relevant for Sceilg Mhichíl including:

- Potential for the introduction of invasive non-native species (INNS);
- Current conservation status of Atlantic puffin, Manx shearwater and European storm petrel on Sceilg Mhichíl is unknown;
- Pressure from increasing visitor numbers to Sceilg Mhichíl on the resident seabird population;
- Disturbance of nesting seabird species and damage to their habitat; and
- Increasing frequency and intensity of storm events in the region leading to rockfall incidents.

The SEA objectives used in the assessment were:

1. Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas, (e.g. through direct disturbance and damage to breeding/non-breeding seabirds, trampling of nesting habitat and damage and disturbance cause by conservation/building works);
2. Minimise impact of noise from vessels and helicopters on seabirds and marine mammals;
3. Prevent introduction of invasive species to Sceilg Mhichíl;
4. Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas;

5. Contribute to effective adaptation to the predicted effects of climate change;
6. Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape;
7. Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape;
8. Minimise the impact of soil and coastal erosion;
9. Protect the landscape/seascape character and visual amenity in the vicinity of the area;
10. Protect and enhance the existing infrastructure present on Sceilg Mhichíl;
11. Improve economic opportunities for the local community in a sustainable manner;
12. Improve the safety of staff and visitors to Sceilg Mhichíl; and
13. Protect and improve visitor experience of Sceilg Mhichíl.

## Alternatives Considered

SEA requires the consideration of reasonable alternatives – including the 'do nothing scenario'. In the case of the Proposed Plan the alternative of not producing a new management plan, i.e. 'no plan' is not considered a reasonable alternative because the requirement for an up-to-date management plan for World Heritage Sites is prescribed by UNESCO under the World Heritage Convention 1972, for which the Irish Government is a signatory.

An alternative scenario identified through stakeholder consultation was the provision for an extension to the duration of the visitor season to Sceilg Mhichíl. The Proposed Plan maintains the visitor season will open from approximately mid-May and run to the end of September. The potential for the duration of the visitor season to be extended was assessed in the SEA, with the findings determining that such an extension would be challenging primarily on safety grounds. In summary:

- Given the limited operational window for staff to access the island and complete the required works to make the island safe to accept visitors and complete the relevant training, it is challenging to open the site to visitors earlier than mid-May. A reduction in time to complete works (e.g. clearance and strengthening of the steps leading to the monastery) and to train staff would negatively impact the safety of visitors at the site.
- Earlier opening would also increase the pressure of visual disturbance from visitor access to breeding seabirds arriving for the start of the breeding season.

It has therefore been concluded that this alternative to the current position in the Proposed Plan is not recommended. It is recommended however, that the OPW should provide weekly updates to concerned parties on the works they are carrying out to prepare the site for the visitor season, so that all parties are aware of the reasoning for the sites closure and when the site will be ready for reopening.

## Environmental Assessment Findings

Assessment of the likely significant environmental effects of the Proposed Plan concluded that while individual Actions may have the potential to have a detrimental impact on specific SEA Topics in some instances, following application of appropriate mitigation measures and re-wording/addition of new Actions the Proposed Plan will have a positive effect on the environment of Sceilg Mhichíl. A summary of the assessment of each SEA topic is provided below:

- **Biodiversity, flora and fauna** – The Proposed Plan will have an overall positive effect on the biodiversity, flora and fauna of Sceilg Mhichíl, through the implementation of the recommendations of the 2018 Biosecurity Review regarding invasive species, limiting of helicopter and drone flights over the site, and the Actions aimed at protecting and furthering the understanding of the sites flora and fauna.

- **Climatic factors** - The Proposed Plan sets out a monitoring framework for the effects of climate change on Sceilg Mhichíl. This will aid in predicting where events such as rockfalls may occur as a result of extreme weather, allowing further adaptations to be put in place to mitigate against/prevent such events from occurring.
- **Cultural, architectural and archaeological heritage** - The overall potential predicted impact of the proposed actions is considered to be a positive effect in regard to the cultural, architectural and archaeological heritage. Actions provide for the ongoing protection, maintenance and future monitoring of the heritage features of Sceilg Mhichíl. There are important actions in the Proposed Plan in relation to the sharing of knowledge and the creation of a dedicated research community comprising the local community, academics, and guardians of the site.
- **Soil** - Through the management of visitor access, research works and the creation of a framework for monitoring climate change, the Proposed Plan will significantly support the minimisation of soil and coastal erosion and their impacts on Sceilg Mhichíl.
- **Landscape and visual amenity** - The development of the Lower Lighthouse complex for use by staff and visitors, as opposed to the construction of new permanent structures on Sceilg Mhichíl, will ensure that the landscape/seascape character of the area will not be hindered by the Proposed Plan.
- **Material assets and infrastructure** - The continued maintenance of the existing structures on Sceilg Mhichíl, as outlined by the Actions of the Proposed Plan, along with the renovation of the Lower Lighthouse Complex, ensures that the Proposed Plan will continue to protect and enhance the existing infrastructure.
- **Population and human health** – Through the enhancement of information dissemination, educational outreach programme, natural history lectures and supporting local initiatives, increased transparency and co-ordination with local stakeholders and continued emphasis on the safety and visitor experience on Sceilg Mhichíl, the Proposed Plan will have a positive effect on population and human health.

## Mitigation Measures

Measures envisaged to prevent, reduce and as fully as possible offset any detrimental environmental effects of implementing the Proposed Plan included the re-wording/addition of new Actions in the Proposed Plan and adoption of mitigation measures.

Following the results of the SEA, new Actions to be included in the Proposed Plan are as follows:

- **Action 2.5:** Make publicly available existing and future reports on Sceilg Mhichíl via a dedicated website page for Sceilg Mhichíl.
- **Action 4.15:** Develop guidance for boat operators to follow to reduce potential impacts on wildlife on Sceilg Mhichíl, and in the surrounding waters.

Proposed mitigation measures for the SCIs of Skelligs SPA were detailed in the NIS that accompanies this report. These measures are detailed in Appendix E of this report.

## Monitoring Programme

A framework for the monitoring of the Actions outlined under the Management Objectives of the Proposed Plan is presented below. This framework details the deliverables of those objectives that require monitoring and the timescales for their completion. As not all Actions in the Proposed Plan require monitoring of their outputs, only applicable Actions that do require monitoring have been included in this framework.

Management Objective	Applicable Actions	Targets/Indicators	Timescales
<b>Objective 2:</b> To improve liaison with local interest groups and other relevant parties.	<b>A2.3:</b> Create a Sceilg Mhichíl stakeholder forum to address issues of mutual interest and inform decision-making processes.	<ol style="list-style-type: none"> <li>1. Creation of the Stakeholder Forum.</li> <li>2. Subject to the views of the Stakeholder Forum, report produced on issues and decisions addressed through the Forum.</li> </ol>	<ol style="list-style-type: none"> <li>1. Within 6 months of the Proposed Plan's implementation.</li> <li>2. Annually from the date of the forum's creation.</li> </ol>
<b>Objective 3:</b> To preserve the cultural heritage of the island and sustain its Outstanding Universal Value.	<b>A3.2:</b> Prepare a formal, structured maintenance programme for all conserved structures.	<ol style="list-style-type: none"> <li>1. Preparation and delivery of the programme.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually, ongoing.</li> </ol>
	<b>A3.3(a):</b> Report on archaeological works undertaken each year.	<ol style="list-style-type: none"> <li>1. Annual report on archaeological works released publicly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually each January.</li> </ol>
	<b>A3.3(b):</b> Publish full monograph publication of archaeological works undertaken on the island.	<ol style="list-style-type: none"> <li>1. Publication of the monograph of archaeological works.</li> </ol>	<ol style="list-style-type: none"> <li>1. Within 3 years of the Proposed Plans implementation.</li> </ol>
<b>Objective 4:</b> To identify and preserve the natural heritage of the island	<b>A3.4(a):</b> Report on conservation works undertaken each year.	<ol style="list-style-type: none"> <li>1. Annual report on conservation works released publicly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually each January.</li> </ol>
	<b>A4.1:</b> Prepare site-specific conservation objectives for the bird species for which the Skelligs SPA has been designated. Include quantitative conservation objectives attributes and targets.	<ol style="list-style-type: none"> <li>1. Continue the monitoring of the SCI's of Skelligs SPA to determine species specific issues and population levels (As per Actions 4.5 and 4.6 in the management plan).</li> <li>2. Use available information on the ecological requirements of each of the SCIs of the Skelligs SPA in order to select suitable attributes for conservation objective-setting. Use available monitoring data to set targets for each attribute, which will be quantitative where possible.</li> <li>3. Where necessary, refine quantitative attributes and targets</li> </ol>	<ol style="list-style-type: none"> <li>1. Ongoing.</li> <li>2. Within 1 year of Proposed Plans implementation.</li> <li>3. Within 5 years of Proposed Plans implementation .</li> </ol>

Management Objective	Applicable Actions	Targets/Indicators	Timescales
		as further monitoring data becomes available.	
	<b>A4.2:</b> Maintain close co-operation between the site management team, NPWS and the Guide team.	<ol style="list-style-type: none"> <li>1. Schedule regular meetings between the interested parties.</li> <li>2. Disseminate summary of meetings within the team and to the interested parties.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ongoing, quarterly from the Proposed Plans implementation, twice yearly in respect of Guide team.</li> <li>2. 1 week after meeting is held.</li> </ol>
	<b>A4.5:</b> Continue to develop the seabird monitoring programme, with particular attention to burrow-nesting seabirds in order derive, among other things, robust population estimates, population trends and the identification of pressures acting on the populations. Such data will inform the management of both public access and the works programme in monitoring potential effects of human activities.	<ol style="list-style-type: none"> <li>1. Conduct a monitoring study of the burrowing nesting species.</li> <li>2. Collation and analysis of the data to inform management of the site.</li> <li>3. Release of study findings publicly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually, beginning immediately from the Proposed Plans implementation.</li> <li>2. After 5 years of study, biennial (every 2 years) thereafter.</li> <li>3. Within 12 months of the study's completion.</li> </ol>
	<b>A4.6:</b> On an annual basis, carry out a census count of all cliff nesting seabird species and estimate the breeding productivity of Sceilg Mhichíl's Kittiwake population.	<ol style="list-style-type: none"> <li>1. Carry out census count and kittiwake productivity work.</li> <li>2. Publicly release findings of the report online.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually from each July.</li> <li>2. Annually each January.</li> </ol>
	<b>A4.8:</b> Participate in national and international seabird survey and monitoring initiatives.	<ol style="list-style-type: none"> <li>1. Release census data as sought.</li> </ol>	<ol style="list-style-type: none"> <li>1. When requested.</li> </ol>
	<b>A4.9:</b> Implement, and if necessary update, the biosecurity action plan to deal with accidental or deliberate introductions of predator species.	<ol style="list-style-type: none"> <li>1. Implement the recommendations of the Biosecurity Plan.</li> <li>2. Release annual report on outcomes of implementing the plan online.</li> </ol>	<ol style="list-style-type: none"> <li>1. Within 1 year of the Proposed Plans implementation.</li> <li>2. Annually each January.</li> </ol>
	<b>A4.11:</b> Finalise and publish the vegetation survey, including an investigation of species that may have been cultivated by the monks.	<ol style="list-style-type: none"> <li>1. Finalise and publish the vegetation survey publicly online.</li> </ol>	<ol style="list-style-type: none"> <li>1. Within 1 year of the Proposed Plans implementation.</li> </ol>



Management Objective	Applicable Actions	Targets/Indicators	Timescales
<b>Objective 6:</b> To manage visitors to Sceilg Mhichíl effectively.	<b>A6.4:</b> Collect Visitor Statistics for each season and analyse trends in order to provide quality management information. Publish annual statistics and analytical report online.	<ol style="list-style-type: none"> <li>1. Collate and analyse collected data.</li> <li>2. Release report publicly online.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually, from the end of the visitor season.</li> <li>2. Annually each January.</li> </ol>
	<b>A6.6:</b> Continue to regularly review both the patterns of movement across the site and whether the 180 visitors per-day limit is sustainable, with regards to the cultural and natural heritage features of the site and to visitor safety.	<ol style="list-style-type: none"> <li>1. Collate and analyse collected data.</li> <li>2. Release report publicly online.</li> <li>3. Alter the permitted visitor numbers should the limit be proven to be unsustainable.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually, from the end of the visitor season.</li> <li>2. Annually each January.</li> <li>3. As required.</li> </ol>
<b>Objective 7:</b> To maintain an appropriate standard of safe, regulated visitor access system that supports conservation aims.	<b>A7.2:</b> Continue the ongoing review of the criteria for the granting of permits for boats to land visitors on the island to ensure that the system adapts to any changing circumstances.	<ol style="list-style-type: none"> <li>1. Undertake biennial reviews of criteria.</li> <li>2. If any changes made, inform stakeholders at earliest opportunity and import into existing arrangements.</li> </ol>	<ol style="list-style-type: none"> <li>1. Biennially from implementation of the Proposed Plan.</li> <li>2. Ongoing.</li> </ol>
	<b>A7.3:</b> Collect visitor-traffic data and analyse trends with a view to providing quality data for informed decision-making.	<ol style="list-style-type: none"> <li>1. Collate and analyse collected data.</li> <li>2. Release report publicly online.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually, from the end of the visitor season.</li> <li>2. Annually each January.</li> </ol>
<b>Objective 8:</b> To increase understanding of and appreciation for Sceilg Mhichíl and its environs.	<b>A8.2:</b> Maintain the website for Sceilg Mhichíl [ <a href="http://worldheritageireland.ie">worldheritageireland.ie</a> ] and continue to provide relevant information on the significance of the site, provide periodic updates on the implementation of the management plan and to advise visitors how to prepare for a safe visit to the island.	<ol style="list-style-type: none"> <li>1. Review the status of the Plan's Actions and if they have been achieved.</li> <li>2. Release status report on implementation of the Proposed Plan.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually.</li> <li>2. Annually.</li> </ol>
<b>Objective 10:</b> To monitor those factors with the potential to impact	<b>A10.1:</b> Develop a framework for monitoring climate change.	<ol style="list-style-type: none"> <li>1. Begin development of framework.</li> <li>2. Publish finalised framework publicly online.</li> </ol>	<ol style="list-style-type: none"> <li>1. Within 3 months of implementation of the Proposed Plan.</li> <li>2. Within 2 years of implementation of the Proposed Plan.</li> </ol>

Management Objective	Applicable Actions	Targets/Indicators	Timescales
on the built and natural environment of Sceilg Mhichíl.	<b>A10.2:</b> Ensure that any possible impact of climate change on Sceilg Mhichíl is monitored and taken into account in the development of the National Climate Change Strategy.	1. Monitoring of climate change impacts e.g. erosion events, flora and fauna surveys.	1. Ongoing.
	<b>A10.3:</b> Monitor the change of structures using technical assistance as required.	1. Carry out the seasonal survey.	1. Annually each Spring.
	<b>A10.4:</b> Monitor, on an ongoing basis, other factors that may impinge on the built and natural environment.	1. Compile and publicly release a report on such impinging factors as necessary.	1. Ongoing.

## How to comment on this Environmental Report

This Environmental Report has been published alongside the accompanying Natura Impact Statement (NIS) and Draft Sceilg Mhichíl Management Plan. They are available to download from [www.worldheritageireland.ie](http://www.worldheritageireland.ie).

**You are hereby invited to express your views on this Environmental Report and the Draft Proposed Plan. Please send your comments by email to [skelligmanagementplan@chg.gov.ie](mailto:skelligmanagementplan@chg.gov.ie).**

The Draft Proposed Plan and SEA Environmental Report will undergo a 6-week period of consultation from 4<sup>th</sup> November 2020 until 16<sup>th</sup> December 2020. Any comments that you wish to make should be submitted by email or in writing no later than **16<sup>th</sup> December 2020**.

DRAFT

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# GLOSSARY

## AA

Appropriate Assessment

## CIL

Commissioners of Irish Lights

## CKTSAP

County Kerry Tourism Strategy and Action Plan

## DAFM

Department of Agriculture, Food and the Marine

## DECC

Department of the Environment, Climate and Communications

## DHLGH

Department of Housing, Local Government and Heritage

## DT

Department of Transport

## EC

European Commission

## EPA

Environmental Protection Agency

## ER

Environmental Report

## GSI

Geological Survey Ireland

## INFOMAR

Integrated mapping for the sustainable development of Ireland's Marine Resource

## INNS

Invasive Non-Native Species

## IWDG

Irish Whale and Dolphin Group

## JNCC

Joint Nature Conservation Committee

## KCPD

Kerry County Development Plan

## KLECP

Kerry Local Economic & Community Plan

## NBDC

National Biodiversity Data Centre

## NGO

Non-Governmental Organisation

## NIAH

National Inventory of Architectural Heritage

## NIS

Natura Impact Statement

## NMS

National Monuments Service

## NPWS

National Parks and Wildlife Service

## NTS

Non-Technical Summary

## OPW

Office of Public Works

## P/P

Plan/Project

## pNHA

Proposed Nature Heritage Area

## RMP

Record of Monuments and Places

## SCVEDP

Skellig Coast Visitor Experience Development Plan

## SEA

Strategic Environmental Assessment

## SMR

Sites and Monuments Record

## SPA

Special Protection Area

## TII

Transport Infrastructure Ireland

**UCC**

University College Cork

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**UNESCO**

United Nations Educational, Scientific and Cultural Organization

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**WHS**

World Heritage Site

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**WIID**

Wreck Inventory of Ireland Database

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**WILP**

West Iveragh Local Plan

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DRAFT

# 1. INTRODUCTION

This document has been prepared for National Monuments Service (NMS), part of the Department of Housing, Local Government and Heritage (DHLGH) by Intertek Energy and Water Consultancy Services (Intertek). It is the Environmental Report resulting from the Strategic Environmental Assessment (SEA) of the Proposed Sceilg Mhichíl Management Plan 2020-2030 (hereafter referred to as the 'Proposed Plan').

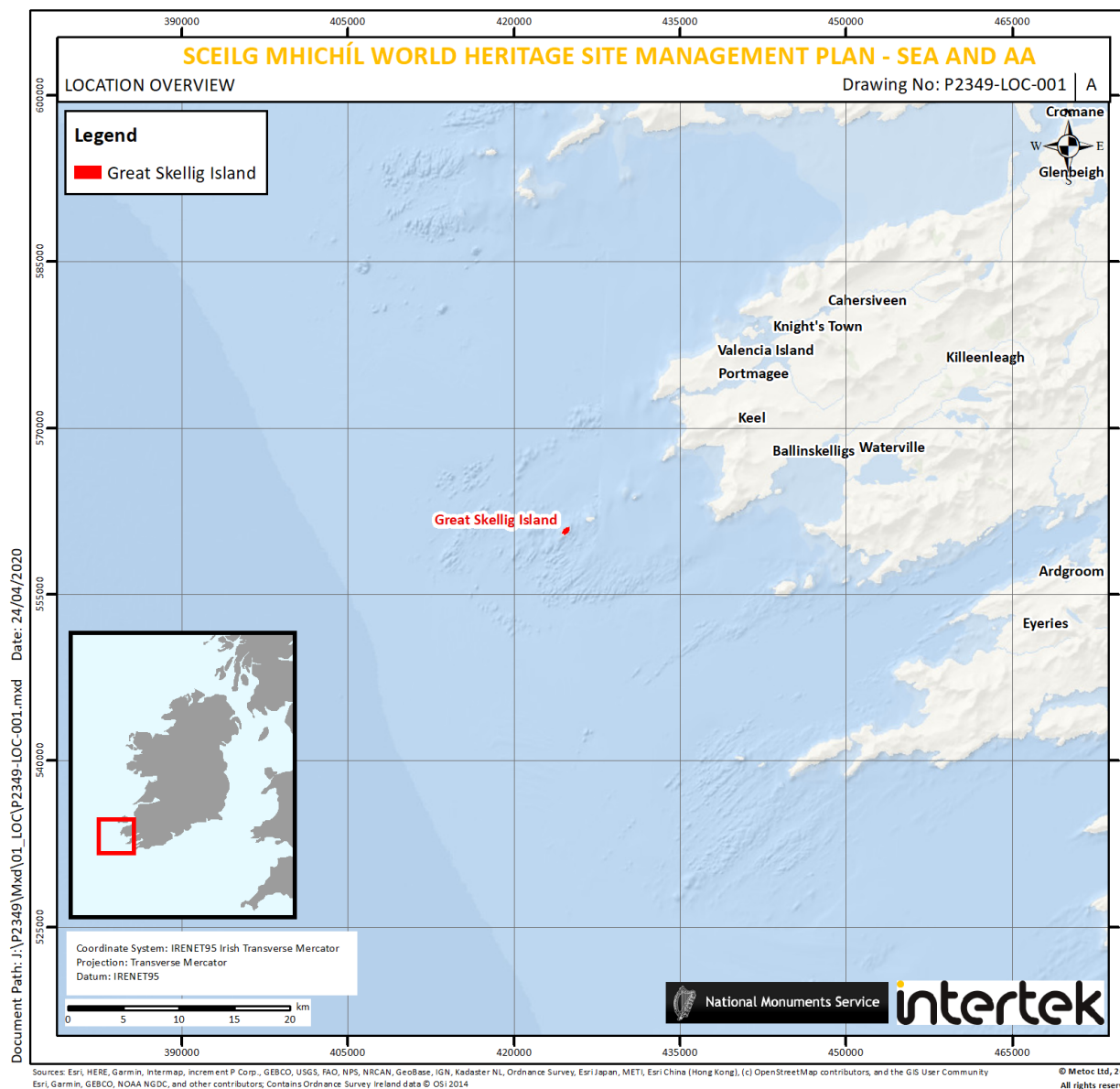
## 1.1 Background Information

Sceilg Mhichíl (also known as Great Skellig or Skellig Michael) and Sceilg Bheag (also known as Little Skellig), are towering sea crags rising from the Atlantic Ocean, located 11.6km west of the Iveragh Peninsula in County Kerry, on the Irish mainland (Figure 1-1). Sceilg Mhichíl is the most spectacularly situated of all the early medieval island monastic sites, with well-preserved access steps, monastery, remote hermitage and other monastic structures. The island's isolation has helped to preserve and protect these monastic remains. Their state of preservation and authenticity makes Sceilg Mhichíl of immense and immeasurable importance. It represents a unique cultural achievement, illustrating a significant period of history and a civilisation that has disappeared.

Additionally, the island records the early history of the establishment of lighthouses on Ireland's coast in the 1820s. The engineering achievement was quite remarkable for its time with the establishment of two lighthouses linked by a remarkable road which is cut into the rock running along the southern edge of the island from the upper lighthouse, past the lower lighthouse and leading to the island pier at the eastern extremity of the island. This pier continues to be the modern-day landing place for visitors.

The Sceilg islands (Sceilg Mhichíl and Sceilg Bheag) have also been recognised as two of Ireland's most important sites for breeding seabirds for several hundred years. Both the size and diversity of the seabird colonies make these islands very significant from a natural heritage perspective on a national and international scale. This is reflected in the designation of Sceilg Mhichíl as a Statutory Nature Reserve, a Special Protection Area (SPA) and a proposed Natural Heritage Area (pNHA).

Figure 1-1 Location of Sceilg Mhichíl (Drawing P2349-LOC-001-A)



## 1.2 Purpose and Content of the Draft Sceilg Mhichíl Management Plan

### 1.2.1 Overview

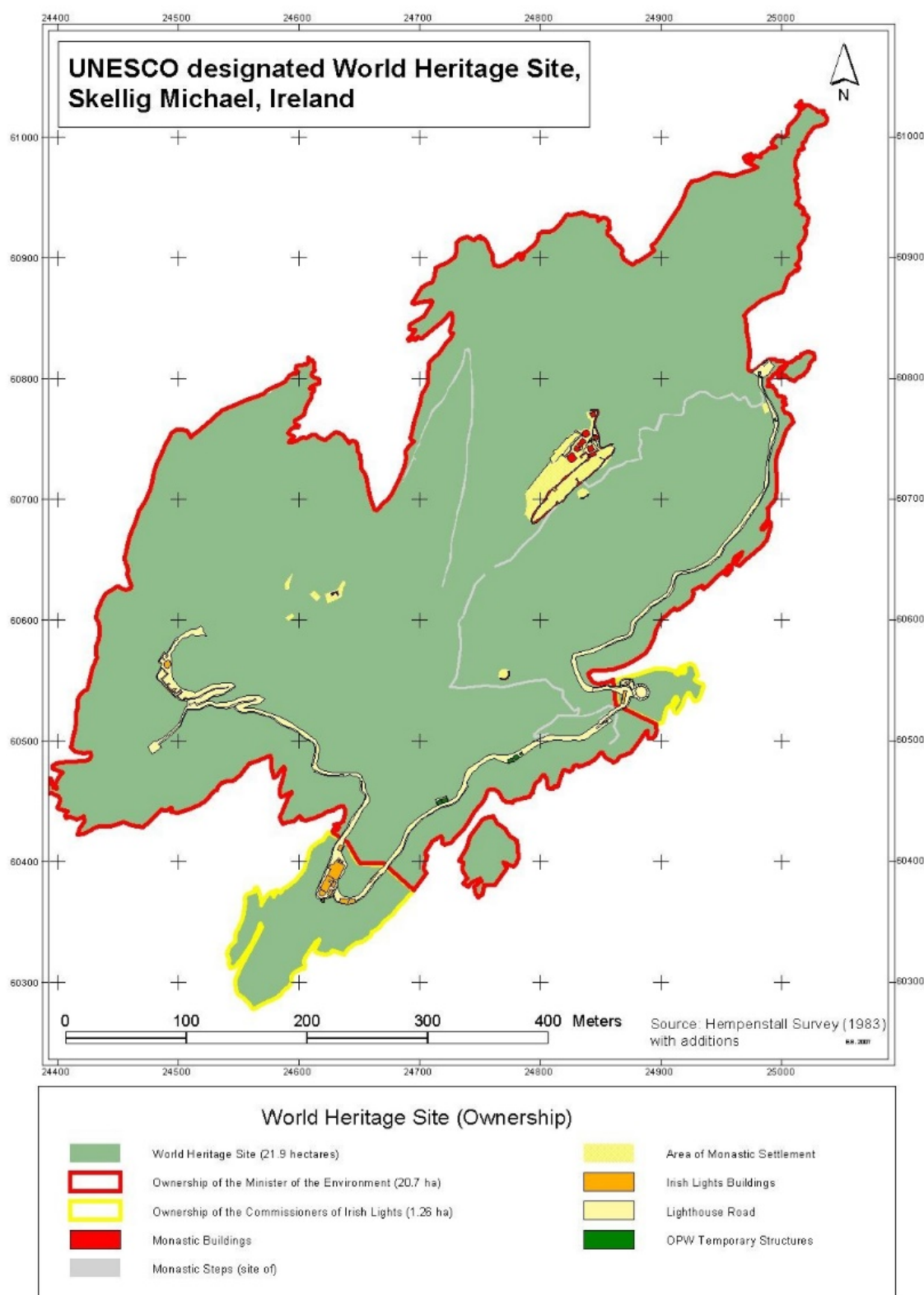
The island of Sceilg Mhichíl was inscribed by The United Nations Educational, Scientific and Cultural Organization (UNESCO) on the World Heritage List as a World Heritage Site (WHS) in 1996. The entire island was inscribed due to its Outstanding Universal Value created by the historic interaction between the monks of Sceilg Mhichíl and the island's unique topography and harsh living environment. The boundary of the WHS designation is drawn tightly around the island (see Figure 1-2), with the nearby island of Sceilg Bheag or the surrounding seas not being included in the designation. The entirety of the site is owned by the DHLGH (on behalf of the State), with the exception of the lower lighthouse, its curtilage, the helipad and its adjacent store which are currently owned by the Commissioners of Irish Lights (CIL) on behalf of the state. Negotiations with the CIL are currently underway for the DHLGH to lease the lighthouse property.

As required under the UNESCO World Heritage Convention 1972, Ireland is obligated to ensure every WHS within its territory has an appropriate management structure in place. The Proposed Plan will replace the existing Sceilg Mhichíl Management Plan 2008 – 2018. The Proposed Plan was developed by DHLGH, in conjunction with the Office of Public Works (OPW), along with input from local interest groups, non-governmental organisations (NGO's) and other interested parties through public consultation.

The Proposed Plan provides a framework for the ongoing proactive management of the site, helping to ensure that its Outstanding Universal Value is protected and managed for future generations.

The aim of the Proposed Plan is to protect and preserve the Sceilg Mhichíl WHS whilst addressing cultural and natural heritage issues in an integrated manner. This is in recognition of both the biological and historical importance of Sceilg Mhichíl and that measures which seek to protect the cultural heritage of the site may not always be in harmony with protecting the natural heritage.

Figure 1-2 Sceilg Mhichíl WHS boundary (UNESCO, 2008)



### 1.3 Purpose of this Environmental Report

As part of the preparation of the Proposed Plan, DHLGH (the Responsible Authority) is carrying out a Strategic Environmental Assessment (SEA). The SEA has been undertaken in parallel with the revision of the Proposed Plan. The SEA fulfils the requirement of EU Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive). SEA is a systematic method for considering the likely environmental effects of a Plan or Project (P/P). SEA aims to:

- integrate environmental factors into P/P preparation and decision-making;
- improve P/P and enhance environmental protection;
- increase public participation in decision making; and
- facilitate openness and transparency of decision-making.

Intertek carried out SEA Screening for the Proposed Plan in February 2020. It was determined that SEA of the Proposed Plan would be required as there exists both a potential risk to human health on the site and the potential for the Proposed Plan to significantly impact the Skelligs SPA. The SEA Screening was then followed by a SEA Scoping Report, which detailed the proposed structure of the SEA Environmental Report (ER). The Scoping Report was issued to key stakeholders and statutory authorities (see Section 1.4 for further information). This SEA ER presents the findings of the Environmental Assessment (see Appendix C for full assessment results).

The key steps of the SEA process are listed in Table 1-1 below with the current stage of the process highlighted.

**Table 1-1 Key Stages in the SEA Process**

Stage	Description
Screening	Determines whether SEA is required for the Proposed Plan, in consultation with the designated statutory consultees.
Scoping	Determines the scope and level of detail of the assessment for the SEA, in consultation with the designated statutory consultees, being the Environmental Protection Agency (EPA), Department of Housing, Local Government and Heritage (DHLGH), Department of Agriculture, Food and the Marine (DAFM), Department of the Environment, Climate and Communications (DECC), and the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media.
Environmental Assessment	Formal and transparent assessment of the likely significant impacts on the environment as a result of implementing the Proposed Plan. The output from this is an Environmental Report which must go on public display along with the Draft Plan.
SEA Statement	Summarises the process undertaken and identifies how environmental considerations and consultations have been integrated into the final Proposed Plan.

## 1.4 Scoping Report Consultation

Under Article 6 of the SEA Directive (and Article 11 of SI 435 of 2004), the competent authority (in this case DHLGH) preparing the plan or programme is required to consult with specific 'environmental authorities' (statutory consultees) throughout the SEA process. The SEA Scoping Report was issued to the following identified statutory consultees:

- Environmental Protection Agency (EPA);
- Department of Housing, Local Government and Heritage (DHLGH), (Formerly the Department of Housing, Planning and Local Government);
- Department of Agriculture, Food and the Marine (DAFM);
- Department of the Environment, Climate and Communications (DECC) (Formerly the Department of Communications, Climate Action and the Environment); and
- Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media (Formerly the Department of Culture, Heritage and the Gaeltacht)

Non-statutory consultees relevant to and included in the Sceilg Mhichíl Management Plan 2020 – 2030 consultation process included:

- Department of Transport (DT) (Formerly the Department of Transport, Tourism and Sport);
- Transport Infrastructure Ireland (TII);
- BirdWatch Ireland;
- An Taisce;
- Kerry County Council;
- UNESCO;
- Fáilte Ireland;
- Skelligs Experience Visitor Centre;
- Irish Wildlife Trust;
- Local Fisheries;
- Boat Operators;
- Irish Whale and Dolphin Group;
- Heritage Council;
- Kerry Historical and Archaeological Society; and
- Marine Institute

The Scoping comments received from the consultation authorities are summarised in Appendix D, along with how the comments were taken into account in the preparation of this SEA ER.

## 1.5 Scope of the SEA

### 1.5.1 Geographic Scope

The geographical scope of the Proposed Plan is focused on the WHS, the island of Sceilg Mhichíl. It also includes the neighbouring island of Sceilg Bheag on account of this island being part of the Skelligs SPA and the routes of the vessels that transit to the Skelligs from the piers of Portmagee, Ballinskelligs and Derrynane on the Irish mainland.



The entirety of the island of Sceilg Mhichíl is under ownership of DHLGH on behalf of the State, with the exception of the lower lighthouse and its curtilage, and the helipad area and its adjacent store which is owned on behalf of the State by the CIL. Negotiations between DHLGH and CIL are underway regarding the leasing of this property.

Whilst the Proposed Plan makes reference to the Skellig Experience Visitor Centre, which is located on the mainland near Portmagee, it is not within the remit of the Sceilg Mhichíl Proposed Plan which focuses on the UNESCO WHS.

### 1.5.2 Temporal Scope

The Proposed Plan will encompass a 10-year period from 2020 to 2030, similar to the previous Management Plan for the site which ran from 2008 to 2018.

## 1.6 Scoping in and out of the SEA Topics

In accordance with Article 5 of the Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive), it has been considered whether the environmental effects (both positive and negative) of the Proposed Plan are likely to be significant for the individual SEA topics also listed in Article 5 of the SEA Directive. The SEA Scoping Report screened in the following SEA topics to be assessed in this ER:

- Biodiversity, Flora and Fauna
- Climatic Factors
- Cultural, Architectural & Archaeological Heritage
- Landscape and Visual Amenity
- Material Assets and Infrastructure
- Population & Human Health
- Soils

The SEA topics of Air and Water were screened out of further assessment. The reasoning for their exclusion is outlined below:

- **Air:** The implementation of the plan and any construction and conservation works will not result in a degradation of air quality, or an increase in noise or vibration above the current levels within the geographic scope of the Proposed Plan.
- **Water:** Due to the remote nature of the site in the Atlantic Ocean, isolated from the Irish mainland, there is negligible potential for environmental effects regarding water quality on Sceilg Mhichíl itself. Any impact to the water quality of the seas between Sceilg Mhichíl and the Irish mainland will be negligible owing to the minimal number of boats that make the crossing and small nature of such vessels.

## 2. OUTLINE OF THE PROPOSED SCEILG MCHICHÍL MANAGEMENT PLAN

**Article 5 of the SEA Directive<sup>1</sup> requires that the Environmental Report includes an outline of the contents and main objectives of the plan or programme (P/P). The purpose of this section is to explain the nature, contents, objectives and timescales of the Proposed Plan.**

### 2.1 Approach

The Proposed Plan has been prepared by the Sceilg Mhichíl Implementation Group Review Committee, established by the DHLGH in 2018 to oversee the preparation of the revised Proposed Plan, in accordance with Ireland's obligations under the World Heritage Convention. The group comprised technical experts from the OPW and the Department's National Parks and Wildlife Service (NPWS) and NMS. Responsibility for the implementation of the Management Plan lies jointly with the DHLGH and the OPW.

In the course of preparing the Management Plan the group met regularly to develop a consensus on the key priorities. A draft plan was launched by the steering group in October 2018 for public consultation. The consultation period ran from December 2018 to February 2019. There were 24 submissions in response to the public consultation stage of the preparation of the Sceilg Mhichíl Draft Management Plan. All comments received were considered and taken into account by the steering group in the preparation of this plan. The group also consulted with agencies such as the National Tourism Development Authority, Fáilte Ireland, regarding sustainable tourism comments received during the consultative phase.

In February 2020, the Proposed Plan was screened for the requirement of SEA and it was determined that SEA and Screening for Appropriate Assessment (AA) would be required. A SEA Scoping report to determine the content and detail of the SEA was consulted on between June and July 2020. Feedback from this process has been reviewed and taken into consideration in the SEA ER and the drafting of the Proposed Plan.

The SEA and Natura Impact Statement (NIS) for the Proposed Plan have been conducted in parallel, due to the common overlap between the two reports. The NIS is narrower in focus compared to the SEA, focusing specifically on the effect(s) the Proposed Plan may have on Natura 2000 sites and thus requires more detailed analysis. However, the findings of the NIS and the research conducted for it also feed into the SEA, allowing for a better consideration of the environmental concerns in the SEA. The outputs from these assessments, in conjunction with consultation and a workshop with stakeholders, have been used to identify potential alternatives to the Proposed Plan. Such alternatives include changes to the wording of existing Actions and the addition of new Actions.

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<sup>1</sup> Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment

## 2.2 Objectives of the Proposed Plan

The outline Management Objectives of the Proposed Plan are presented in Table 2-1 below.

**Table 2-1 Proposed Plan Objectives**

Objectives	
1	To have in place an effective management framework to protect the Outstanding Universal Value of Sceilg Mhichíl.
2	To improve liaison with local interest groups and other relevant parties.
3	To preserve the cultural heritage of the island and sustain its' Outstanding Universal Value.
4	To identify and conserve the natural heritage of the island.
5	To further promote the importance of the WHS to ensure continued coordination by government departments, agencies and other statutory bodies with responsibilities for making and implementing national policies and undertaking activities that may impact on Sceilg Mhichíl and its environs.
6	To manage visitors to Sceilg Mhichíl effectively.
7	To maintain an appropriate standard of safe, regulated visitor access system that supports conservation aims.
8	To increase understanding of and appreciation for Sceilg Mhichíl and its environs.
9	To maintain and enhance the landscape setting of Sceilg Mhichíl.
10	To monitor those factors with the potential to impact on the built and natural environment of Sceilg Mhichíl.
11	To establish a research framework for Sceilg Mhichíl.

## 3. CONTEXT

The purpose of this section is to set out the context of the Proposed Plan. This section provides a summary of the relationship between the Proposed Plan and other relevant Plans/Projects (P/P); a list of the environmental baseline for the area the plan covers; an assessment of the limitations of the data; a list of current environmental problems within the area; the likely evolution of the environment without implementation of the Proposed Plan; and the SEA objectives to be assessed in this ER.

### 3.1 Relationship with other P/P and Environmental Protection Objectives

Article 5 of the SEA Directive requires that the ER includes an outline of the Proposed Plans relationships with other relevant P/P, and how environmental protection objectives have been taken into account in the Proposed Plans preparation. Appendix A lists all the P/P which have been reviewed alongside the Proposed Plan, identifies their environmental objectives and summarises how they affect or are affected by the Proposed Plan. A summary of the key plans, programmes and legislation is listed in Table 3-1.

**Table 3-1 Summary of Key Plans, Programmes and Legislation Relevant to the Proposed Plan**

Level	Name of Plan, Programme or Strategy (PPS)
International/EU	<p>Protection of the World Cultural and Natural Heritage (the World Heritage Convention 1972) (UNESCO)</p> <p>Convention on the Law of the Sea 1982 (UNCLOS Ireland ratified 21 June 1996)</p> <p>Operational Guidelines for the Implementation of the World Heritage Convention (2013)</p> <p>Convention on Biological Diversity (1993)</p> <p>The Convention for the Protection of the Marine Environment of the North-east Atlantic (the 'OSPAR Convention')</p> <p>World Heritage Convention 1972 (Ireland ratified 16 September 1991)</p> <p>Convention for the Protection of the Architectural Heritage of Europe 1985 (Granada Convention; Ireland ratified 20 January 1997)</p> <p>European Convention on the Protection of Archaeological Heritage (Revised 1992, Ireland ratified 18 March 1997)</p> <p>European Cultural Convention 1954 (Ireland ratified 11 March 1955)</p> <p>Convention for the Protection of Cultural Property in the Event of Armed Conflict 1954 (Hague Convention; Ireland ratified 17 May 2018)</p> <p>Convention on the International Return of Stolen or Illegally Exported Cultural Objects 1995 (Unidroit Convention; Ireland has not ratified)</p> <p>European Landscape Convention 2000 (Ireland ratified on 22 March 2002)</p> <p>European Landscape Convention (signed by the Irish Government and ratified by the Council of Europe in 2004)</p> <p>SEA Directive—Assessment of the effects of certain plans and programmes on the Environment 2001 (2001/42/EC)</p> <p>Convention for the Safeguarding of the Intangible Cultural Heritage 2003 (Ireland ratified 22 December 2015)</p> <p>The Framework Convention on the Value of Cultural Heritage for Society 2005 (The Faro Convention; Ireland yet to ratify)</p> <p>Convention on Offences relating to Cultural Property 2017 (Ireland yet to ratify)</p>

Level	Name of Plan, Programme or Strategy (PPS)
	<p>The Convention of the Conservation of European Wildlife and Natural Habitats (1979)</p> <p>Environmental Impact Assessment Directive 1985 (85/337/EEC) (97/11/EC)</p> <p>Council Directive 2009/147/EC, The EC Birds Directive</p> <p>Council Directive 92/43/EEC, The EC Habitats Directive</p> <p>Communication 'Towards an EU Strategy on Invasive Species' (EU COM (2008) 789)</p> <p>Council Directive 2002/49/EC, Environmental Noise Directive</p> <p>Council Directive 2008/50/EC, The Ambient Air Quality and Cleaner Air for Europe Directive</p> <p>Council Directive 2008/56/EC, The Marine Strategy Framework</p> <p>Council Directive 2014/89/EU, Maritime Spatial Planning</p> <p>EU Biodiversity Strategy to 2020</p> <p>Second European Climate Change Programme [ECCP II] 2005</p>
National	<p>Architectural Heritage Protection – Guidelines for Planning Authorities (2011)</p> <p>National Monuments Acts (1930 to 2014) (S.I. No. 2 of 1930 &amp; No. 22 of 2004)</p> <p>National Cultural Institutions Act 1997</p> <p>The National Climate Change Adaptation Framework (2012)</p> <p>National Adaptation Framework (2018)</p> <p>National Biodiversity Plan 2017 – 2021</p> <p>National Planning Framework 2040</p> <p>European Communities (Birds and Natural Habitats) Regulations 2011 to 2015</p> <p>Biodiversity Sectoral Climate Change Adaptation Plan (2019)</p> <p>Flora (Protection) Order, 2015, S.I. No. 356 of 20</p> <p>Harnessing Our Ocean Wealth: An Integrated Marine Plan for Ireland (Inter-Departmental Marine Coordination Group 2012)</p> <p>Irish Geological Heritage (IGH) Programme (1998 - Present)</p> <p>Marine Strategy Framework Directive, Programme of Measures (2015)</p> <p>Marine Planning Policy Statement (2019)</p> <p>National Marine Planning Framework (2018)</p> <p>National Climate Change Strategy 2007-2012 (2007)</p> <p>Planning and Development Act 2000 (as amended)</p> <p>Planning and Development Regulations 2001–2019 (Unofficial Consolidation)</p> <p>Framework and Principles for the Protection of the Archaeological Heritage (1999 Dublin: Dept of Arts, Heritage, Gaeltacht and the Islands)</p> <p>Policy and Guidelines on Archaeological Excavation (1999 Dublin: Dept of Arts, Heritage, Gaeltacht and the Islands)</p> <p>Project Ireland 2040 National Development Plan 2018–2027 (2017 Dublin: Dept of Public Expenditure and Reform)</p> <p>Landscape and Landscape Assessment: Consultation draft guidelines for planning authorities (2000 Dublin: Dept of Housing, Planning and Local Government)</p> <p>Creative Ireland Programme 2017–2022 (2016 Dublin: Dept of Arts, Heritage and the Gaeltacht)</p> <p>Heritage Ireland 2030 (Under consultation)</p> <p>National Landscape Strategy for Ireland 2015 – 2025 (DAHG, 2015)</p> <p>National Mitigation Plan, 2017</p>

Level	Name of Plan, Programme or Strategy (PPS)
	National Spatial Strategy for Ireland 2002-2020 (2002) Proposed National Clean Air Strategy (Under consultation, 2017) Wildlife Acts 1976 to 2012 Environmental Noise Regulations 2006
Regional	Kerry County Development Plan 2015 – 2021 West Iveragh Local Plan 2019 – 2025 Regional Spatial and Economic Strategy for the Southern Region (2020 Waterford: Southern Regional Assembly) Wild Atlantic Way Operational Programme 2015–2019 (2015 Dublin: Bord Fáilte) County Kerry Heritage and Biodiversity Plan 2008 – 2012 Regional Planning Guidelines for the South-West Region 2010 – 2022 Kerry Local Economic & Community Plan 2016 – 2022 County Kerry Tourism Strategy and Action Plan 2016 - 2022
Local	Sceilg Mhichíl World Heritage Site Management Plan 2008 – 2018

### 3.2 Environmental Baseline

Article 5 of the SEA Directive requires that the ER details ‘Relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the P/P’, ‘Environmental characteristics of areas likely to be significantly affected’, and ‘Existing environmental problems that are relevant to the P/P including, in particular, those relating to any areas of particular environmental importance, such as areas designated under the Birds and Habitats Directives’. This section aims to describe the environmental context within which the Proposed Plan will operate and the constraints and targets that this context imposes on the Proposed Plan.

A detailed review of the baseline environment can be found in Appendix B, along with tables and figures detailing the main findings of the review. The following sections summarise Appendix B.

Table 3-2 summarises, for each identified SEA topic, the baseline data subject areas and lists the principal data sources for each subject.

**Table 3-2 Data sources to inform the baseline assessment**

SEA Topic	Environmental Baseline Data	Data Sources
Biodiversity, Flora and Fauna	Location and condition of designated sites	NPWS, EPA, DCCAE
	Habitat and species information (including birds and mammals)	NPWS, EPA, DCCAE, BirdWatch Ireland, University College Cork (UCC), National Biodiversity Data Centre (NBDC), Irish Whale and Dolphin Group (IWDG), Marine Institute, Joint Nature Conservation Committee (JNCC), Skelligs Biosecurity Review 2019, NPWS Biosecurity review of Sceilg Mhichíl (2017)
	Invasive Species	NBDC, NPWS, Skelligs Biosecurity Review 2019, NPWS Biosecurity review of Sceilg Mhichíl (2017)

SEA Topic	Environmental Baseline Data	Data Sources
	Present threats to biodiversity	NBDC, NPWS, Skelligs Biosecurity Review 2019, NPWS Biosecurity review of Sceilg Mhichíl (2017)
	Impacts of noise on birds and marine mammals	NPWS, EPA, DCCAE, BirdWatch Ireland, UCC, NBDC, IWDG, Marine Institute, JNCC
Population and Human Health	Employment	Kerry County Council, Central Statistics Office, OPW
	Visitor statistics and experience	OPW, NMS Skellig Coast Visitor Experience Development Plan (Fáilte Ireland, 2017)
	Health and Safety	OPW and NMS
Soil	Soil and geological features and erosion	AA GeoTool, Geological Survey Ireland (GSI), OPW and EPA data for: <ul style="list-style-type: none"> <li>▪ Bedrock</li> <li>▪ Soil &amp; Subsoil type/permeability/vulnerability</li> <li>▪ Geological heritage areas</li> <li>▪ Landslide locations</li> <li>▪ Coastal erosion</li> </ul>
Material Assets & Infrastructure	Current infrastructure	DAFM, OPW data <ul style="list-style-type: none"> <li>▪ Ports and harbours - Marine Irish Digital Atlas</li> </ul>
	Boat statistics	OPW and NMS
	Waste management and statistics	Kerry County Council NMS and OPW waste records
Climatic Factors	Climatic summary	Met Éireann information on local and Irish-wide climate
Cultural, Architectural & Archaeological Heritage	Location and status of protected sites	DHLGH, NMS, ASI Sites & Monuments Record data, UNESCO World Heritage Sites, World Heritage Ireland, Kerry County Council <ul style="list-style-type: none"> <li>▪ Sites and Monuments Record (SMR)</li> <li>▪ Record of Monuments and Places (RMP)</li> <li>▪ National Inventory of Architectural Heritage (NIAH) Architecture</li> <li>▪ UNESCO WHS</li> <li>▪ Record of protected structures</li> </ul>
	Wrecks of archaeological interest	Wreck Inventory of Ireland Database (WIID) Underwater Unit National Monuments Service Integrated mapping for the sustainable development of Ireland's Marine Resource (INFOMAR)
	Architectural buildings and features	Record of Protected Structures - Kerry County Council National Inventory of Architectural Heritage (NIAH)



SEA Topic	Environmental Baseline Data	Data Sources
	Archaeological monuments on Sceilg Mhichíl	3D Icons Ireland Project (The Discovery Programme)
	Archaeological excavations, artefacts, monuments	Heritage Council Database of Irish excavation reports National Museum of Ireland Antiquities Division
	Place names	Placenames database of Ireland
	Folklore	National Folklore Collection UCD database
	Photography of monuments	National photographic archive
Landscape and Visual Amenity	Landscape character areas and sensitive landscapes	Information from County Kerry Development Plan <ul style="list-style-type: none"> <li>▪ Landscape conservation areas</li> <li>▪ Landscape character areas</li> <li>▪ Sensitive landscapes</li> <li>▪ Seascapes</li> </ul>

### 3.3 Limitations of Data

The gaps and/or limitations of the SEA baseline data, and how the SEA addressed these shortcomings is summarised below:

- There is limited data available on the specific planktonic communities found in the surrounding seas around Sceilg Mhichíl. Best available other sources of data (e.g. communities found on the south-west coast of Ireland) have instead been utilised.
- There are currently no specific statistics available on the levels of waste generated on Sceilg Mhichíl. Current waste management practices on the island have been described in as much detail as is currently available.
- Recent baseline monitoring and survey data for the Special Conservation Interests (SCI) of Skelligs SPA is focused on cliff nesting species. The greatest gap in data is for the burrowing nesting nocturnal SCI species found on Sceilg Mhichíl, namely Atlantic puffin, Manx shearwater and European storm petrel. These species have been identified as the most vulnerable to the identified potential pressures from implementation of the Proposed Plan. However, monitoring these species is inherently difficult given their nocturnal, burrowing nature and access to some burrows on the island is potentially hazardous, requiring safety equipment due to the steep nature of the land. As a result of the difficulties in obtaining data for these species there is a lack of understanding with regard to the distribution of the individuals across the island and a lack of data on yearly breeding success to be able to monitor trends in population levels. Where it was not possible to obtain detailed local data, secondary data sources were utilised, including reports on the state of the environment by NPWS, Birdwatch Ireland, Irish Whale and Dolphin Group (IWDG) and JNCC. These reports contain a variety of datasets which were the best data available and are considered reliable for the assessment of the state of the environment.

### 3.4 Environmental Problems

Article 5, Annex I (d) of the SEA Directive requires that information regarding ‘any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC (The Birds and Habitats Directives respectively)’ included in the



Environmental Report. The purpose of this section is to explain how existing environmental problems will affect or be affected by the Proposed Plan, and whether the Proposed Plan is likely to aggravate, reduce or otherwise affect existing environmental problems. Existing environmental problems that have been deemed relevant for Sceilg Mhichíl and the surrounding areas are summarised in Table 3-3.

**Table 3-3 Environmental problems relevant to the Proposed Plan**

SEA Topic	Environmental Problem	Implications for the Proposed Plan
Biodiversity, flora and fauna	Maintenance of condition of designated sites, under the requirements of the Habitats and Birds Directives.	Any proposed works throughout the area affected by the Proposed Plan must adhere to appropriate legislation and seek not to adversely impact the integrity of designated sites. An Appropriate Assessment (AA) will be undertaken for the Proposed Plan.
	Maintenance of condition as per designated sites conservation objectives.	
	Disturbance of burrowing breeding seabird species (e.g. Atlantic puffin, European storm petrel) from visitors and conservation works.	The Proposed Plan must seek to not adversely affect seabird habitats and protected sites and disrupt seabird populations.
	Introduction of invasive non-native species (INNS).	The Proposed Plan must seek to minimise INNS introduction risk.
	Effects on non-designated but important habitats and species such as rare lichens, cetaceans and pinnipeds found in the surrounding seas. Habitats and species identified as requiring further protection.	The Proposed Plan must seek to not adversely affect other important habitats and species found within the area the Proposed Plan affects.
Population and human health	Deterioration of the pathways utilised by visitors, along with rockfall and erosion events on Sceilg Mhichíl, may impact the safety of visitors when visiting the site.	The Proposed Plan must ensure that the main tourist pathways are kept clear of debris and maintained to ensure visitor safety.
Soil	Site is at risk of erosion and rockfall events from adverse weather conditions.	The Proposed Plan should consider mitigation measures to reduce erosion events.
Material assets and infrastructure	Construction/renovation of existing structures on Sceilg Mhichíl may not fit in with the cultural heritage features present on the island.	The Proposed Plan should ensure any new developments are in keeping with the environment of Sceilg Mhichíl.
Climatic factors	Site is at risk of deterioration (e.g. erosion, damage from rockfalls) from increasing intensity of winter storm events.	Proposed Plan should consider monitoring and mitigation measures to aid in predicting where events such as rockfalls may occur as a result of extreme weather, allowing further adaptations to be put in place to mitigate against/prevent such events from occurring.
Cultural, architectural &	Potential for damage to cultural heritage features to be damaged by work programmes.	The Proposed Plan should ensure any works programmes are subject to sufficient pre-works surveys to identify

SEA Topic	Environmental Problem	Implications for the Proposed Plan
archaeological heritage		potential problems prior to works commencing.
	Potential for damage to cultural heritage features to be damaged through inappropriate interactions with visitors.	The Proposed Plan should ensure any works programmes are subject to sufficient pre-works surveys to identify potential problems prior to works commencing. Any works should be undertaken in accordance with current regulation in respect of licences and consents. <sup>2</sup>
	Potential for cultural heritage features to be damaged directly/indirectly by extreme weather events e.g. heavy rainfall, high winds leading to erosion/rockfall events.	The Proposed Plan should ensure the maintenance works programme is equipped to manage/mitigate against the potential impacts of extreme weather events.
Landscape and visual amenity	The distinct and high-quality nature of the landscapes and seascapes of Sceilg Mhichíl and Sceilg Bheag should be protected.	The Proposed Plan should ensure any new developments that may arise on Sceilg Mhichíl are appropriately sited, and their design and scale is in keeping with the surrounding landscape.

### 3.5 Likely Evolution of the Environment Without Implementation of the Proposed Plan

Article 5, Annex I (b) requires that information regarding ‘the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme’ is included in the Environmental Report. The likely future changes to Sceilg Mhichíl and the surrounding area in relation to the relevant SEA topics are described below:

#### Biodiversity, flora and fauna

- Resident cliff nesting bird populations on the Skellig islands are likely to remain at similar levels as the present day. Burrowing bird species such as Atlantic puffin, Manx shearwater and European storm petrel may however be subject to increased disturbance through deteriorating physical conditions of the site and increased numbers of visitors.
- Disturbance of cetaceans and pinniped species in the waters surrounding Sceilg Mhichíl could potentially increase due to an increased number of vessels circulating around the island itself.
- Bird populations could be at severe risk from potential introduction of predatory mammalian INNS.
- Increased disturbance to nesting bird species during the breeding season, leading to reduction in breeding success and population declines, should helicopter tours and use of drones increase.

<sup>2</sup>. *Frameworks and Principles for the Protection of the Archaeological Heritage* (Dúchas 1999a). Available at: <https://www.archaeology.ie/sites/default/files/media/publications/framework-and-principles-for-protection-of-archaeological-heritage.pdf>. Accessed 23 September 2020; *Policy and Guidelines on Archaeological Excavation* (Dúchas 1999a). Available at: <https://www.archaeology.ie/sites/default/files/media/publications/excavation-policy-and-guidelines.pdf>. Accessed 23 September 2020

#### **Climatic factors**

- Current and predicted changes to the local weather conditions, such as change in dominant wind direction and increased severity of winter storm events, will continue into the future.

#### **Cultural, architectural & archaeological heritage**

- Boats and visitor numbers to island and 'off island' may increase without monitoring and cause erosion to monuments and underlying deposits, effects including rockfalls, soil erosion, degradation of monuments and features such as steps, as well as negative impacts on the location's spiritual integrity.
- The lack of a future interpretative base/centre that would clearly show the international significance of the site may lead to a lack of awareness of the underlining reasoning behind Sceilg Mhichíl's World Heritage Status inscription, its historic integrity and its spiritual significance may wane. Should this occur it may be difficult to re-establish spiritual significance and historic integrity.
- Lack of monitoring of the consolidated monuments and structures may lead to their deterioration and ultimately their destruction due to lack of mitigation in relation to, for example, climate impact.
- Ongoing research on the island's cultural heritage, both material and intangible, may be stunted.
- Loss of World Heritage Status and loss of recognition of Sceilg Mhichíl as a place of Outstanding Universal Value.

#### **Soil**

- Due to increasing frequency and severity of extreme weather conditions in the vicinity of Sceilg Mhichíl, erosion and rockfall events are likely to occur with increasing frequency on Sceilg Mhichíl.

#### **Landscape and visual amenity**

- The present landscape and seascape, through deterioration of the site due to the effects of climate change, may be negatively impacted in the long-term.

#### **Material assets and infrastructure**

- Necessary renovations of the existing lower lighthouse complex may not proceed, leading to deterioration of the structures and inability for their use by workers and visitors to the island.

#### **Population and human health**

- No further safety structures and procedures may be implemented on the site, potentially leading to more hazardous conditions for both workers and visitors on the island.
- The current permit system for commercial boats to take visitors to Sceilg Mhichíl would likely remain in its current iteration, with 15 operators competing in a commercial tender on a 3-year basis.

### **3.6 Environmental Topic Inter-Relationships**

Inter-relationships between the environmental topics listed in Article 5 of the SEA Directive have been considered and are presented in Table 3-4. The green boxes identify when inter-relationships occur between topics.

**Table 3-4 Consideration of SEA topic inter-relationships**

Topic	Biodiversity, Flora and Fauna	Climatic Factors	Cultural, Architectural & Archaeological Heritage	Soils	Landscape and Visual Amenity	Material Assets & Infrastructure	Population and Human Health
Biodiversity, Flora and Fauna							
Climatic Factors	Y						
Cultural, Architectural & Archaeological Heritage	Y	Y					
Soil	Y	Y	Y				
Landscape and Visual Amenity	Y	Y	Y	Y			
Material Assets & Infrastructure	Y	Y	Y	Y	Y		
Population and Human Health	Y	Y	Y	Y	Y	Y	

### 3.7 SEA Objectives

The environmental assessment was undertaken for a set of environmental objectives (SEA objectives). These objectives have been derived from a review of (a) the Proposed Plan, (b) the environmental baseline, and (c) associated issues. The Proposed Plan has been assessed against the SEA objectives (listed in Table 3-5) to examine the likely significant environmental impacts. The SEA objectives have been kept broad to allow for a wide range of environmental topics to be considered.

**Table 3-5 SEA Environmental Objectives**

SEA Topic	SEA Objective
Biodiversity, Flora and Fauna	<ol style="list-style-type: none"> <li>1. Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas, (e.g. through direct disturbance and damage to breeding/non-breeding seabirds, trampling of nesting habitat and damage and disturbance cause by conservation/building works).</li> <li>2. Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.</li> <li>3. Prevent introduction of invasive species to Sceilg Mhichíl.</li> <li>4. Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.</li> </ol>
Climatic Factors	<ol style="list-style-type: none"> <li>5. Contribute to effective adaptation to the predicted effects of climate change.</li> </ol>
Cultural, Architectural & Archaeological Heritage	<ol style="list-style-type: none"> <li>6. Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.</li> <li>7. Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.</li> </ol>

SEA Topic	SEA Objective
Soil	8. Minimise the impact of soil and coastal erosion.
Landscape and Visual Amenity	9. Protect the landscape/seascape character and visual amenity in the vicinity of the area.
Material Assets & Infrastructure	10. Protect and enhance the existing infrastructure present on Sceilg Mhichíl.
Population and Human Health	11. Improve economic opportunities for the local community in a sustainable manner. 12. Improve the safety of staff and visitors to Sceilg Mhichíl. 13. Protect and improve visitor experience to Sceilg Mhichíl.

## 4. ASSESSMENT OF ENVIRONMENTAL EFFECTS

### 4.1 Alternatives Assessment

SEA requires the consideration of reasonable alternatives – including the 'do nothing scenario'. In the case of the Proposed Plan the alternative of not producing a new management plan, i.e. 'no plan' is not considered a reasonable alternative because the requirement for an up-to-date management plan for World Heritage Sites is prescribed by UNESCO under the World Heritage Convention 1972, for which the Irish Government is a signatory.

All reasonable alternatives have been assessed in the SEA which either address stakeholder concerns or aim to avoid or reduce any negative effects of implementation of the Proposed Plan in relation to the Objectives and Actions.

#### 4.1.1 Alternative Duration of the Visitor Season

An alternative scenario that has been identified through stakeholder consultation is provision for an extension to the duration of the visitor season to Sceilg Mhichíl. Consultation feedback has raised concerns that opportunity for a longer visitor season, which could benefit boat operators, local tourism and local businesses, is being missed even when optimal weather conditions have occurred outside the prescribed visitor season (e.g. it has been noted that favourable weather conditions have been consistently experienced in April). Currently the visitor season is defined as starting around mid-May and running to the end of September. Interested stakeholders would like to see the season extended, for example opening in April if the weather permits.

While this alternative scenario could lead to short-term economic benefits to the boat operators and the local area of the Iveragh Peninsula, extending the duration of the visitor season could lead to several detrimental impacts which would foremost compromise the safety of the site to visitors and add to the existing pressure of increasing visitor numbers on the cultural and natural heritage features of the site. As described in Chapter 5: Site Management, of the Proposed Plan, there are three key factors which determine the visitor season:

- The feasibility of consistent access by boat, as dictated by weather and sea conditions;
- The need to carry out pre-season maintenance and safety preparation works in the early part of the year to counteract the effects of winter storms and check the fabric of the site for any damage; and
- The need to contract the Guide Team, carry out necessary training and schedule emergency response training in conjunction with emergency services such as Coastguard, Hospital services etc.

The OPW has significant obligations to prepare the island in advance of the visitor season to render it as safe as possible. Work carried out to ready the site includes the cleaning of winter debris from the pier, the access roadway and the steps, ensuring all visitor accessible areas are clean and hazard free, ensuring the 600 + steps are not loosened or unstable, addressing any fabric restitution issues at the Monastery site, clearing any rockfalls and assessing likely unstable areas on the mountainside above visitor-trafficked areas.

Before any regular visitor access can be permitted, the island must first be assessed by the OPW maintenance team and the site prepared for visitors. Due to the extremely harsh environment at Sceilg Mhichíl during the winter such as severe storms and adverse weather and sea conditions which can

persist well into the spring season, regular safe access to the site for the work team can be difficult to achieve during this period. Along with the required works undertaken during this period, other activities are also conducted. These include a full-scale safety evacuation drill for the site and an intensive process of health and safety training for guide staff which takes place ten days prior to the opening of the site to visitors.

In addition to safety aspects, an earlier opening of the site may increase disturbance to breeding seabirds on Sceilg Mhichíl, over the already existing levels of disturbance. Several species such as Atlantic puffin typically arrive on Sceilg Mhichíl in April, before the visitor season starts. Introduction of visitors during this time may prevent individual birds from reaching their typical nesting sites, impacting the population over the short and long-term.

In summary:

- Given the limited operational window for staff to access the island and complete the required works to make the island safe to accept visitors and complete the relevant training, it is challenging to open the site to visitors earlier than mid-May. A reduction in time to complete works (e.g. clearance and strengthening of the steps leading to the monastery) and to train staff would negatively impact the safety of visitors at the site.
- Earlier opening would also likely have a detrimental impact to breeding seabirds arriving for the start of the breeding season.

As such, it has been concluded that this alternative to the current position in the Proposed Plan is not recommended.

It is recommended however, that OPW should provide weekly updates to concerned parties on the works they are carrying out to prepare the site for the visitor season, so that all parties are aware of the reason for the sites closure and when the site will be ready for reopening.

As such, the SEA ER will solely consider the version of the Proposed Plan dated 19<sup>th</sup> of June 2020.

## 4.2 Assessment Methods

The SEA involved the assessment of each Plan Action under the 11 Management Objectives against the 13 SEA Objectives to determine whether Action will support, have a neutral contribution to, or detract from, the SEA Objectives.

Impacts relating to the issues addressed by the SEA objectives above have been considered and a high-level appraisal of the Plan Actions against the SEA objectives has been made using the significance criteria detailed in Table 4-1.

**Table 4-1 Significance criteria for assessment**

Significance of effect	Description of effect significance
<b>Substantially supports SEA objective</b>	Is considered significant, e.g. beneficial impacts are substantial, substantially accelerate an improving trend, substantially decelerate a declining trend, substantially support delivery of a declared objective.
<b>Supports SEA objective</b>	Supports SEA objective but not to a significant extent, e.g. beneficial impacts are not substantial, do not substantially accelerate an improving trend, do not substantially decelerate a declining trend, do not substantially support from delivery of a declared objective.
<b>Neutral contribution to SEA objective</b>	Either no impacts or on balance (taking account of positive and



Significance of effect	Description of effect significance
	negative impacts) a neutral contribution.
<b>Detracts from SEA objective</b>	Detracts from SEA objective but not to a significant extent, e.g. adverse impacts are not substantial, do not substantially decelerate an improving trend, do not substantially accelerate a declining trend, do not substantially detract from delivery of a declared objective.
<b>Substantially detracts from SEA objective</b>	Is considered significant, e.g. adverse impacts are substantial, substantially decelerate an improving trend, substantially accelerate a declining trend, substantially detract from delivery of a declared objective.

Any effects will each impact on the site in a different manner. The definitions of such effects are detailed below:

- **Direct effects:** Direct effects represent for example loss of habitat, disturbance of bird species, changes in biodiversity abundances or loss of resources.
- **Indirect effects:** effects on the environment, which are not a direct result of the activities of the project, often produced away from or as a result of a complex pathway, for example the effects of climate change.
- **Irreversible:** an effect which is likely to be permanent, effects that cannot be undone even through remediation and the resource cannot turn to its original state.
- **Reversible:** an effect which is temporary and effects that can be undone, for example through remediation or restoration.

### 4.3 Summary of Effects

The results of the assessment indicated that a small number of Plan Actions have the potential to detract from the SEA Objectives for three SEA topics (Biodiversity, flora and fauna; Soils; and Population and human health). However, most of the Plan Actions either substantially support, support, or have a neutral effect on the SEA Objectives across all the topics.

Therefore overall, when averaging out the results, implementation of the Proposed Plan either substantially supports or supports the SEA Objectives.

The overall potential effects on the SEA topics are summarised in Table 4-2 below. Full assessment results are detailed in Appendix C of this report.

Where potential negative effects have been identified, measures to mitigate such effects have been proposed.

The assessment also identified areas where the Proposed Plan could be improved by removing any identified ambiguity in the meaning of Actions; increasing communications in relation to collected data on Sceilg Mhichíl and increasing transparency in decision making; or strengthening the Action for greater environmental protection. These proposed changes included:

- Re-wording eight existing Plan Actions; and
- The addition of two new Plan Actions;

These measures have been proposed to address stakeholder feedback on communications, transparency of decision making and availability of data in the public domain.



**Table 4-2 Summary of assessment results**

Topic	SEA Objective	Significance	Potential Effect and Justification of Significance Ranking
Biodiversity, flora and fauna	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas, (e.g. through direct disturbance and damage to breeding/non-breeding seabirds, trampling of nesting habitat and damage and disturbance cause by conservation/building works).	Supports	While some Plan Actions, such as those relating to visitor access and conservation/research works, on their own may have a detrimental effect on the biodiversity, flora and fauna of Sceilg Mhichíl, the Actions aimed at protecting and furthering the understanding of the sites flora and fauna will aid in efforts to reduce damage to such features into the future.
	Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.	Supports	The Proposed Plan contains specific Actions detailing that helicopter flights will be prohibited from flying within 1km of Skelligs SPA, and that the aircraft regulatory authorities will be engaged with to mitigate conservation risks to the site from deployment of inappropriate airborne devices.
	Prevent introduction of invasive species to Sceilg Mhichíl.	Substantially supports	The Proposed Plan will implement the recommendations of the 2018 Biosecurity Review and incorporate them into the Standard Operating Procedure for the site.
	Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Supports	The Proposed Plan contains Actions that detail how the current natural heritage features will be conserved and monitored into the future, so they are not detrimentally affected by conservation works and visitor access to the site.
Climatic factors	Contribute to effective adaptation to the predicted effects of climate change.	Substantially supports	The Proposed Plan sets out a monitoring framework for the effects of climate change on Sceilg Mhichíl. This will aid in predicting where events such as rockfalls may occur as a result of extreme weather, allowing further adaptations to be put in place to mitigate against/prevent such events from occurring.

Topic	SEA Objective	Significance	Potential Effect and Justification of Significance Ranking
Cultural, archaeological and cultural heritage	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.	Substantially supports	The overall potential predicted impact of the proposed actions is considered to be a positive effect in regard to the cultural, archaeological and cultural heritage. Actions provide for the ongoing protection, maintenance and future monitoring of this resource. There are important actions in relation to the sharing of knowledge and the creation of a dedicated research community comprising the local community, academics, and guardians of the site.  Each proposed action was assessed for its impact in relation to the SEA objectives, and also in relation to the environmental problems highlighted in Table 3-3. Detail of assessment is provided in Appendix C.
	Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Support	This supports the SEA objective. Any interventions required should be kept to a minimum and undertaken in line with current regulation in order to maintain/enhance the historic and archaeological integrity of the island. <sup>3</sup>
Soil	Minimise the impact of soil and coastal erosion	Substantially supports	Through the management of visitor access, research works and the creation of a framework for monitoring climate change, the Proposed Plan will significantly support the minimisation of soil and coastal erosion and their impacts on Sceilg Mhichíl.
Landscape and visual amenity	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Support	The development of the Lower Lighthouse complex for use by staff and visitors, as opposed to the construction of new permanent structures on Sceilg Mhichíl, will

<sup>3</sup> Current regulation is detailed in: *Frameworks and Principles for the Protection of the Archaeological Heritage* (Dúchas 1999a). Available at: <https://www.archaeology.ie/sites/default/files/media/publications/framework-and-principles-for-protection-of-archaeological-heritage.pdf>. Accessed 23 September 2020; *Policy and Guidelines on Archaeological Excavation* (Dúchas 1999a). Available at: <https://www.archaeology.ie/sites/default/files/media/publications/excavation-policy-and-guidelines.pdf>. Accessed 23 September 2020

Topic	SEA Objective	Significance	Potential Effect and Justification of Significance Ranking
			ensure that the landscape/seascape character of the area will not be hindered by the Proposed Plan.
Material assets and infrastructure	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Support	The continued maintenance of the existing structures on Sceilg Mhichíl as outlined by the Actions of the Proposed Plan, along with the renovation of the Lower Lighthouse Complex, ensures that the Proposed Plan will continue to protect and enhance the existing infrastructure.
Population and human health	Improve economic opportunities for the local community in a sustainable manner.	Support	There could be significant positive effects for the local population from promoting the enjoyment and understanding of the site. The enhancement of information dissemination, educational outreach programme, natural history lectures and supporting local initiatives has the potential to provide additional jobs and/or responsibilities for members of the local population. In addition, increased awareness of and engagement with the site and the Skellig Experience Centre has the potential to have significant tourism benefits.
	Improve the safety of staff and visitors to Sceilg Mhichíl.	Support	The Actions outlined in the Proposed Plan will ensure that safety of staff and visitors on Sceilg Mhichíl remains a priority.
	Protect and improve visitor experience to Sceilg Mhichíl.	Support	The Proposed Plan includes various Actions that will ensure that the visitor experience on the site is of high quality through the employment of trained guides, ensuring a reasonable minimum allotted time on-site to prevent visitors from feeling rushed and the addition of toilet facilities.

## 4.4 Cumulative Effects Assessment

This section of the Environmental Report provides an outline of the potential cumulative effects on the environment as a result of implementation of the plan.

Cumulative effects are defined in the EPA Sea Process Checklist as “effects on the environment that result from incremental changes caused by the strategic action together with other past, present and reasonably foreseeable future actions. These effects can result from individually minor but collectively significant actions taking place over time or space” (EPA, 2018). These effects can be insignificant individually but cumulatively over time and from a number of sources can result in the degradation of sensitive environmental resources. Assessment of cumulative effects is required by the SEA Directive (2001/42/EC).

Applicable plans and projects have been identified through a search of the DHPLG website and a further desk-top review of other published literature and websites. Current commercial fisheries and shipping interests have been scoped out of the list of projects as they are considered to represent baseline conditions, and are not considered as projects, plans or licensed activities. For there to be a potential in-combination effect between the Proposed Plan and another plan or project there must be a common pressure-receptor pathway which overlaps spatially and temporally.

Other small-scale activities such as sport-fishing, SCUBA diving around the site and the use of craft such as kayaks and jet-skis have been recorded to occur on a very limited basis by local guides on Sceilg Mhichíl (OPW, pers. comms. May 2020). Individuals participating in such activities are not permitted from landing on Sceilg Mhichíl, outside of local arrangements being in place for some dive operators where divers may use the pier area for resting purposes. Owing to the infrequent nature of these activities and lack of interaction with the main site of Sceilg Mhichíl itself, it is considered that these activities will not lead to any significant effects to the site, alone or in-combination with the Proposed Plan

Table 4-3 below details the relevant Plans and Projects and whether they may have a cumulative effect with the Proposed Plan. As a result of the below assessment, it has been determined that there is no pathway for cumulative effect between the above plans/projects and the Proposed Plan.

**Table 4-3 Potential in-combination effects of relevant plans/projects with the Proposed Plan**

Plan	Plan/Project Summary	Details of HRA Work Completed	Potential impacts that may cause in-combination effects?	Further Assessment Required?
Kerry County Development Plan (KCPD) 2015 – 2021	The KCPD 2015 – 2021 is an integrated document detailing the policies and objectives across a wide range of sectors that outline how the County will develop in the future.	Appropriate Assessment – Determined that the Kerry County Development Plan is not likely to have significant effects on a Natura 2000 site, either by itself or in combination with other plans or projects and that adverse impact on the integrity of Natura 2000 sites are not likely to occur.	The KCPD makes no provision for any specific policies relating to the any protected sites in the SEA Study Area. Where reference is made to protected sites in the policies, it is made to ensure that the integrity of such sites will not be affected. The KCPD makes no specific provision for the expansion of tourism to Sceilg Mhichíl, with the only policy relating to the site being to support the sustainable public access to the site. For these reasons, in addition to the AA conducted for the KCPD determining it would not have an adverse impact alone or in-combination with another plans/projects, there are no potential impacts from this plan that may cause in-combination effects.	NO
West Iveragh Local Plan (WILP) 2019 – 2025	The purpose of the WILP is to set out a comprehensive local planning framework with clear policies and objectives including land use zoning in the interests of the common good, with its successful implementation ensuring the are develops positively in a sustainable manner.	Appropriate Assessment concluded that (after all Material Alterations were accounted for) adverse impacts on the integrity of Natura 2000 sites, in view of the site's conservation objectives, were not likely to occur.	As detailed in the Natura Impact Statement for the WILP, the policies and objectives in the plan will either: <ul style="list-style-type: none"> <li>▪ Not lead to development;</li> <li>▪ Are intended to protect the natural environment including biodiversity;</li> <li>▪ Are intended to conserve or enhance the natural built or historic environment and are unlikely to have an effect on a Natura 2000 site;</li> <li>▪ Will positively steer development away from Natura 2000 sites and associated sensitive areas;</li> <li>▪ Positively make provision to ensure that implementation will not have a significant effect or an adverse effect on the integrity of a Natura 2000 site;</li> </ul>	NO

Plan	Plan/Project Summary	Details of HRA Work Completed	Potential impacts that may cause in-combination effects?	Further Assessment Required?
			<ul style="list-style-type: none"> <li>And/or have been formulated using a caveat or conditional approach requiring, where necessary, a case by case environmental assessment/HDA.</li> </ul> <p>In addition, the WILP refers to the Proposed Plan and its support for its implementation. As such, the WILP will not lead to impacts that could have an in-combination effect with the Proposed Plan.</p>	
Regional Planning Guidelines for the South-West Region 2010 – 2022	The Regional Planning Guidelines sets out a series of recommendations to local authorities, which are clearly linked to and support national investment priorities and are designed to strengthen integrated approaches to policy making and planning at local level, in line with regional and national planning frameworks.	N/A	This document is a high-level strategic planning document that provides broad guidance for further plans (i.e. KCDP) to develop and adapt for their specific area's needs. As such, the policies outlined in this document are of too general in nature to have a foreseeable in-combination impact pathway with the Actions proposed by the Proposed Plan.	NO
Skellig Coast Visitor Experience Development Plan (SCVEDP)	The aim of the SCVEDP is to "extend the season and attract visitors to engage with the true essence and story of the Skellig Coast without compromising the environment or culture of the region".	Screening Report completed – Concluded that AA was not required.	One of the 'Catalyst Projects' for the SCVEDP is supporting the continued operation of a marine eco-tour from Portmagee, Cahersiveen or Valentia Island as an alternative or addition to the Skellig Boat journey. Encouraging the addition of further boat tours around Sceilg Mhichíl, separately to the Proposed Plan, could potentially lead to an in-combination effect with the boats already provisioned in the Proposed Plan. However, as birds do not raft in large numbers during the day around Sceilg Mhichíl and are not overly sensitive to	NO

Plan	Plan/Project Summary	Details of HRA Work Completed	Potential impacts that may cause in-combination effects?	Further Assessment Required?
			the presence of such vessels, the presence of additional boats will not have a significant in-combination effect.	
Kerry Local Economic & Community Plan (KLECP) 2016 – 2022	The KLECP provides a blueprint for economic and community development for the county for the period 2016 – 2022. This evidence-based plan was adopted by Kerry County Council in April following extensive research and public consultation over a preceding 18-month period.	N/A	The KLECP has been developed in full compliance with the KCDP 2015-2021. As it was determined in the AA for the KCDP that it would not have an adverse effect on a Natura 2000 site, the KLECP will itself not lead to any significant effects on the environment. The KLECP makes no provisions within its actions and objectives that could lead to an in-combination effect in conjunction with the Proposed Plan, with the actions being general in nature or leading to a positive sustainable impact on the area.	NO
County Kerry Tourism Strategy and Action Plan (CKTSAP) 2016 - 2022	The CKTSAP aims ‘to maximise, in a sustainable manner, tourism’s contribution to the quality of life, economy, employment and local community development, paying particular attention to nurturing and protecting the natural, built, cultural and linguistic heritage of the county’.	Screening Report completed – Concluded that AA was not required.	There are no policies in the CKTSAP that in-combination with the Proposed Plan would lead to a negative effect on any Natura 2000, with any policy being general in nature, referring to areas out with the Natura 2000 sites or having a positive impact to Natura 2000 sites. The remainder of the CKTSAP makes provision for points that will benefit the tourism in the region, and so will not have a negative impact on the socio-economic status of Sceilg Mhichíl. As a result, along with the associated Screening Report concluding that AA was not required, there are no potential impacts that may cause in-combination effects.	NO
Heritage Ireland 2030 (Under consultation)	Ireland’s new national heritage plan providing a framework of values, principles, strategic priorities and actions to guide	N/A	The Heritage Ireland 2030 plan is currently in the consultation phase, with no specific plans or policies that may refer to Sceilg Mhichíl or other heritage features along the County Kerry coastline being outlined. As such,	NO

Plan	Plan/Project Summary	Details of HRA Work Completed	Potential impacts that may cause in-combination effects?	Further Assessment Required?
	and inform the heritage sector up to 2030.		there is currently no identifiable in-combination effects between this plan and the Proposed Plan.	
CHERISH project	Cross-disciplinary project aiming to raise awareness and understanding of the past, present and near future impacts of climate change, storminess and extreme weather events on the rich cultural heritage of the Irish and Wales regional seas and coasts.	N/A	The CHERISH project, with permission, is aiming to conduct survey work on Sceilg Mhichíl, specifically an unmanned aerial vehicle (UAV) photogrammetric survey of the island. The use of drones on Sceilg Mhichíl is tightly regulated, requiring permission to be obtained for their use, the scope-of-works for this project will be assessed by competent ecologists prior to it commencing. This will ensure that any potential in-combination impacts are mitigated against/prevented.	NO



## 4.5 Habitats Directive Appropriate Assessment

A key requirement of the Habitats Directive is that the effects of any plan or project, alone, or in combination with other plans or projects, on the Natura 2000 site network, should be assessed before any decision is made to allow that plan or project to proceed. This process is known as Appropriate Assessment (AA). Each plan or project considered for approval, must take into consideration the possible effects it may have in combination with other plans and projects when going through the AA process. The obligation to undertake AA derives from Article 6(3) and 6(4) of the Habitats Directive.

This section presents a summary of the AA process that has been undertaken for the Proposed Plan in parallel with the SEA process.

### 4.5.1 AA process

The AA process consists of the following steps:

#### Screening for AA

1. Identification of relevant sites
2. Identification of potential pressures
3. Identification of sensitive receptors
4. Identification of a pathway for effect

#### Appropriate Assessment

1. Special Conservation Interest Assessment
2. Examination of Proposed Plan Actions and Objectives
3. Link Between Pressure-Receptor Pathways with Proposed Plan Actions
4. Assessment of Adverse effects on integrity of Skelligs SPA (alone and in-combination)
5. Schedule of Mitigation
6. Determination

### 4.5.2 Screening for AA

All Natura 2000 sites that could be impacted by the implementation of the Proposed Plan were considered in the screening stage. Of all the sites considered, 17 were identified as having the potential to be affected and were taken forward for further assessment. These sites were assessed to determine if there was the potential for an interaction between pressures resulting from implementation of the Proposed Plan and the sites' qualifying features. The four potential pressures identified were:

#### Direct pressures

- Visual and physical disturbance (including noise disturbance) and potential displacement of protected species resulting from the presence of visitors (including vessels) and employees, conservation works and vehicles/vessels (e.g. boats, helicopters);
- Habitat loss/damage from conservation works and accidental/intentional damage from visitors; and
- Introduction of invasive non-native species (INNS) / problematic native species.

#### Indirect pressure

- Climate change – resulting in habitat loss and damage / visual and noise disturbance through a requirement for remedial conservation works.

The report concluded that Stage 2 AA was required to assess whether it can be demonstrated, beyond reasonable scientific doubt, that the implementation of the Proposed Plan will not adversely affect the site integrity of one Natura 2000 site, the Skelligs SPA.

#### 4.5.3 Appropriate Assessment

Following the Screening for AA, a full AA was conducted to determine the potential for any adverse effects on site integrity of the Skelligs SPA. This was achieved by assessing the specific sensitivities of the bird species the site has been designated for – the 'Special Conservation Interests (SCIs)' of Skelligs SPA to the identified pressures. The Actions and Objectives of the Proposed Plan were then considered to determine which specific Actions, if any, may require further assessment regarding their potential to have an adverse effect on the SCIs of Skelligs SPA. A total of 21 Actions were taken forward for further assessment, with each Action being linked to a specific Pressure-Receptor pathway/s.

The next step in the process was to undertake an assessment of adverse effects on site integrity of Skelligs SPA. This involved:

- a. Assessment of adverse effects of the Proposed Plan implementation on site integrity – for Skelligs SPA where a potential for an adverse effect for a SCI has been identified, an assessment in relation to the conservation objectives and site integrity has been undertaken, both prior to- and after mitigation measures have been applied.
- b. In-combination effects assessment – assessment of other plans and projects within the potential ZOI between the Skelligs SPA and the Proposed Plan has been undertaken. For there to be a potential in-combination effect between the Proposed Plan and another plan or project there must be a common pressure-receptor pathway which overlaps spatially and temporally

#### 4.5.4 Conclusion

In conclusion, provided the Actions presented in the Proposed Plan are adhered to fully, the Actions and Objectives of the Proposed Plan will not have a significant effect on Skelligs SPA. Implementation of the mitigation measures outlined in the AA will reduce/remove any detrimental effects to the SCIs of Skelligs SPA.

## 5. ASSESSMENT CONCLUSION

### 5.1 Measures Envisaged for the Prevention, Reduction and Offsetting of Any Significant Adverse Effects

The environmental assessment presented in Appendix C and summarised in Section 4, identified that most of the Plan Actions in the Proposed Plan will either support or substantially support the SEA objectives for the seven SEA topics.

The Plan Actions that have the potential to detract from the SEA objectives, are presented below together with the mitigation applied to reduce any negative effects:

- **Biodiversity, flora and fauna**
  - Action 6.11: In describing the need for a balance between visitor numbers and protection of the National Monument, the Action did not mention balancing visitor numbers for the protection of biodiversity features. As such there exists the possibility that through addressal of this balance, biodiversity features may be negatively impacted. The Action was therefore reworded to ensure that the natural heritage features were also included in the wording.
  - Action 6.13, 9.1i) and 9.3: These Actions make provision for building works on the site. This could potentially disturb any nearby birds in the vicinity from the noise the works generate. However, where works are of a small scale such as within the lighthouse complex, the works would not undermine the conservation objectives of the Skelligs SPA and therefore would not have any adverse effects on the integrity of the site. Should works be on a larger scale or be assessed as having the potential for likely significant effects then Action A4.4 to undertake an ecological assessment would apply.
- **Soils**
  - Action 6.1: This Action makes provision for the introduction of visitors to Sceilg Mhichíl. This brings with it the potential for increased erosion events to occur due to footfall from the number of individuals visiting the site each year, some of which could potentially venture from the designated pathways leading to exacerbation of areas already prone to erosion. Mitigations M5 and M7 from the NIS, will help reduce the pressure of visitors straying from the path and causing erosion.
- **Population and human health**
  - Actions 7.2 and 7.3: These Actions did not detail the addressal of the clustering of visitor arrivals to Sceilg Mhichíl, which has potential negative effects for the safety of visitors but also the visitor experience of the island. Mitigation M6 from NIS makes provision for the continued exploration of staggering visitor arrivals to the site over the course of the day, with the aim to reduce overcrowding on the site and reduce the potential for visitors to venture from the designated pathways.

The assessment also identified that re-wording a further seven existing Plan Actions (in addition to Action 6.11 listed above) and the addition of two new Plan Actions would improve the Proposed Plan by removing any identified ambiguity in the meaning of Actions, increasing communications in relation to collected data on Sceilg Mhichíl and increasing transparency in decision making, or strengthening the Action for greater environmental protection.

The following sections provide details on the proposed re-wording of the eight Actions and addition of two new Actions and the justification for their inclusion in the Proposed Plan. As they represent

changes to the Proposed Plan, they have been assessed against the 11 SEA objectives in Appendix C, Table C-14.

### 5.1.1 Alternative wordings to Actions

Through conducting the SEA Assessment, several Actions in the current Proposed Plan have been identified where a change to their wording will lead to a reduction in significance/removal of a potential effect on a SEA Topic. These Actions, the proposed alternative wording, and the reasoning for the proposed change, are presented in Table 5-1 below.

**Table 5-1 Alternative wordings proposed for Actions of the Proposed Plan**

Original Action	Updated Action	Justification for Change
<b>Action 4.1:</b> Prepare site-specific conservation objectives for the bird species for which the Sceilg SPA has been designated.	<b>Action 4.1:</b> Prepare site-specific conservation objectives for the bird species for which the Skelligs SPA has been designated.  Include quantitative conservation objectives attributes and targets.	The additional wording is recommended to make it clear that the conservation objectives will include attributes and targets so that the status of each species can be clearly assessed against what has been defined as a favourable conservation status. In order to enable a quantitative assessment, population trends, range and use of area for each species would be required which will be an output from Action A4.5 on continuing to develop further the seabird monitoring programme. Therefore, the timelines for completing this Action would need to be phased.
<b>Action 4.10:</b> Ensure that helicopter flights over and in the vicinity of Sceilg SPA are avoided during the birds' breeding season.	<b>Action 4.10:</b> Exclude recreational and other non-essential helicopter flights from an exclusion zone of 1km surrounding Skelligs SPA.	In the event that helicopter flights over Sceilg Mhichíl continue into the future, limitations on the distance they are permitted to fly within should be implemented. This will limit the negative effects of their presence on birds (from noise disturbance, buffeting from the rotors downdraft and bird strikes), as well as noise disturbance to visitors to the site, thus improving the visitor experience.
<b>Action 6.1:</b> Continue to manage the National Monument, Nature Reserve and SPA at Sceilg Mhichíl while allowing a system of managed public access that ensures the conservation of the World Heritage Site is maintained as a first priority.	<b>Action 6.1:</b> Continue to balance the need to preserve the integrity of the National Monument, Nature Reserve and SPA at Sceilg Mhichíl while allowing a system of managed public access so as to ensure the conservation of the World Heritage Site and Sceilg Mhichíl's other Statutory Designations are maintained as a first priority over public access.	Wording has been changed to clarify that the WHS taking priority does not mean that the cultural heritage features will take priority over the natural heritage features of the site.
<b>Action 6.4:</b> Collect Visitor Statistics for each season and analyse trends in order to	<b>Action 6.4:</b> Collect Visitor Statistics for each season and analyse trends in order to provide quality management	The public release of statistics each year has been requested in stakeholder consultation and publishing the analysis of the statistics

Original Action	Updated Action	Justification for Change
provide quality management information.	information. Publish annual statistics and analytical report online.	would help facilitate more transparent decision making
<b>Action 6.6:</b> Continue to regularly review both the sustainable total number of visitors allowed and the patterns of movement across the site.	<b>Action 6.6:</b> Continue to regularly review both the patterns of movement across the site and whether the 180 visitors per-day limit is sustainable, with regards to the cultural and natural heritage features of the site and to visitor safety.	The proposed changes to the wording are designed to remove any ambiguity over what is meant by sustainable in this context.
<b>Action 6.8:</b> Engage with aircraft regulatory authorities to mitigate conservation risks arising from inappropriate deployment of airborne devices and aircraft above and around Sceilg Mhichíl in order to manage risks to the site.	<b>Action 6.8:</b> Implement a ban on general recreational drone (UAV) usage from an exclusion zone of 1km surrounding Skelligs SPA and create a process for evaluating and authorising appropriate and responsible drone use within this area.	There is currently no mention in the Proposed Plan of drone usage being prohibited without prior authorisation on Sceilg Mhichíl.
<b>Action 6.11:</b> Continue to balance the need to preserve the National Monument and facilitate public access through the operation of the boat permit scheme for landing visitors on the island during the visitor season.	<b>Action 6.11:</b> Continue to balance the need to preserve the cultural and natural heritage designated features of Sceilg Mhichíl and facilitate public access through the operation of the boat permit scheme for landing visitors on the island during the visitor season.	The proposed changes to the wording are designed to enable an integrated approach to managing the cultural and natural heritage features of the site
<b>Action 8.2:</b> Maintain the website for Sceilg Mhichíl and continue to provide relevant information on the significance of the site, provide periodic updates on the implementation of the plan and to advise visitors how to prepare for a safe visit to the island.	<b>Action 8.2:</b> Maintain the website for Sceilg Mhichíl [ <a href="http://www.worldheritageireland.ie">www.worldheritageireland.ie</a> ] and continue to provide relevant information on the significance of the site, provide periodic updates on the implementation of the plan and to advise visitors how to prepare for a safe visit to the island.	The Action should specify exactly which website this information can be found.

### 5.1.2 Addition of New Actions

Through conducting the SEA Assessment, review of stakeholder responses to the SEA Scoping Report and 2019 consultation on the Proposed Plan, and holding a workshop with the members of the Skellig Michael Implementation Group, two new Actions have been proposed for inclusion in the Proposed Plan. These new Actions, the Objectives they fall under and the justification for their potential inclusion, are detailed in Table 5-2 below.

**Table 5-2 Proposed New Actions to be considered for the Proposed Plan**

Objective	Proposed Action	Reasoning
<b>Objective 2:</b> To improve liaison with local interest groups and other relevant parties	<b>Action 2.5:</b> Make publicly available existing and future reports on Sceilg Mhichíl via a dedicated website page for Sceilg Mhichíl.	This will provide greater transparency to the decision-making process on Sceilg Mhichíl and the data that underpins these decisions.
<b>Objective 4:</b> To identify and preserve the natural heritage of the island	<b>Action 4.14:</b> Develop guidance for boat operators to follow to reduce potential impacts on wildlife on Sceilg Mhichíl, and in the surrounding waters.	An increase in tours around Sceilg Mhichíl as an alternative to landing, will help reduce some of the pressure to the island from visitor footfall. However, increased numbers and frequencies of vessels circumnavigating the Skelligs have the potential to impact wildlife. This action could be achieved through a public awareness campaign to make the boat operators and public aware of activities which could disturb wildlife such as seals and rafting birds. This information could be displayed at the piers.

### 5.1.3 Mitigation Measures

The NIS that accompanies this report details fifteen mitigation measures for the protection of the SCIs of Skelligs SPA. These mitigation measures are provided for convenience in Appendix E of this report.

## 5.2 Monitoring

A framework for the monitoring of the Actions outlined under the Management Objectives of the Proposed Plan is detailed in Table 5-4 below. This framework details the deliverables of these objectives that require monitoring and the timescales for their completion.

**Table 5-3 Framework for the monitoring of specific Actions of the Proposed Plan**

Management Objective	Applicable Actions	Targets/Indicators	Timescales
<b>Objective 2:</b> To improve liaison with local interest groups and other relevant parties.	<b>A2.3:</b> Create a Sceilg Mhichíl stakeholder forum to address issues of mutual interest and inform decision-making processes.	<ol style="list-style-type: none"> <li>1. Creation of the Stakeholder Forum.</li> <li>2. Subject to the views of the Stakeholder Forum, report produced on issues and decisions addressed through the Forum.</li> </ol>	<ol style="list-style-type: none"> <li>1. Within 6 months of the Proposed Plan's implementation.</li> <li>2. Annually from the date of the forum's creation.</li> </ol>
<b>Objective 3:</b> To preserve the cultural heritage of the island and sustain its Outstanding Universal Value.	<b>A3.2:</b> Prepare a formal, structured maintenance programme for all conserved structures.	<ol style="list-style-type: none"> <li>1. Preparation and delivery of the programme.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually, ongoing.</li> </ol>
	<b>A3.3(a):</b> Report on archaeological works undertaken each year.	<ol style="list-style-type: none"> <li>1. Annual report on archaeological works released publicly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually each January.</li> </ol>
	<b>A3.3(b):</b> Publish full monograph publication of archaeological works undertaken on the island.	<ol style="list-style-type: none"> <li>2. Publication of the monograph of archaeological works.</li> </ol>	<ol style="list-style-type: none"> <li>1. Within 3 years of the Proposed Plans implementation.</li> </ol>
	<b>A3.4(a):</b> Report on conservation works undertaken each year.	<ol style="list-style-type: none"> <li>1. Annual report on conservation works released publicly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually each January.</li> </ol>
<b>Objective 4:</b> To identify and preserve the natural heritage of the island	<b>A4.1:</b> Prepare site-specific conservation objectives for the bird species for which the Skelligs SPA has been designated. Include quantitative conservation objectives attributes and targets.	<ol style="list-style-type: none"> <li>1. Continue the monitoring of the SCIs of Skelligs SPA to determine species specific issues and population levels (As per Actions 4.5 and 4.6 in the management plan).</li> <li>2. Use available information on the ecological requirements of each of the SCIs of the Skelligs SPA in order to select suitable attributes for conservation objective-setting. Use available monitoring data to set targets for each attribute, which will be quantitative where possible.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ongoing.</li> <li>2. Within 1 year of Proposed Plans implementation.</li> <li>3. Within 3 years of Proposed Plans implementation</li> </ol>



Management Objective	Applicable Actions	Targets/Indicators	Timescales
		3. Where necessary, refine quantitative attributes and targets as further monitoring data becomes available	
	<b>A4.2:</b> Maintain close co-operation between the site management team, NPWS and the Guide team.	1. Schedule regular meetings between the interested parties. 2. Disseminate summary of meetings within the team and to the interested parties.	1. Ongoing, quarterly from the Proposed Plans implementation, twice yearly in respect of Guide team. 2. 1 week after meeting is held.
	<b>A4.5:</b> Continue to develop the seabird monitoring programme, with particular attention to burrow-nesting seabirds in order derive, among other things, robust population estimates, population trends and the identification of pressures acting on the populations. Such data will inform the management of both public access and the works programme in monitoring potential effects of human activities.	1. Conduct a monitoring study of the burrowing nesting species. 2. Collation and analysis of the data to inform management of the site. 3. Release of study findings publicly.	1. Annually, beginning immediately from the Proposed Plans implementation. 2. After 5 years of study, biennial (every 2 years) thereafter. 3. Within 12 months of the study's completion.
	<b>A4.6:</b> On an annual basis, carry out a census count of all cliff nesting seabird species and estimate the breeding productivity of Sceilg Mhichíl's Kittiwake population.	1. Carry out census count and kittiwake productivity work. 2. Publicly release findings of the report online.	1. Annually from each July. 2. Annually each January.
	<b>A4.8:</b> Participate in national and international seabird survey and monitoring initiatives.	1. Release census data as sought.	1. When requested.
	<b>A4.9:</b> Implement, and if necessary update, the biosecurity action plan to deal with accidental or deliberate introductions of predator species.	1. Implement the recommendations of the Biosecurity Plan. 2. Release annual report on outcomes of implementing the plan online.	1. Within 1 year of the Proposed Plans implementation. 2. Annually each January.



Management Objective	Applicable Actions	Targets/Indicators	Timescales
	<b>A4.11:</b> Finalise and publish the vegetation survey, including an investigation of species that may have been cultivated by the monks.	1. Finalise and publish the vegetation survey publicly online.	1. Within 1 year of the Proposed Plans implementation.
<b>Objective 6:</b> To manage visitors to Sceilg Mhichíl effectively.	<b>A6.4:</b> Collect Visitor Statistics for each season and analyse trends in order to provide quality management information. Publish annual statistics and analytical report online.	1. Collate and analyse collected data. 2. Release report publicly online.	1. Annually, from the end of the visitor season. 2. Annually each January.
	<b>A6.6:</b> Continue to regularly review both the patterns of movement across the site and whether the 180 visitors per-day limit is sustainable, with regards to the cultural and natural heritage features of the site and to visitor safety.	1. Collate and analyse collected data. 2. Release report publicly online. 3. Alter the permitted visitor numbers should the limit be proven to be unsustainable.	1. Annually, from the end of the visitor season. 2. Annually each January. 3. As required.
<b>Objective 7:</b> To maintain an appropriate standard of safe, regulated visitor access system that supports conservation aims.	<b>A7.2:</b> Continue the ongoing review of the criteria for the granting of permits for boats to land visitors on the island to ensure that the system adapts to any changing circumstances.	1. Undertake biennial reviews of criteria. 2. If any changes made, inform stakeholders at earliest opportunity and import into existing arrangements.	1. Biennially from implementation of the Proposed Plan. 2. Ongoing.
	<b>A7.3:</b> Collect visitor-traffic data and analyse trends with a view to providing quality data for informed decision-making.	1. Collate and analyse collected data. 2. Release report publicly online.	1. Annually, from the end of the visitor season. 2. Annually each January.
<b>Objective 8:</b> To increase understanding of and appreciation for Sceilg Mhichíl and its environs.	<b>A8.2:</b> Maintain the website for Sceilg Mhichíl [ <a href="http://worldheritageireland.ie">worldheritageireland.ie</a> ] and continue to provide relevant information on the significance of the site, provide periodic updates on the implementation of the management plan and to advise visitors how to prepare for a safe visit to the island.	1. Review the status of the Plan's Actions and if they have been achieved. 2. Release status report on implementation of the Proposed Plan.	1. Annually. 2. Annually.

Management Objective	Applicable Actions	Targets/Indicators	Timescales
<b>Objective 10:</b> To monitor those factors with the potential to impact on the built and natural environment of Sceilg Mhichíl.	<b>A10.1:</b> Develop a framework for monitoring climate change.	<ol style="list-style-type: none"> <li>1. Begin development of framework.</li> <li>2. Publish finalised framework publicly online.</li> </ol>	<ol style="list-style-type: none"> <li>1. Within 3 months of implementation of the Proposed Plan.</li> <li>2. Within 2 years of implementation of the Proposed Plan.</li> </ol>
	<b>A10.2:</b> Ensure that any possible impact of climate change on Sceilg Mhichíl is monitored and taken into account in the development of the National Climate Change Strategy.	<ol style="list-style-type: none"> <li>1. Monitoring of climate change impacts e.g. erosion events, flora and fauna surveys.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ongoing.</li> </ol>
	<b>A10.3:</b> Monitor the change of structures using technical assistance as required.	<ol style="list-style-type: none"> <li>1. Carry out the seasonal survey.</li> </ol>	<ol style="list-style-type: none"> <li>1. Annually each Spring.</li> </ol>
	<b>A10.4:</b> Monitor, on an ongoing basis, other factors that may impinge on the built and natural environment.	<ol style="list-style-type: none"> <li>1. Compile and publicly release a report on such impinging factors as necessary.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ongoing.</li> </ol>

### 5.3 Conclusion

In conclusion, the Sceilg Mhichíl World Heritage Site Management Plan 2020–2030 will have an overall positive effect on the SEA Topics assessed as part of this report. While individual actions of the current Proposed Plan may in some cases have a detrimental impact on specific SEA Topics, appropriate monitoring and mitigation measures, along with changes to wording/addition of new Actions, have been proposed to reduce/remove these detrimental effects. The Proposed Plan will not lead to any negative cumulative effects in conjunction with other Plans/Projects in the region.

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## 6. NEXT STEPS

Table 6-1 lists future milestones in the development of the Proposed Plan and its SEA, and the dates when these are expected to be completed.

The Draft Sceilg Mhichíl Management Plan, SEA Environmental Report and Natura Impact Statement will undergo a six-week period of consultation from 4<sup>th</sup> November 2020 until 16<sup>th</sup> December 2020.

**You are hereby invited to express your views on this Environmental Report and the Draft Proposed Plan. Please send your comments by email to [skelligmanagementplan@chg.gov.ie](mailto:skelligmanagementplan@chg.gov.ie).**

Once the final Management Plan has been finalised and adopted, the monitoring framework set out within the SEA ER will be used to assess the impacts of the implementation of the Management Plan.

**Table 6-1 Anticipated plan-making and SEA milestones**

Actions	Timeline
Consultation on the SEA Environmental Report and Proposed Plan	4 <sup>th</sup> November 2020 to 16 <sup>th</sup> December 2020
Post Adoption SEA Statement and Final Sceilg Mhichíl WHS Management Plan	Q1 2021

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# APPENDIX A

## Plan and Policy Review

DRAFT

## A.1 PLAN, POLICY AND STRATEGY REVIEW

**Table A-1 Relevant plans and policies (P/P) and environmental protection objectives, and their relationship with the Proposed Plan**

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
<b>International/EU</b>		
Protection of the World Cultural and Natural Heritage (the World Heritage Convention 1972) (UNESCO)	The Convention sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them. By signing the Convention, each signatory pledges to conserve not only the World Heritage sites situated in its territory, but also to protect its national heritage. The entirety of Sceilg Mhichíl is inscribed on the World Heritage List as a site of 'Outstanding Universal Value'.	The Proposed Plan must not negatively impact on the 'Outstanding Universal Value' of the Sceilg Mhichíl WHS.
Convention on the Law of the Sea 1982 (UNCLOS Ireland ratified 21 June 1996)	The United Nations Convention on the Law of the Sea lays down a comprehensive regime of law and order in the world's oceans and seas establishing rules governing all uses of the oceans and their resources. It enshrines the notion that all problems of ocean space are closely interrelated and need to be addressed as a whole.	The Proposed Plan must ensure that it complies with the rulings of UNLCOS in regards to the seas between Sceilg Mhichíl and the Irish mainland.
Operational Guidelines for the Implementation of the World Heritage Convention (2013)	The Convention aims to ensure the identification, protection, conservation, presentation and transmission to future generations of cultural and natural heritage and ensure that effective and active measures are taken for these.	The Proposed Plan should ensure that sites of cultural and natural heritage are protected from loss or damage resulting from development proposals.
Convention on Biological Diversity (1993)	Contracting Parties are required to create and enforce national strategies and action plans to conserve, protect and enhance biological diversity. International commitment was updated in Aichi, Japan in 2010 and, through publication of the EU Biodiversity Strategy, extended to 2020. Recent emphasis is on economic advantages of biodiversity as 'natural capital'. The EU addresses biodiversity through the Habitats Directive and the creation of the Natura 2000 network of conservation areas.	The Proposed Plan will aim to conserve and enhance the biodiversity of Sceilg Mhichíl.
The Convention for the Protection of the Marine Environment of the North-east Atlantic (the 'OSPAR Convention')	The Convention aims to prevent and eliminate pollution and to protect the maritime area against the adverse effects of human activities. The OSPAR Convention contains a series of Annexes covering:	The Proposed Plan will seek to ensure any waste generated on Sceilg Mhichíl does not enter the marine environment.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	<p>Prevention and elimination of pollution from land-based sources;</p> <ul style="list-style-type: none"> <li>Prevention and elimination of pollution by dumping or incineration;</li> <li>Prevention and elimination of pollution from offshore sources; and</li> <li>Assessment of the quality of the marine environment.</li> </ul> <p>All parties in the Convention should take all steps possible to prevent and eliminate marine pollution.</p>	
World Heritage Convention 1972 (Ireland ratified 16 September 1991)	The Convention aims to ensure the identification, protection, conservation, presentation and transmission to future generations of cultural and natural heritage and ensure that effective and active measures are taken for these.	The Proposed Plan should ensure that sites of cultural and natural heritage are protected from loss or damage resulting from development proposals.
Convention for the Protection of the Architectural Heritage of Europe 1985 (Granada Convention; Ireland ratified 20 January 1997)	The convention aims to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regards to heritage conservation and is designed to foster practical co-operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.	The Proposed Plan will aim to protect features of architectural heritage on Sceilg Mhichíl.
European Convention on the Protection of Archaeological Heritage (Revised 1992, Ireland ratified 18 March 1997)	The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. Finally, the Convention constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.	The Proposed Plan will adhere to the guidelines regarding public access to archaeological sites as detailed in the convention.
European Cultural Convention 1954 (Ireland ratified 11 March 1955)	The purpose of this Convention is to develop mutual understanding among the peoples of Europe and reciprocal appreciation of their cultural diversity, to safeguard European culture, to promote national contributions to Europe's common cultural heritage respecting the same fundamental values and	The Proposed Plan will aim to safeguard the unique cultural value that Sceilg Mhichíl possesses.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	to encourage in particular the study of the languages, history and civilisation of the Parties to the Convention.	
Convention for the Protection of Cultural Property in the Event of Armed Conflict 1954 (Hague Convention; Ireland ratified 17 May 2018)	<p>The States Parties to the Convention benefit from their mutual commitment, with a view to sparing cultural heritage from consequences of possible armed conflicts, including:</p> <ul style="list-style-type: none"> <li>Adoption of peacetime safeguarding measures such as the preparation of inventories, the planning of emergency measures for protection against fire or structural collapse, the preparation for the removal of movable cultural property or the provision for adequate in situ protection of such property, and the designation of competent authorities responsible for the safeguarding of cultural property</li> </ul>	The Proposed Plan will detail the authorities responsible for the safeguarding of the site.
Convention on the International Return of Stolen or Illegally Exported Cultural Objects 1995 (Unidroit Convention; Ireland has not ratified)	In the UNIDROIT Convention, States commit to a uniform treatment for restitution of stolen or illegally exported cultural objects and allow restitution claims to be processed directly through national courts. Moreover, the UNIDROIT Convention covers all stolen cultural objects, not just inventoried and declared ones and stipulates that all cultural property must be returned.	The Proposed Plan will adhere to the guidelines of this convention.
European Landscape Convention (signed by the Irish Government and ratified by the Council of Europe in 2004)	The Convention is aimed at: the protection, management and planning of all landscapes and raising awareness of the value of a living landscape.	The Proposed Plan will comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations.
SEA Directive—Assessment of the effects of certain plans and programmes on the Environment 2001 (2001/42/EC)	<p>Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.</p> <p>Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment</p>	The Proposed Plan will ensure the intangible cultural heritage of the Sceilg Mhichíl WHS is safeguarded.
Convention for the Safeguarding of the Intangible Cultural Heritage 2003 (Ireland ratified 22 December 2015)	<p>The purposes of this Convention are:</p> <ol style="list-style-type: none"> <li>to safeguard the intangible cultural heritage;</li> </ol>	The Proposed Plan aims to emphasize the cultural importance of the heritage features of Sceilg Mhichíl.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	<ul style="list-style-type: none"> <li>b. to ensure respect for the intangible cultural heritage of the communities, groups and individuals concerned;</li> <li>c. to raise awareness at the local, national and international levels of the importance of the intangible cultural heritage, and of ensuring mutual appreciation thereof;</li> <li>d. to provide for international cooperation and assistance.</li> </ul>	
The Framework Convention on the Value of Cultural Heritage for Society 2005 (The Faro Convention; Ireland yet to ratify)	The Faro Convention is a “framework convention” which defines issues at stake, general objectives and possible fields of intervention for member States to progress. Each State Party can decide on the most convenient means to implement the Convention according to its legal or institutional frameworks, practices and specific experience.	
Convention on Offences relating to Cultural Property 2017 (Ireland yet to ratify)	The Convention on Offences relating to Cultural Property aims to prevent and combat the illicit trafficking and destruction of cultural property, in the framework of the Organisation’s action to fight terrorism and organised crime.	The Proposed Plan will follow the framework as defined by the convention to prevent the intentional destruction of cultural heritage features.
The Convention of the Conservation of European Wildlife and Natural Habitats (1979)	Principal aims are to ensure conservation and protection of wild plant and animal species and their natural habitats. Implemented within the European Union as Council Directive 79/43/EEC as the EC Habitats Directive (1992). Member states report every six years on progress towards conservation of natural habitats.	The Proposed Plan will seek to identify potential effects on protected plant and animal species and implement monitoring programmes to monitor the potential effects of the Policy’s implementation.
Environmental Impact Assessment Directive 1985 (85/337/EEC) (97/11/EC)	<p>Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment</p> <p>Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4</p>	The Proposed Plan will ensure that any Plans or Projects that may have significant effects on Sceilg Mhichíl are subject to EIA.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
Council Directive 2009/147/EC, The EC Birds Directive	The Directive affords protection to migratory bird species and their habitats and has led to the creation of Special Protection Areas (SPAs). Together, SACs and SPAs make up the Natura 2000 network. All SPAs in the area are listed in Appendix B.	The Proposed Plan must consider the potential effects to SPAs and its species to ensure policy activities do not adversely affect protected areas.
Council Directive 92/43/EEC, The EC Habitats Directive	Aims to promote maintenance of biodiversity by introducing robust protection of habitats and species designated within its Annexes considered of European importance. The Directive has created a network of Special Conservation Areas (SACs) for habitats listed on Annex I and for species listed in Annex II. All SACs in the area are listed in Appendix B.	
Communication 'Towards an EU Strategy on Invasive Species' (EU COM (2008) 789)	The communication presenting policy options for an EU Strategy on Invasive species recommends a three-stage hierarchical approach based on prevention, early detection and eradication, and control.	The Proposed Plan will consider the potential effects to SACs and its protected species and ensure that its Actions do not adversely affect protected areas and species.
Council Directive 2002/49/EC, Environmental Noise Directive	The Directive relates to the management and assessment of environmental noise. The Environmental Noise Directive has three main aims: <ul style="list-style-type: none"> <li>▪ The determination of exposure to environmental noise</li> <li>▪ Ensuring that information on environmental noise and its effects is made available to the public</li> <li>▪ Preventing and reducing environmental noise where necessary and preserving environmental noise quality where it is good</li> </ul>	The Proposed Plan will be subjected to an 'Appropriate Assessment' under Article 6(3) of the Habitats Directive.
Council Directive 2008/50/EC, The Ambient Air Quality and Cleaner Air for Europe Directive	The Directive was adopted for ambient air quality which it will following using the key elements: <ul style="list-style-type: none"> <li>▪ That most of existing legislation be merged into a single directive (except for the fourth daughter directive) with no change to existing air quality objectives*</li> <li>▪ New air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives – exposure concentration obligation and exposure reduction target</li> </ul>	The Proposed Plan must minimise and prevent the risk of introducing non-native invasive species through adequate measures and good controls.



Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	<ul style="list-style-type: none"> <li>the possibility to discount natural sources of pollution when assessing compliance against limit values</li> <li>Possibility for time extensions of three years (PM10) or up to five years (NO2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission.</li> </ul>	
Council Directive 2008/56/EC, The Marine Strategy Framework	Outlines a transparent, legislative framework for an ecosystem-based approach to the management of human activities which supports the sustainable use of marine goods and services. The overarching goal is to achieve 'Good Environmental Status' (GES) by 2020 across Europe's marine environment. One of the descriptors for GES is non-indigenous species.	The Proposed Plan must seek to support these objectives.
Council Directive 2014/89/EU, Maritime Spatial Planning	The Directive sets out the EU common approach to planning of Maritime areas. It seeks to enable public authorities to organise human activities in the marine area to meet various ecological, economical, and social objectives.	The Proposed Plan must seek to support these objectives on air quality and pollution.
EU Biodiversity Strategy to 2020	The EU Biodiversity Strategy aims to halt the loss of biodiversity and the degradation of ecosystem services in Europe by 2020 and restore them. There are six main targets, and 20 actions to help Europe reach its goal. Targets cover management of fish stocks, controls invasive alien species introductions, use of green infrastructure and protection for ecosystems.	The Proposed Plan must not lower the baseline environmental status of Sceilg Mhichíl and the surrounding waters and must seek to enable achievement and maintenance of a GES.
Second European Climate Change Programme [ECCP II] 2005	The Programme provides targets to enable the EU to meet its climate and energy targets for 2020. These are known as the "20-20-20" targets.	The Proposed Plan should have regard for their implications for marine spatial planning in Ireland.
<b>National</b>		
Architectural Heritage Protection – Guidelines for Planning Authorities (2011)	Part IV of the Planning and Development Acts 2000 – 2011 sets out the legislative provisions for the protection and conservation of Ireland's architectural heritage.	The Proposed Plan should aim to contribute towards climate change action through monitoring of climate change effects on Sceilg Mhichíl.
National Monuments Acts (1930 to 2014) (S.I. No. 2 of 1930 & No. 22 of 2004)	This Act provides the primary legal protection for archaeology in Ireland. The	National



Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	Act has been amended several times, most recently 2004.	
National Cultural Institutions Act 1997	The Act provides for the establishment of a board to be known as Bord Ard-Mhúsaem na hÉireann and a board to be known as Bord Leabharlann Náisiúnta na hÉireann, to make further provision in relation to the National Gallery of Ireland, to provide for the giving of indemnities by the State against the loss of, or damage to, cultural objects loaned to certain institutions, to amend certain enactments, to make further provision in relation to the national heritage and to provide for other matters connected with the matters aforesaid.	The Proposed Plan will ensure that Sceilg Mhichíl's architectural heritage is protected and conserved for future generations to come.
The National Climate Change Adaptation Framework (2012)	Requires local authorities to integrate climate change adaptation (as well as mitigation) considerations into their statutory plans.	As Sceilg Mhichíl is a designated National Monument, the Proposed Plan will ensure this Act is adhered to and the site is sufficiently protected.
National Adaptation Framework (2018)	The National Adaptation Framework (NAF) outlines a whole of government and society approach to climate adaptation in Ireland. Under the NAF a number of Government Departments are required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for. Work on these plans began in 2018. Local authorities are required to prepare local adaptation strategies. The NAF will be reviewed at least once every five years. The NAF also aims to improve the enabling environment for adaptation through ongoing engagement with civil society, the private sector and the research community.	The Proposed Plan will ensure that the cultural heritage features of Sceilg Mhichíl are protected and conserved for future generations to come.
National Biodiversity Plan 2017 – 2021	The National Biodiversity Plan plays a central part in Ireland's efforts to halt biodiversity loss. The Plan was developed as in line with the EU and International Biodiversity strategies and policies. It sets out the strategic objectives of the government in relation to biodiversity.	The Proposed Plan will adhere to any climate change policies included in Local Area Plans.
National Planning Framework 2040	The new blueprint for spatial planning in Ireland up to 2040, contains ten key National Strategic Outcomes.	The Proposed Plan will establish a climate change monitoring framework on Sceilg Mhichíl to mitigate against/prevent impacts of climate change.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
European Communities (Birds and Natural Habitats) Regulations 2011 to 2015	These regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the CJEU judgements. Articles 6(1) and (2) of the Regulations require Member States to take appropriate conservation measures to maintain and restore habitats and species, for which a site has been designated, to a favourable conservation status.	The Proposed Plan will aim to conserve and enhance the biodiversity of Sceilg Mhichíl.
Biodiversity Sectoral Climate Change Adaptation Plan (2019)	The Biodiversity Climate Change Sectoral Adaptation Plan considers terrestrial, freshwater and marine biodiversity and ecosystem services. The goal is to protect biodiversity from the impacts of climate change and to conserve and manage ecosystems so that they deliver services that increase the adaptive capacity of people and biodiversity. This is achieved by identifying adaptation options that will help to protect biodiversity and ecosystem services from the impacts of changing climate.	Any developments on Sceilg Mhichíl will aim to further develop the key National Strategic Outcomes outlined in the new framework.
Flora (Protection) Order, 2015, S.I. No. 356 of 20	A list of plant species protected in Ireland by Section 21 of the Wildlife Act, 1976, superseding orders made in 1980, 1987 and 1999.  It is illegal to cut, uproot or damage the listed species in any way, or to offer them for sale. This prohibition extends to the taking or sale of seed. In addition, it is illegal to alter, damage or interfere in any way with their habitats. This protection applies wherever the plants are found and is not confined to sites designated for nature conservation.	The Proposed Plan will aim to conserve and enhance the biodiversity of Sceilg Mhichíl.
Harnessing Our Ocean Wealth: An Integrated Marine Plan for Ireland (Inter-Departmental Marine Coordination Group 2012)	Harnessing Our Ocean Wealth is an Integrated Marine Plan (IMP), setting out a roadmap for the Government's vision, high-level goals and integrated actions across policy, governance and business to enable our marine potential to be realised. Implementation of this Plan will see Ireland evolve an integrated system of policy and programme planning for our marine affairs.	The Proposed Plan will ensure that a framework for monitoring climate change is created, which in turn will aid in mitigating against/preventing the effects of climate change from impacting the biodiversity of Sceilg Mhichíl.
Irish Geological Heritage (IGH) Programme (1998 - Present)	The Irish Geological Heritage (IGH) Programme of the Geological Survey of Ireland (GSI) aims to identify, protect and	The Proposed Plan will ensure that any species or their habitat from the order found on Sceilg

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	promote the best of this heritage, along with its partners in the National Parks and Wildlife Service (NPWS)	Mhichíl are protected from damage.
Marine Strategy Framework Directive, Programme of Measures (2015)	The Marine Strategy Framework Directive requires European member states, including Ireland, to reach good environmental status (GES) in the marine environment by the year 2020 at the latest. The directive is very similar to the Water Framework Directive, but the focus is on the marine environment.	The Proposed Plan will adhere to any local marine plans in the surrounding area.
Marine Planning Policy Statement (MPPS)	The MPPS draws together and describes the existing components of Ireland's marine planning system, outlines a vision for the future development of the marine planning system, sets out the overarching policies and principles the Government expects marine planning bodies and other public bodies that engage with the marine planning system to observe (in terms, for example, of public engagement, transparency, governance, environmental assessment, climate action, social and economic benefit) and sets out high-level priorities for the enhancement of the marine planning system in Ireland.	The Proposed Plan will adhere to any local marine plans in the surrounding area.
National Marine Planning Framework (NMPF)	The NMPF sets out the policy, legislative and regulatory context for marine spatial planning and the development of Ireland's first plan, a description of the "as is" situation in terms of existing sectoral development and activities in Ireland's maritime area, including an identification of the future opportunities and constraints for each, an initial elaboration of potential high level objectives for Ireland's first National Marine Planning Framework, and a number of consultation questions or issues intended to prompt discussion and consideration amongst stakeholders.	The Proposed Plan will adhere to any local marine plans in the surrounding area.
National Climate Change Strategy 2007-2012 (2007)	This strategy set out a range of measures, building on those already in place under the 2000 Strategy, to meet Ireland's commitments under the Kyoto Protocol.  The Strategy projects a reduction in emissions from the agricultural sector through a number of measures including Common Agricultural Policy Reforms, participation in REPS, AEOS & Organic Schemes, supports for manure management in line with the EU Nitrates Directive,	The Proposed Plan will conserve and enhance the geological heritage of Sceilg Mhichíl and make provision for research on its features to be conducted.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	supports for afforestation and through development of renewable energy resources.	
Planning and Development Act 2000 (as amended)	This Act consolidated all planning legislation from 1963 to 1999 and remains the basis for the Irish planning code, setting out the detail of regional planning guidelines, development plans and local area plans as well as the basic framework of the development management and consent system.	The Proposed Plan will preserve the marine environment surrounding Sceilg Mhichíl.
Planning and Development Regulations 2001–2019 (Unofficial Consolidation)	The Planning and Development Regulations 2001 – 2019 implement the Planning and Development Act 2000 by prescribing the details of the planning code. They consolidate all previous Regulations made under the Planning and Development Act 2000 (as amended) and replace the Local Government (Planning and Development) Regulations 1994-2000.	The Proposed Plan will ensure that a framework for monitoring climate change is created, which in turn will aid in mitigating against/preventing the effects of climate change from impacting the biodiversity of Sceilg Mhichíl.
Framework and Principles for the Protection of the Archaeological Heritage (1999 Dublin: Dept of Arts, Heritage, Gaeltacht and the Islands)	This publication set out broad principles for the protection of the archaeological heritage in Ireland, so that the countries heritage features may be better conserved and protected into the future.	Any developments outlined by the Proposed Plan will adhere to the planning guidelines of this Act.
Policy and Guidelines on Archaeological Excavation (1999 Dublin: Dept of Arts, Heritage, Gaeltacht and the Islands)	In response to an accelerating number of archaeological excavations occurring within Ireland, this document outlined clear policy and guidelines for all future excavation activities to follow.	Any developments on Sceilg Mhichíl resulting from the Proposed Plan will be conducted according to these planning regulations.
Project Ireland 2040 National Development Plan 2018–2027 (2017 Dublin: Dept of Public Expenditure and Reform)	A long-term investment plan for the future of Ireland, aimed at ensuring public investment in infrastructure, businesses and communities is targeted with a defined strategy. The plan underpins the recent National Planning Framework.	The Proposed Plan will conserve and enhance the archaeological heritage of Sceilg Mhichíl.
Landscape and Landscape Assessment: Consultation draft guidelines for planning authorities (2000 Dublin: Dept of Housing, Planning and Local Government)	These guidelines, introduced in 2000, brought in the Landscape Character Assessment to Ireland, which favoured characterisation of the landscape based on landcover and landform.	Any excavation activities occurring as a result of implementation of the Proposed Plan will follow these policies and guidelines.
Creative Ireland Programme 2017–2022 (2016 Dublin: Dept of Arts, Heritage and the Gaeltacht)	The Creative Ireland programme /Clár Éire Ildánach, is a culture-based programme designed to promote individual, community and national wellbeing. Creative Ireland is the Government's legacy programme for	The Proposed Plan must adhere to any relevant aims and objectives of this plan.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	<p>Ireland 2016 – a five year initiative, from 2017 to 2022, which places creativity at the centre of public policy.</p> <p>Creative Ireland will prioritise children’s access to art, music, drama and coding; enhance the provision of culture and creativity in every community; further develop Ireland as a global hub for film and TV production; empower and support our artists; drive investment in our cultural institutions; and further enhance our global reputation abroad.</p>	
Heritage Ireland 2030 (Under consultation)	Ireland’s new national heritage plan providing a framework of values, principles, strategic priorities and actions to guide and inform the heritage sector up to 2030.	Any new developments outlined in the Proposed Plan will comply with the policy framework outlined in this strategy, maintaining the unique landscape of Sceilg Mhichíl.
National Landscape Strategy for Ireland 2015 – 2025 (DAHG, 2015)	<p>Ireland signed and ratified the Council of Europe’s European Landscape Convention (ELC) which came into effect on 1 March 2004. The Convention has been ratified by thirty-eight countries. It obliges Ireland to implement policy changes and objectives concerning the management, protection and planning of the landscape.</p> <p>The National Landscape Strategy will be used to ensure compliance with the ELC and to establish principles for protecting and enhancing it while positively managing its change. It is a high-level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions.</p>	The Proposed Plan aims to further increase the cultural understanding and appreciation of the Sceilg Mhichíl WHS.
National Mitigation Plan, 2017	This National Mitigation Plan 2017 is a multi-sectoral policy document. The Plan aims at setting Ireland on a decarbonisation pathway to 2050. It sets out over 100 individual actions to be taken by the Government and public bodies to cut emissions in a range of areas including electricity generation, transport, agriculture, forestry and land use.	The Proposed Plan will aim to follow the values, principles and priorities outlined in the new heritage plan.
National Spatial Strategy for Ireland 2002-2020 (2002)	The National Spatial Strategy (NSS) 2002-2020 was the national strategic planning framework to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning.	Any new developments outlined in the Proposed Plan will comply with the policy framework outlined in this strategy, maintaining the unique landscape of Sceilg Mhichíl.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
Proposed National Clean Air Strategy (Under consultation, 2017)	A new strategy aimed at achieving lasting reductions in the health and environmental impacts of air pollution in Ireland.	The Proposed Plan will seek to reduce and mitigate against the effects of climate change on Sceilg Mhichíl.
Wildlife Acts 1976 to 2012	The aims of the Wildlife Act, 1976, are to provide for the protection and conservation of wild fauna and flora, to conserve a representative sample of important ecosystems, to provide for the development and protection of game resources and to regulate their exploitation, and to provide the services necessary to accomplish such aims. It was amended further in 2000, 2010 and 2012.	The Proposed Plan will adhere to any relevant points in the planning framework for development in the local area.
Environmental Noise Regulations 2006	These Regulations transpose EU Directive 2002/49/EC relating to the assessment and management of environmental noise. The Directive aims to provide a common framework to avoid, prevent or reduce, on a prioritised basis, the harmful effects of exposure to environmental noise.	The Proposed Plan will adhere by the National Clean Air Strategy when it is finalised.
<b>Regional</b>		
Kerry County Development Plan 2015 – 2021	The Kerry County Development Plan (KCPD) 2015 – 2021 is an integrated document detailing the policies and objectives across a wide range of sectors that outline how the County will develop in the future.	The Proposed Plan will aim to reduce the harmful effects of exposure to environmental noise to the environment of Sceilg Mhichíl.
West Iveragh Local Plan 2019 – 2025	The purpose of the plan is to set out a comprehensive local planning framework with clear policies and objectives including land use zoning in the interests of the common good, with its successful implementation ensuring the area develops positively in a sustainable manner.	Regional
Regional Spatial and Economic Strategy for the Southern Region (2020 Waterford: Southern Regional Assembly)	The Regional Planning Guidelines sets out a series of recommendations to local authorities, which are clearly linked to and support national investment priorities and are designed to strengthen integrated approaches to policy making and planning at local level, in line with regional and national planning frameworks.	The Proposed Plan, through its successful implementation, will benefit the development of the local Kerry County area.
Wild Atlantic Way Operational Programme 2015–2019 (2015 Dublin: Bord Fáilte)	The Operational Programme for the Wild Atlantic Way sets out a strategy and a framework and programme – including goals and objectives – for sustainable implementation over the period 2015-2019.	The Proposed Plan will ensure any developments resulting from its implementation adhere to the policies and objectives outlined in the planning



Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
		framework of the West Iveragh Local Plan.
County Kerry Heritage and Biodiversity Plan 2008 – 2012	The County Kerry Heritage and Biodiversity Plan outlined policies, aims, and actions to improve heritage and biodiversity in the region across three performance areas (education and access, research and management).	The Proposed Plan will aim to adhere to the existing regional and national planning frameworks currently in place
Regional Planning Guidelines for the South-West Region 2010 – 2022	The Regional Planning Guidelines sets out a series of recommendations to local authorities, which are clearly linked to and support national investment priorities and are designed to strengthen integrated approaches to policy making and planning at local level, in line with regional and national planning frameworks.	The Proposed Plan will seek to coordinate its tourism facing Actions with the goals of the Wild Atlantic Way.
Kerry Local Economic & Community Plan 2016 – 2022	The Kerry Local Economic & Community Plan (LECP) provides a blueprint for economic and community development for the county for the period 2016 – 2022. This evidence-based Plan was adopted by Kerry County Council in April following extensive research and public consultation over a preceding 18-month period.	The Proposed Plan aims to conserve and enhance the existing heritage and biodiversity features of Sceilg Mhichíl.
County Kerry Tourism Strategy and Action Plan 2016 - 2022	Plan to 'to maximise, in a sustainable manner, tourism's contribution to the quality of life, economy, employment and local community development, paying particular attention to nurturing and protecting the natural, built, cultural and linguistic heritage of the county'.	The Proposed Plan will aim to adhere to the existing regional and national planning frameworks currently in place.
<b>Local</b>		
Sceilg Mhichíl World Heritage Site Management Plan 2008 – 2018	<p>The plan provides information on the various aspects of the management policy for Skellig Michael, including conservation and presentation, visitor management, the legislative protections it enjoys and the development considerations necessary to protect the site into the future.</p> <p>The plan sets out the key objectives and long-term vision for the management of Skellig Michael, provides a brief history of the site and describes its key cultural and natural heritage features. It defines the Outstanding Universal Value of the site and the justification for inscription of the site on the UNESCO World Heritage List. It proposes a policy framework for the effective</p>	The Proposed Plan will ensure that the visitor experience to Sceilg Mhichíl is of high quality, and that local stakeholders in tourism to the site are kept informed and involved in future decision making.

Name of plan or project (P/P)	Main environmental objectives or requirements of P/P	How P/P and its objectives may affect or may be affected by the Proposed Plan
	management, preservation and protection of the site for the future while sustaining its intangible and cultural significance for the benefit of local communities and visitors.	



# APPENDIX B

## Environmental Baseline

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## B.1 BIODIVERSITY, FLORA AND FAUNA

### B.1.1 Natura 2000 and Nationally Designated Sites

A screening for AA report undertaken in parallel with the SEA, assessed all European Sites which could be impacted by the implementation of the Proposed Plan. This screening assessment considered sites which could come into direct contact with the geographic scope of the Proposed Plan (the islands of Sceilg Mhichíl and Sceilg Bheag and their surrounding waters and the sailing routes from Portmagee, Ballinskelligs and Derrynane) and European Sites further afield for mobile species which could travel into the area (e.g. marine birds and marine mammals). The screening for AA concluded one European Site, Skelligs SPA has the potential to be significantly adversely affected by implementation of the Proposed Plan. However, to provide a broader context for the SEA, protected sites covered in this section include all site designations which are in the vicinity of the geographic scope of the Proposed Plan.

The following baseline description of designated sites (both existing and future designations) covers the main types of biodiversity designations found in this study area.

#### Existing Designations

The main relevant protected site designations are as follows:

**Natura 2000 sites:** Under the Habitats Directive (Council Directive 92/43/EC) and Birds Directive (Council Directive 2009/147/EC) Europe's most valuable habitats and species are protected through the designation of Special Areas of Conservation and Special Protection Areas. Together these sites make up the Natura 2000 network. The aim of the Natura 2000 network is to ensure the long-term survival of European threatened species and habitats.

- **Special Areas of Conservation (SACs)** for habitats listed on Annex I and for species listed on Annex II of the Habitats Directive.
  - **Candidate SACs (cSACs)**, in the process of being classified as SACs under Article 4 of the Habitats Directive. cSACs are not yet fully designated and are subject to public consultations.
- **Special Protection Areas (SPAs)** classified under Article 4 of the Birds Directive.
  - **Potential SPAs (pSPAs)**, in the process of being classified as SPAs under Article 4 of the Birds Directive. pSPAs are not yet fully designated and are subject to public consultations.
- **Site of Community Importance (SCI)** are sites selected as potential SACs that have been adopted by the European Commission but not yet formally designated by the member states government.

Under the OSPAR Convention to Protect the Marine Environment of the North East Atlantic, Ireland committed to establishing marine protected areas (**OSPAR MPAs**) within its waters. As currently no legislation exists to legally underpin any such site established by the state, Ireland has established a number of SACs as OSPAR MPAs for marine habitats.

**Natural Heritage Areas (NHAs)** are areas considered important for the habitats present or which holds species of plants and animals whose habitat needs protection. There also exists **proposed Nature Heritage Areas (pNHAs)** which were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats. Under the Wildlife Amendment Act (2000), NHAs are legally protected from damage from the date they are formally proposed for designation.

First established under the 1976 Wildlife Act, **Statutory Nature Reserves (SNR)** are areas designated for the protection of natural habitats, fauna and flora and are protected under Ministerial order. While

most are owned by the Irish state, some are owned by private landowners or organisations, with it being possible to apply for their lands to be deemed a SNR.

Birdwatch Ireland, an independent conservation organisation founded in 1968, has designated and maintains a network of **Nature Reserves** across Ireland, which are located in areas of conservation importance to birds. Such lands are managed exclusively for the interests of the bird species found there, and are aimed to help advocate for the benefits of conservation management and raise public awareness of the variety and heritage of Ireland's wild bird species (BirdWatch Ireland, 2020h).

The number of designated sites within each category in the study area is summarised in Table B.1. For the purposes of this study the sites which have been included are:

- All sites within Sceilg Mhichíl, Sceilg Bheag and their surrounding waters whose designating features could interact with activities that result from the Proposed Plan.
- Any sites within/within the zone of influence of the three-tourist vessel sailing routes.

**Table B-1 Number of designations within the SEA study area**

Designation	SEA study area (Sceilg Mhichíl, Sceilg Bheag and tourist vessel routes)
SAC	4
OSPAR MPA	2
SPA	4
pNHA	5
SNR	3
BirdWatch Ireland Nature Reserve	2

These sites designating features detailed in Table B-2 below. Where sites multiple designations (i.e. SPA and pNHA in the same boundary), they are listed together in Table B-2.

**Table B-2 Existing Designated sites in vicinity of the SEA study area**

Location	Site Name	Designating features and comments
Sceilg Mhichíl and Sceilg Bheag	Skelligs SPA(IE-004007)	Northern fulmar ( <i>Fulmarus glacialis</i> ) [A009]
	Great Skellig pHNA (IE-001954)	Manx shearwater ( <i>Puffinus puffinus</i> ) [A013]
	Little Skellig pNHA (IE-001953)	European storm petrel ( <i>Hydrobates pelagicus</i> ) [A014]
		Northern gannet ( <i>Morus bassanus</i> ) [A016]
		Black-legged kittiwake ( <i>Rissa tridactyla</i> ) [A188]
		Common guillemot ( <i>Uria aalge</i> ) [A199]
		Atlantic puffin ( <i>Fratercula arctica</i> ) [A204]
	Great Skellig SNR	It is rated as of international importance for certain seabird species - Manx Shearwaters, Storm Petrels and Puffins. It also provides a good example of typical plant communities of a small and remote marine island (NPWS, 2020b).
	Little Skellig SNR	It is rated as of international importance because of the colonies of Gannets that inhabit the island (NPWS, 2020e).
Vicinity of Portmagee vessel route	Puffin Island SPA (IE-004003)	Northern fulmar
	Puffin Sound – Horse Island Cliffs pNHA (IE-001373)	Manx shearwater
	Puffin Island BirdWatch Ireland Nature Reserve	European storm petrel
		Lesser black-backed gull ( <i>Larus fuscus</i> ) [A183]
		Razorbill ( <i>Alca torda</i> ) [A200]
		Atlantic puffin
Vicinity of Ballinskelligs vessel route	Iveragh Peninsula SPA (IE-004154)	Northern fulmar
	Puffin Sound – Horse Island Cliffs pNHA (IE-001373)	Peregrine ( <i>Falco peregrinus</i> ) [A103]
		Black-legged kittiwake
		Common guillemot
		Chough ( <i>Pyrrhocorax pyrrhocorax</i> ) [A346]

Location	Site Name	Designating features and comments
	Puffin Island SNR	Well known for its large colonies of breeding seabirds, it is owned by the State and the Irish Wildbird Conservancy. A marine reserve has been established on the surrounding area of sea and seashore to ensure the protection of the birds and control activities which might cause disturbance.  Puffin Island Nature Reserve comprises 86.5 hectares, of which 32.73 are State-owned and 53.77 are privately owned (NPWS, 2020f).
Vicinity of Derrynane vessel route	Deenish Island and Scariff Island SPA (IE-004175)  Deenish and Scariff Islands pNHA (IE-001345)	Northern fulmar Manx shearwater European storm petrel Lesser black-backed gull Arctic tern ( <i>Sterna paradisaea</i> ) [A194]
Within the Derrynane vessel route	Kenmare River SAC (IE-002158)  Kenmare River MPA (IE-0002980)	<i>Phoca vitulina</i> (harbour seal) [1365] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Atlantic salt meadows ( <i>Glaucopuccinellietalia maritimae</i> ) [1330] Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] European dry heaths [4030] <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130] Submerged or partially submerged sea caves [8330] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] <i>Lutra lutra</i> (otter) [1355]

Location	Site Name	Designating features and comments
Within the Ballinskelligs vessel route	Ballinskelligs Bay and Inny Estuary SAC (IE-000335)	Atlantic salt meadows Mediterranean salt meadows <i>Petalophyllum ralfsii</i> (Petalwort) [1395]
Within the Portmagee vessel route)	Valencia Harbour/Portmagee Channel SAC (IE-002262) Valencia River Estuary pNHA (IE-001383)	Mudflats and sandflats not covered by seawater at low tide [1140] Large shallow inlets and bays [1160] Reefs [1170]
North of Sceilg Mhichíl	Blasket Islands SAC (IE-002172) Blasket Islands MPA (IE-0002984)	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351] <i>Halichoerus grypus</i> (Grey Seal) [1364]

## B.1.2 Protected species

### B.1.2.1 European Protected Species

European Protected Species (EPS) are those species listed on Annex IV of the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive). They require “a system of strict protection”. In Ireland the Habitats Directive is transposed into Irish law by the European Communities Birds and Natural Habitats Regulations 2011 (S. I. No. 477 of 2011), with further amendments in 2013 (S.I. No. 290 and 499) and 2015 (S.I. No. 355 of 2015) (NPWS, 2020d).

The regulations make it an offence to deliberately capture, kill or disturb a specimen in the wild, or to damage or destroy a breeding site or resting place of such an animal.

Disturbance of animals includes activities that are likely to -

- a. Impair their ability -
  - i to survive, to breed or reproduce, or to rear or nurture their young; or
  - ii in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- b. Affect significantly the local distribution or abundance of the species to which they belong.

Regulations 51, 52 and 54 of the European Communities Birds and Natural Habitats Regulations 2011 provide for the protection of Annex IV species. Marine EPS include:

- All cetacean species;
- Otter (*Lutra lutra*);
- Leatherback Turtle (*Dermochelys coriacea*);
- Kemp’s ridley turtle (*Lepidochelys kempii*);
- Loggerhead turtle (*Caretta caretta*); and
- Hawksbill turtle (*Eretmochelys imbricate*).

Cetaceans and otters are found within the study area, further details of which are provided in individual sections below.

In addition to these European protected species, Annex II of the Habitats Directive, lists animal and plant species of community interest whose conservation requires the designation of SACs. Annex II species for which SACs have been designated in the study area include:

- Grey seal (*Halichoerus grypus*);
- Otter (*Lutra lutra*);
- Harbour seal (*Phoca vitulina*); and
- Harbour porpoise (*Phocoena phocoena*);

A summary of the SACs in the SEA study area which list an Annex IV (EPS) or Annex II species as an interest or qualifying feature are summarised in Table B-3.

**Table B-3 SACs in the SEA study area which list an Annex IV (EPS) or Annex II species as an interest or qualifying feature**

Location	Site Name	Annex IV Species	Annex II Species
Irish mainland coast	Kenmare River SAC	Otter	Harbour seal Otter
	Blasket Islands SAC	Harbour porpoise	Harbour porpoise Grey seal

### B.1.2.2 Cetaceans

Harbour porpoise are listed in Annex II of the Habitats Directive as species whose conservation requires designation of SACs. There is one site within the SEA study area which contain the species as a QI: Blasket Islands SAC.

#### Harbour porpoise (*Phocoena phocoena*)

Harbour porpoise are the most common cetacean in Irish and UK waters, it is wide-ranging and abundant, both coastally and offshore, with the most occurring in the coastal area, close to islands and headlands with strong tidal currents (DECC, 2016). While the species is wide-ranging, capable of travelling up to 100km each day in search of food, they typically travel a mean distance of 24.5km each day (BEIS, 2019). While their mean swimming speed is approximately 1m/s, studies have shown that when disturbed by underwater noise they can increase their speed from an average of 1.2 – 2m/s (BEIS, 2019). The species is a QI of the nearby Blasket Islands SAC, being recorded year-round at the site with seasonal peaks coinciding with the typical breeding period of the species from May – September (NPWS, 2014). A survey of the species in 2014 recorded a total of 134 individuals within the site, with density estimates ranging between 0.59 to 2.20 individuals per km<sup>2</sup> (O'Brien and Berrow, 2014). Due to the nearby nature of the Blasket Islands SAC to Sceilg Mhichíl, there exists the possibility of harbour porpoise from the site being in the vicinity of the vessels transiting between the site and the mainland.

#### Other cetacean species

At least 25 unique cetacean species have been recorded in Irish territorial waters, from migratory species such as humpback and fin whales to species present year-round such as the common bottlenose dolphin population in the Shannon Estuary (IWDG, 2020). This variety is in part due to the variety of habitat types present in Irish waters, from sheltered bays and inlets to deep undersea canyon systems found out on the continental shelf. The waters around Sceilg Mhichíl and the west coast of Ireland are examples of this, with 17 unique species having been recorded in the area. Of these 17 species, eight are considered to be common or occasional visitors. These 8 common species are the harbour porpoise, common dolphin (*Delphinus delphis*), bottlenose dolphin, Risso's dolphin (*Grampus griseus*), killer whale (*Orcinus orca*), minke whale (*Balaenoptera acutorostrata*), humpback whale (*Megaptera novaeangliae*) and fin whale (*Balaenoptera physalus*) (Wild Atlantic Way, 2020).

### B.1.2.3 Otters

The Eurasian Otter population in Ireland has remained relatively consistent over recent decades, with the most recent country-wide survey recording approximately 7800 breeding females, a number which was consistent with the previous baseline (Reid *et al.*, 2013). The species has remained strong in Ireland when compared to other populations in the UK and Europe, with a high level of genetic diversity due to multiple colonisation events and a stable demographic history being thought to have helped the species continue to thrive in Ireland (Finnegan and Ó. Néill, 2010). The European otter is an EPS, listed on Annex IV of the Habitats Directive. It is also listed on Annex II of the Habitats Directive



requiring the designation of SACs for its conservation. Otters are semiaquatic mammals that obtain most their food from lochs, rivers or the sea.

Within the SEA study area, otters are a Qualifying Interest of the Kenmare River SAC. The National Otter Survey of Ireland 2010/12 provides the most recent information on the Irish otter population and the range of their habitat.

### B.1.3 Other protected species

#### Grey seal (*Halichoerus grypus*)

The grey seal is one of two resident species of seal in Irish waters and can be found hauled out on the rocky ledges surrounding Sceilg Mhichíl throughout the year. It is the larger of the seal species found in Ireland with males reaching lengths of 2.5-3.3m. Grey seal typically breed between the months of September to December and the species' population in Ireland is regularly monitored during the pupping and moulting period (NPWS, 2020c). Population trend data across Ireland for recent years is limited, however the most recent estimates from counts of pup production between 2009 – 2012 indicate a rise in populations across Ireland (with the exception of Saltee Islands) (Evans and Waggitt, 2020). The nearest site to Sceilg Mhichíl where grey seal is a QI is the Basket Islands SAC (located approximately 22.7km from Sceilg Mhichíl). The Basket Islands are home to one of the largest grey seal populations in Ireland (approximately 1,099 – 1,413 individuals), comprising approximately a third of the national total (NPWS, 2013a). Grey seal are capable of long-distance travel over hundreds of kilometres, and tracked individuals from the Basket Islands typically forage within 50km of haul-out sites (Cronin, Pomeroy and Jessopp, 2013). Grey seals also haul-out on rocky ledges surrounding Sceilg Mhichíl and are an important component of the island's fauna but are not present in nationally significant numbers.

#### Harbour seal (*Phoca vitulina*)

Harbour seal, the smaller of the seal species found in Ireland, are a QI of the Kenmare River SAC, a site located within the route that vessels transiting from Derrynane pier take to Sceilg Mhichíl. Harbour seals may grow up to 1.85 metres in length, with males of the species typically being larger than females (NPWS, 2020a). When hauling out onshore the species typically prefers sheltered locations within the lower reaches of estuarine waters and sheltered bays and inlets (NPWS, 2013b). While there is evidence that individuals may travel over 100km from their haul-out site to forage, the majority of individuals forage within 25km of a haul-out site (Cunningham *et al.*, 2009). Within the Kenmare River SAC, the species is present year-round with breeding occurring between May and July, and moulting occurring between August and September. A total of 310 individuals were recorded within the Kenmare River in 2010, the last available population estimate for the site.

### B.1.4 Birds

#### B.1.4.1 Skelligs SPA

Sceilg Mhichíl and Sceilg Bheag are located within the Skelligs SPA and are home to an internationally important assemblage of seabirds, with over 10,000 pairs of breeding seabirds and individual populations of European storm petrel and northern gannet (NPWS, 2015d). Regular surveys of the (majority of) the SPA's breeding seabird population have taken place since 1990, utilising a standardised survey methodology. Due to the differing nature of their nesting habits compared to other present bird species, European storm petrel, Atlantic puffin, and Manx shearwater population numbers on Sceilg Mhichíl are estimated using bespoke methods. Table B-4 below details count data for the species which the Skelligs SPA has been designated for.

**Table B-4 Bird count data for designated species**

Species	Skelligs SPA count <sup>1</sup>	All-Ireland count	Data source
Northern fulmar	701 AOS	32,899 pairs	2019 NPWS Survey (NPWS 2020, pers. comms, 19 June) The Status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018 (Cummins, Lauder and Tierney, 2019)
Manx shearwater	738 AOS	44,000	Seabird 2000 survey (Mitchell <i>et al.</i> , 2004)
European storm-petrel <sup>2</sup>	963 individuals	100,000	2018 storm petrel census (Arneill and Quinn, 2018) Seabird 2000 survey (Mitchell <i>et al.</i> , 2004)
Northern gannet <sup>3</sup>	35,294 AON	47,946 pairs	The Status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018 (Cummins, Lauder and Tierney, 2019)
Black-legged kittiwake	810 individuals	24,728 pairs	2019 NPWS Survey (NPWS 2020, pers. comms, 19 June) The Status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018 (Cummins, Lauder and Tierney, 2019)
Common guillemot	2100 individuals	177,388 individuals	2019 NPWS Survey (NPWS 2020, pers. comms, 19 June) The Status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018 (Cummins, Lauder and Tierney, 2019)
Atlantic puffin	6,808 individuals	21,000	2019 NPWS Survey (NPWS 2020, pers. comms, 6 May) Seabird 2000 survey (Mitchell <i>et al.</i> , 2004)

<sup>1</sup> Methodology for surveying colonies differs depending on several factors such as site accessibility and bird behaviour, requiring different count units to be used as detailed below:

AOS – Apparently Occupied Sites

AON – Apparently Occupied Nests

<sup>2</sup> Species listed under Annex I of the Birds Directive

<sup>3</sup> Northern gannets' nest on Sceilg Bheag, not Sceilg Mhichíl

### B.1.4.3 Species of Special Conservation Interest in Skelligs SPA

#### Northern fulmar (*Fulmaris glacialis*)

Northern fulmar are typically present on Sceilg Mhichíl from January to September, nesting on vegetated spots found on the cliffs surrounding the island. The species is widely distributed across Ireland and the UK coast, with their population having increased greatly during the 20<sup>th</sup> century likely due to the increase in discards from commercial fishing vessels (JNCC, 2019). While recent census data for the Republic of Ireland indicates that breeding abundances have remained stable since the Seabird 2000 survey at a population estimate of 32,899 AOS, northern fulmar productivity is falling in the region (JNCC, 2020). Northern fulmar feed out to sea on a wide variety of food sources, making them vulnerable to ingestion of plastics. Northern fulmar is currently a green listed species under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013). Counts of the species on the island in 2019 estimated a total of 701 AOS were present on the island.

#### Manx shearwater (*Puffinus puffinus*)

A migratory species, Manx shearwater return to breed on Sceilg Mhichíl during the months of Spring. Sceilg Mhichíl, along with other islands located along the Kerry coast, support the majority of the population in Ireland. A nocturnal species, Manx shearwater nest in burrows as well as within crevices found in the monastic stone structures found on the island. They are known to raft in large numbers in the seas surrounding the island at dusk before returning to their burrows around midnight. While the species may feed in the seas nearby, they typically will travel 100's of kilometres to other feeding grounds such as Galway Bay, or even as far as the Mid-Atlantic Ridge (Wischnewski *et al.*, 2019) where their diet consists of small fish, plankton, crustaceans and molluscs (BirdWatch Ireland, 2020g). Manx shearwater is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013). To estimate their population numbers, a tape playback method is utilised where a sound is played to evoke a response from any nearby incubating individuals. This method allowed for a breeding population of 902 AOS to be estimated during the Seabird 2000 survey (plans for further census work are currently under discussion (NMS, 2020)). However, Arneill *et al.*, (2019) notes that such population estimates are likely to be highly inaccurate, owing to the species' patchy distribution and any estimates of mean density carrying high standard errors.

#### European storm petrel (*Hydrobates pelagicus*)

An Annex I species listed under the Bird's Directive, the European storm petrel is the smallest seabird found on Sceilg Mhichíl. The species is found at the sea for the majority of its life, typically feeding 100's of kilometres from land, returning to breed on remote islands such as Sceilg Mhichíl between April and October. Similar to Manx shearwater, the species is typically nocturnal on land and nest in burrows or crevices in the monastic structures or steps found on the island. A census of the population on Sceilg Mhichíl in 2018 estimated that a colony size of 963 ( $\pm 193$ ) was present, however due to the difficulty in surveying difficult to reach areas of the island, this figure may be an underestimate (Arneill and Quinn, 2018). European storm petrel is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013).

#### Northern gannet (*Morus bassanus*)

Northern gannets are found exclusively on Sceilg Bheag, where there exists a long-established colony of international importance. They are a fish-eating species with diet dominated by mackerel, whiting, and sandeel, but are also known to feed on fishery discards. Northern gannet is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013).

The last official count of the conducted between 2013-2018 estimated that 35,294 pairs breed on the island, making the site the largest breeding colony in Ireland. The species typically makes its nests on

ledges of cliffs above the splash zone, and occasionally on flat tops or on shallow soil (Cummins, Lauder and Tierney, 2019).

#### Black-legged kittiwake (*Rissa tridactyla*)

Black-legged kittiwake return to breed on the rocky cliffs of Sceilg Mhichíl during the summer months, and feed in the surrounding waters on small fish species such as sandeel and juvenile herring. The species possesses a distinct nasal call that can often be heard above the noise of other species at seabird colonies (BirdWatch Ireland, 2020d). Black-legged kittiwake is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013), with the long-term population trend being in decline due to the diminishing prey availability (Cummins, Lauder and Tierney, 2019). The species population on Sceilg Mhichíl has fluctuated in recent decades, with over 1,000 AON typically being recorded in the early 1990's before decreasing to a low of 365 AON in 2010. Numbers then recovered to 1,014 AON in 2017 before dropping to 404 AON in 2018, then partially recovering again to 810 in 2019 (NPWS 2020, pers. comms, 6 May).

#### Common guillemot (*Uria aalge*)

The most common auk species found in Ireland, the common guillemot breeding season occurs from March/April to August/September where they nest on narrow inaccessible ledges on sea cliffs (BirdWatch Ireland, 2020c). During the breeding season they feed in the surrounding waters on shoaling species such as sandeel and sprat. Species counts conducted between in 2019 estimated a population of 2,100 individuals, a slight increase from 2018 (1,908) but still a marked decrease from 2017 (2,664). Common guillemot is an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013).

#### Atlantic puffin (*Fratercula arctica*)

Atlantic puffin are typically present on Sceilg Mhichíl between April and mid-August, when they nest in burrows and crevices in amongst the steps leading to the monastery and feed on small fish and crustaceans in the nearby waters (BirdWatch Ireland, 2020i). Atlantic puffin is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013). Estimating species numbers of the breeding population on the island has proven difficult, with numbers being derived from counts of adults found on land in the evening, flying around the island or rafting in nearby waters. Using these methods, the most recent study conducted in 2019, counted an estimated 6,808 individuals.

### B.1.4.4 Non-designated species present in Skelligs SPA

#### Cory's shearwater (*Calonectris borealis*)

First recorded on Sceilg Mhichíl in 2003, the same male Cory's shearwater (*Calonectris borealis*) has been found to return to the island every year during the summer months. Cory's shearwater is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013). While Cory's shearwater typically breed in large colonies in the Mediterranean, single individuals have been recorded in Manx shearwater colonies across Ireland (BirdWatch Ireland, 2020a). No female Cory's shearwater or juveniles have been recorded on Sceilg Mhichíl.

#### Leach's storm petrel (*Oceanodroma leuchoa*)

Another listed Annex I species, a number of Leach's storm petrel (*Oceanodroma leuchoa*) have been captured and ringed on Sceilg Mhichíl in recent years. Leach's storm petrel is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013). While there is no evidence of the species breeding on the island, the presence of these individuals indicates the possibility this may be occurring. The species is currently

known to breed in only one location in Ireland, The Stags of Broadhaven off the north Mayo coast (BirdWatch Ireland, 2020e).

#### Razorbill (*Alca torda*)

A highly marine species that only returns to land during the breeding season from March to August (BirdWatch Ireland, 2020j). Typically found to breed on ledges or in cracks of rocky cliffs. Razorbill is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013). Counts on Sceilg Mhichíl in 2019 estimated a population of 281 individuals, a slight increase from 2018 (254) but a noticeable decrease from 2017 (396) (NPWS 2020, pers. comms, 6 May).

#### Shag (*Phalacrocorax aristotelis*)

Shag have been recorded on Sceilg Mhichíl since the 1990's, with small numbers of the species breeding on the island. The most recent survey conducted in 2019 found an estimated three AON on the island. The species nests on cliff edges and feeds on small pelagic fish taken from just below the water's surface (BirdWatch Ireland, 2020k). Shag is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013).

#### Lesser black-backed gull (*Larus fuscus*)

Typically found on Sceilg Mhichíl from March to September, the lesser black-backed gull breeds in colonies on the rock cliffs of the island and feed on a wide range of food sources such as fish, insects in flight and young birds (BirdWatch Ireland, 2020f). Lesser black-backed gull is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013). Recent surveys estimate 44 Apparently Occupied Territories (AOT) of the gull on the island as of 2019 (NPWS 2020, pers. comms, 6 May).

#### Great black-backed gull (*Larus marinus*)

The largest widespread gull species found in Ireland, the great black-backed gull typically breeds individually or in small colonies and has a similar diverse diet to that of the lesser black-backed gull (BirdWatch Ireland, 2020b). Great black-backed gull is currently an amber listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013). It is estimated that six great black-backed gull breeding territories exist on Sceilg Mhichíl, according to the latest 2019 survey data (NPWS 2020, pers. comms, 6 May).

#### Herring gull (*Larus argentatus*)

Breeds on the rocky cliffs of Sceilg Mhichíl in small numbers, with an estimated 42 AOT during the breeding season (NPWS 2020, pers. comms, 6 May). The species is both a predator and scavenger, often found following fishing boats and feeding on bycatch. Herring gull is currently a red listed species of conservation concern under the Birds of Conservation Concern in Ireland 2014–2019 (Colhoun and Cummins, 2013).

### B.1.4.5 Other relevant SPAs

#### Puffin Island SPA

Located approximately 0.5km off the south-west County Kerry coast, Puffin Island is a long and narrow island composed of Old Red Sandstone and is surrounded by steep sea cliffs and slopes. The northern and southern halves of the island are relatively distinct from one another, with the southern half being a narrow rocky ridge that rises to a peak of 130m, while the northern half broadens into a grassy plateau that reaches a peak of 159m. Nine different plant communities have been recorded on the island. While the vegetation is composed predominantly of a maritime grassy sward, there does exist a small area of ling heather (*Calluna vulgaris*) heath, with a thrift community dominating the islands slopes (NPWS, 2015c).



The site is a SPA of SCI for northern fulmar (447 pairs), Manx shearwater (6,329 pairs), European storm petrel (Annex I species, 5,177 pairs), lesser black-backed gull (139 pairs), razorbill (402 pairs) and Atlantic puffin (5,125 pairs). The Atlantic puffin population on Puffin Island was the largest recorded in Ireland during the Seabird 2000 survey, with the populations of Manx shearwater and European storm petrel being of international importance. Other seabirds recorded on the island that are not SCIs for the site include European shag (5 pairs), black-legged kittiwake (25 pairs), common guillemot (92 pairs) and great black-backed gull (72 pairs). The only recorded non-seabird is the chough, an Annex I species that has been recorded in small numbers in recent decades.

#### Iveragh Peninsula SPA

The Iveragh Peninsula SPA encompasses a large section of the County Kerry coastline, stretching from Rossbehy in the north to Abbey Island in the south. Vegetated sea cliffs are the predominant habitat of the site, featuring a variety of plants including thrift, sea campion, sea spleenwort and rock sea-spurry. Some areas of sand dunes are also present at Derrynane and Beginish. Further inland the habitat is a mosaic of habitats including heathland, dense bracken and grassland (NPWS, 2015b).

The site is a SPA of special conservation interest for chough (Annex I species, 88 pairs), peregrine (Annex I species, five pairs), common guillemot (2,860 pairs), northern fulmar (766 pairs), and black-legged kittiwake (1,150 pairs). The population of chough is internationally important, with the Iveragh Peninsula SPA being the second most important for chough in Ireland. This is due to the varying inland habitat in close proximity to breeding cliffs.

#### Deenish Island and Scariff Island SPA

Deenish Island and Scariff Island are located between 5km and 7km from Lamb's Head on the Irish mainland, being similarly exposed to the force of the Atlantic Ocean as Sceilg Mhichíl and Bheag. Of the two islands Scariff is the larger, being surrounded by steep-sided cliffs (the highest of which are to the islands south-side) which rise to a peak of 252m. The islands vegetation is composed of a mix of maritime grassland, bracken-dominated areas and areas of heath with ling heather. Deenish Island is less rugged, rising only to 144m in its' southern half. Grassland comprises the majority of the habitat, with some heath being found at higher points on the island (NPWS, 2015a).

The site is a SPA of special conservation interest for northern fulmar (385 pairs), Manx shearwater (2,311 pairs), European storm petrel (Annex I species, 6,200 pairs), lesser black-backed gull (97 pairs) and Arctic tern (*Sterna paradisaea*, Annex I species, 54 pairs). Both islands are important breeding sites for Manx shearwater, with the combined population from both sites accounting for approximately 5% of the national total. Additionally, chough is a resident species on Scariff with breeding pairs having been recorded historically.

### B.1.5 Benthic ecology

The seabed between Sceilg Mhichíl and the Irish mainland is composed of a variety of habitats and substrate types, owing to the undulating nature of the underlying geology. The seabed immediately surrounding Sceilg Mhichíl and Sceilg Bheag is characterised by the EUNIS<sup>4</sup> biotopes A5.14 (Circalittoral coarse sediment) and A5.15 (Deep circalittoral sediment). Moving further from the islands the seabed is complex with a wide variety of peaks and channels occurring, with the peaks consisting typically of biotope A4.27 (Faunal communities on deep moderate energy circalittoral rock) and the channels consisting of biotope A5.15. Directly east of the Skelligs, the seabed is dominated by the biotope A4.1 (Atlantic and Mediterranean high energy circalittoral rock), with typical species including sponges (e.g. *Halichondria panicea*, *Esperiopsis fucorum*), the hydroid *Tubularia indivisa* and the barnacle *Balanus crenatus*. Further north and north-west of the Skelligs, the seabed is dominated primarily by the biotope A5.27 (Deep circalittoral sand). Closer to the mainland where the seas are more sheltered,

<sup>4</sup> European Nature Information System habitat classification

the seabed is characterised by the biotopes A5.14 and A5.25 or A5.26 (Circalittoral fine sand or Circalittoral muddy sand) (EMODnet, 2019).

## B.1.6 Littoral habitat

### Sceilg Mhichíl (Skellig Michael)

The island features a sparse covering of vegetation, with much of the island being composed of exposed rock and steep rocky sea cliffs. The vegetation that is present is typical of highly exposed maritime conditions, being limited by a thin covering of soil, steep topography, salt spray and high winds. Plant species commonly found on the island include thrift (*Ameria maritima*), sea campion (*Silene maritima*), and rock sea-spurrey (*Spergularia rupicola*), along with frequent patches of red fescue (*Festuca rubra*), dock (*Polygonaceae* sp.) and sea mayweed (*Tripleurospermum maritimum*). A previous study of plants present on the island recorded 38 species of higher plant (Lavelle, 1976). A new vegetation study is due to be completed in early 2020, with the results of which being made available later in the year<sup>5</sup>. Due to the island's remote nature, maritime climate and underlying geology, it supports a nationally important diversity of lichens, with 128 lichen species and two lichenicolous fungi being recorded in a 2009 survey by John Douglass and Paul Whelan (World Heritage Ireland, 2010a).

In addition to the naturally occurring habitat and vegetation present on the island, the historic monastic structures are utilised as habitat by other plants and species, due to the shelter and protection from the elements they provide.

### Sceilg Bheag (Little Skellig)

Sceilg Bheag is inaccessible to humans with no available landing sites and is home to numerous breeding seabird colonies. Due to the large numbers of birds present, along with low soil cover, the island is largely unvegetated. Sea mayweed has been found to occur on ledges too small for gannets however, with tree mallow (*Lavatera arborea*), a local Irish species, also being recorded (NPWS, 2015d).

### Iveragh Peninsula (Irish Mainland)

The coastline of County Kerry and the Iveragh Peninsula is characterised by high coast and sea cliffs and is underlain by Devonian sandstones, siltstones and mudstones. The sea cliffs are host to a variety of plant species typical of the habitat. This includes thrift, sea campion, rock sea-spurrey and sea spleenwort (*Asplenium marinum*), with the cliff tops supporting areas of heath and coastal grassland. Aside from the areas of sea cliffs, the coastline includes areas of dune grassland, dry heath, wet heath, upland acid grassland, dense Bracken (*Pteridium aquilinum*), semi-improved and improved pasture grassland, streams, bedrock shores and islets (NPWS, 2015b).

## B.1.7 Fish

### Basking Shark

The basking shark (*Cetorhinus maximus*) is the largest fish in the North Atlantic and the second largest in the world. Basking sharks are a wide-ranging species also occurring in warm waters and are commonly observed in British and Irish waters along the western seaboard, including the Irish Sea, the western English Channel and past the Isle of Man to the West of Scottish waters. The population around Ireland collapsed in the mid-20<sup>th</sup> century due to overfishing of the species (The Irish Basking Shark Project, 2020b). This is a trend that was repeated around the world with the species currently listed by International Union for Conservation of Nature (IUCN) as "Vulnerable" globally and "Endangered" in the northeast Atlantic and north Pacific. While the frequency of sightings has increased since this point, due to a lack of measurable datasets no current population estimates of the species around Ireland are currently available (The Irish Basking Shark Project, 2020b). While the

<sup>5</sup> Results were not available at the time of writing this report (September 2020)

species itself is not afforded any legal protection in Irish waters, basking sharks are listed on the OSPAR list of threatened and/or declining species and receive further protection through the Bonn Convention.

The seas around the south-west coast of Ireland feature a higher frequency of sightings for basking shark compared to the rest of the country, with the waters around the Blasket Islands in particular known to be a hotspot for sightings. These higher levels of sightings are due to the large aggregations of zooplankton that occur in this area during the spring and summer months (Ireland's Wildlife, 2013). Recent studies on the species on the population in west Kerry has found they are genetically distinct from those sampled elsewhere in Ireland or the UK (The Irish Basking Shark Project, 2020a).

### B.1.8 Planktonic community

The west coast of Ireland, including the seas around Sceilg Mhichíl and nearby sites such as the Blasket Islands, is home to a number of thermal fronts and areas of coastal upwelling (Silke *et al.*, 2012). These areas of upwellings typically lead to higher concentrations of phytoplankton activity. Studies of upwelling events along this area of coastline found that diatom species such as *Chaetoceros* spp., *Leptocylindrus danicus*, *Guinardia delicatula*, and *Thalassiosira* spp. were dominant closer to shore, while further offshore dinoflagellate species increased in numbers (Silke *et al.*, 2012). One of the key mechanisms that influences the appearance and type of blooms in this area of sea is the position of the Irish Shelf Front. During periods of strong south-westerly winds, the Irish Shelf Front is found close to shore and negates the influence of the clockwise flow of the Irish Coastal Current. When such south-westerly winds relax, the Shelf Front is weakened, and the Coastal Current becomes dominant. As a result, the current brings increased populations of dinoflagellates from the Celtic Sea to the area, which in some cases will be transported further inshore and into the estuaries and inlets that characterise the area (Silke *et al.*, 2012).

These high abundances of phytoplankton in the region have led to associated increases in biodiversity in other predator and prey species, supporting large populations of fish, which in turn has led to the area being one of the most important in Ireland for breeding seabirds, as well as numerous cetacean and pinniped species.

### B.1.9 Invasive Non-Native Species

There is potential for Invasive Non-Native Species (INNS) to reach remote islands such as Sceilg Mhichíl through vessels transiting to them from the Irish Mainland. INNS are species that have been transported outside their natural distribution, either deliberately or unintentionally. Not all NNS that are introduced survive, as some are unsuited to their new environment. Some introduced NNS can become invasive if they spread rapidly, establish themselves in the new environment and cause damage to native species.

The direct or indirect introduction of INNS or problematic native species could have catastrophic effects on the island's biodiversity because of the subsequent spread of such species and out-competing of native species (Spatz *et al.*, 2017; Dias *et al.*, 2019). Non-indigenous species have the potential to upset the balance of the existing ecosystem. For example, they may:

- Prey on native species;
- Change the food web;
- Decrease biodiversity; and
- Dominate the island's ecology, especially in the absence of natural predators.

The dangers that the introduction of species such as rats to remote seabird nesting sites would pose to the viability of the site is high, with invasive rats being one of the highest contributors to the



reductions in seabird numbers worldwide (Dias *et al.*, 2019). This is shown through the distribution of European and Leach's storm petrel being confined to rat-free islands (Mitchell *et al.*, 2004).

Currently there are only two species of mammal present on Sceilg Mhichíl: rabbits (*Oryctolagus cuniculus*) and the house mouse (*Mus musculus*). Rabbits are a recent introduction to the island, being introduced in the early nineteenth century (World Heritage Ireland, 2010b). The house mouse was first recorded in the island in the 1960's, being found within the lighthouse and monastery structures, and is thought to have been unintentionally introduced through reaching the island via boat from the mainland (Lovegrove, Byrne and Rear, 1965). Atlantic puffin are known to utilise old rabbit burrows for nesting purposes, and are even known to evict rabbits from existing burrows (BirdWatch Ireland, 2020i).

A review of the biosecurity on Sceilg Mhichíl conducted in 2018 determined that the most likely pathway for new species to reach the island was through boats landing on the island, where pests could stow away within cargo or on the vessel itself (MKO, 2018). Of the various types of boats that land on the island (e.g. tourist vessels, cruise ships, cargo boats), unauthorised landings from vessels such as yachts and diving parties outside of the visitor season are thought to pose the greatest biosecurity risk. While during the visitor season such unscheduled landings would be met by a guide present on the island, there is no such guide presence outside the visitor season, highlighting a potential pathway for invasive species to enter the island unchecked (MKO, 2018). The potential for species to reach the island through swimming was also assessed. While the potential for species to swim directly to Sceilg Mhichíl is negligible, with the island being located at a distance over twice the known record of invasive species' swimming ability, invasive species could potentially swim shorter distances and "island-hop" to the Sceilg Mhichíl. Such a route would start on the mainland then travel to Puffin Island (0.11km), then to Lemon Rock (4.06km), onwards to Sceilg Bheag (3.84km) and then finally to Sceilg Mhichíl (1.8km). Such distances are close to the maximum swimming distances for brown rat. However, given the typically choppy sea conditions between the mainland and Sceilg Mhichíl, and the lack of suitable access points on the intermediary islands, such an occurrence is unlikely.

The review listed the main species for which there was an incursion risk to Sceilg Mhichíl. These species, and an assessment of the impact's incursion may have, is detailed in Table B-5 below.

**Table B-5 Assessment of incursion risk and impacts of key risk species to Sceilg Mhichíl (MKO, 2018)**

Species	Incursion risk	Pathways	Possible impacts	Impact speed	Impact severity
House mouse ( <i>Mus musculus</i> )	<b>High</b> (Already present)	Likely unintentional introduction by boat	Predation on seabirds, eggs and chicks Disease transmission	Slow	Moderate
Rabbit ( <i>Oryctolagus cuniculus</i> )	<b>High</b> (Already present)	Likely deliberately introduced as a food source	Habitat degradation, damage to archaeological features	Slow	Moderate
Brown rat ( <i>Rattus norvegicus</i> )	<b>High</b> (Widespread, human-associated, inconspicuous)	Stowaways, natural dispersal	Predation on seabirds, eggs and chicks Disease transmission	Rapid	Critical

Species	Incursion risk	Pathways	Possible impacts	Impact speed	Impact severity
American mink ( <i>Neovison vison</i> )	<b>Low</b> (Highly conspicuous)	Intentional release, natural dispersal	Predation on seabirds, eggs and chicks	Moderate	Critical
Wood mouse ( <i>Apodemus sylvaticus</i> )	<b>Moderate</b> (Less closely associated with humans)	Stowaways	Predation on seabirds, eggs and chicks	Slow	Moderate
Black rat ( <i>Rattus rattus</i> )	<b>Low</b> (Limited to Lambay Island on Ireland's east coast)	Stowaways, natural dispersal	Predation on seabirds, eggs and chicks Disease transmission	Rapid	Critical
Feral cat	<b>Low</b> (Highly conspicuous)	Intentional release	Predation on seabirds, eggs and chicks	Moderate	Critical
Feral ferret ( <i>Mustela furo</i> )	<b>Low</b> (Very limited distribution in Ireland)	Intentional release	Predation on seabirds, eggs and chicks	Moderate	Critical
Invasive plants	<b>Low</b>	Natural dispersal	Decline and loss of native plants	Slow	Moderate

Of the species assessed in the report, the risk of brown rat (*Rattus norvegicus*) incursion was determined to be of the highest risk, due to the species being widespread, human-associated and inconspicuous enough to avoid detection. While the rabbit and house mouse population already present on the island may, over a long period of time, lead to a notable impact on the site, the possible impacts of a brown rat outbreak (predation of seabirds, eggs and chicks, disease transmission) would be both rapid in timescale and lead to significant impacts on to the biodiversity, economy and cultural heritage of the site.

With the high risk and severe potential impact that brown rat incursion could have on the island, the review recommended several actions that may be utilised to allow such an event to be dealt with effectively and efficiently. These recommendations on safe cargo storage and inspection measures, detailed surveillance and incursion response plans, and options regarding the trapping/killing of any intruders. The actions recommended by the review will themselves be reviewed annually to ensure their continued effectiveness.

### B.1.10 Future Trends

Potential future trends regarding the biodiversity, flora and fauna of the study may include:

- Resident cliff nesting bird populations on the Skellig islands are likely to remain at similar levels as the present day. Burrowing bird species such as Atlantic puffin, Manx shearwater and European storm petrel may however be subject to increased disturbance through deteriorating physical conditions of the site and increased numbers of visitors.
- Declines/shifts in the populations of prey species e.g. sandeel, as a result of factors such as climate change could lead to a reduction/shifts in populations of local species. This includes the breeding seabird populations on Sceilg Mhichíl and Sceilg Bheag, marine mammals and basking shark. For

example, increasing sea temperatures may lead to a shift in the local planktonic communities in the region, which in turn may lead to a reduction in availability of prey species (Lauria, 2012; Cotton *et al.*, 2005).

- Bird populations on Sceilg Mhichíl will remain at severe risk from potential introduction of predatory mammalian INNS (MKO, 2018).

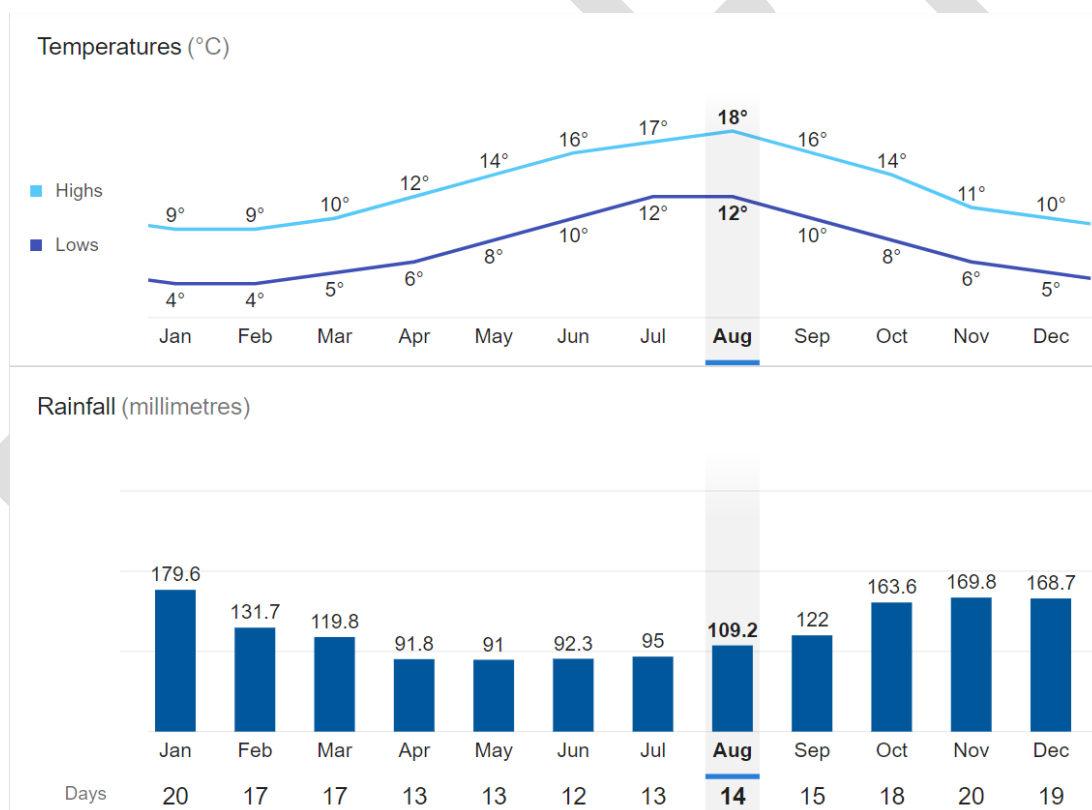
DRAFT

## B.2 CLIMATIC FACTORS

### B.2.1 Climatic summary and future trends

The typical climate of Sceilg Mhichíl, and Ireland as a whole, is predominantly influenced by the Atlantic Ocean, with the region not being subject to the same extreme shifts in temperature compared to other countries located at similar latitudes. The warm North Atlantic Drift that passes close to the Irish landmass has a large influence on sea temperatures in the region, with its presence being felt strongest on coastal sites on the west of Ireland, such as Sceilg Mhichíl and Co. Kerry (Met Éireann, 2020b). Temperatures on the island typically range from lows of 4-9°C in January up to peaks of 12-18°C in August. Average rainfall across the year is highest from October to January, ranging from 163.6 – 179.6mm each month in this period, dropping to ranges of 91.8 – 95mm from May to August (see Figure B-1 (NOAA, 2020)). Due to the site's location on the exposed west coast in the Atlantic, the site is exposed to windy conditions year-round, with stronger stormy conditions occurring in the winter months. High winds are not exclusive to the winter months however, with strong winds during summer months occasionally leading to adverse conditions that prevent tourist vessels from reaching the site.

**Figure B-1 Average annual temperature and rainfall on Sceilg Mhichíl (NOAA, 2020)**



The potential effects of climate change on Ireland vary depending on the type of predictive model used, i.e. a low-medium emissions increase model or a high-level emissions model. Both models do however predict that winters will become milder on average, with lowest night-time temperatures in winter rising by 1.1-1.3°C and decreases in annual precipitation across the country predicted in each model (Met Éireann, 2020a). It is also predicted that the energy content of wind during spring, summer and autumn will decrease, with no significant trend, positive or negative, occurring for winds in winter. While the overall number of cyclones in the North Atlantic is projected to decrease by

approximately 10%, it is also predicted that the paths of extreme storms will extend further south, likely leading to an increase in extreme storm activity across Ireland, and therefore Sceilg Mhichíl (Met Éireann, 2020a).

Sceilg Mhichíl had been, until recently, relatively unaffected by changes in climate across Ireland. The first changes were noted in 2007 however, when winds came predominantly from a northerly direction, a change from what had been experienced in the previous 30 years (NMS, 2020). This trend in northerly winds has since continued, along with an increase in the severity and duration of storm events during the winter months. The increase in adverse weather conditions has also affected the summer months too, reducing the number of available days in which visitors can access the island. With all current climate models predicting an increase in extreme storm activity across Ireland, it is likely this trend in worsening conditions during the winter months will continue into the future.

## B.3 CULTURAL, ARCHITECTURAL & ARCHAEOLOGICAL HERITAGE<sup>6</sup>

### B.3.1 Cultural Assets Overview

Sceilg Mhichíl (Great Skellig) is one of two rocky islands—the other being Little Skellig—known as the Skellig Rocks, situated in the Atlantic Ocean off the coast of the Iveragh Peninsula, Co. Kerry. Geologically, these islands are formed of Old Red Sandstone and are part of the same formations as the Macgillycuddy's Reeks and the Caha mountains. Sea level rise separated the Skelligs from the mainland making them islands, though both clearly maintain their mountainous form, projecting from the sea. Sceilg Mhichíl, the larger of the two islands is 218m above sea level and is 21.9 hectares in extent. The location and natural setting of Sceilg Mhichíl is spectacular in itself; but it is its remaining cultural heritage remains that provide it with its Outstanding Universal Value. It is arguably the most spectacularly situated early medieval island monastic site in Ireland and globally and 'It represents a unique cultural achievement, illustrating a significant period of history and civilisation that has disappeared' (NMS, 2020). Its location at the western edge of the Europe which was then thought as the edge of the known world, Sceilg Mhichíl was the chosen destination for a small group of ascetic monks who, in their pursuit of greater union with God, withdrew from civilisation on the mainland to this remote and precipitous rock. Sometime between the sixth and eighth centuries, a monastery was founded there producing one of the most dramatic examples of the extremes of Christian monasticism. The religious community left for the mainland sometime in the thirteenth century but Sceilg Mhichíl continued as a place of pilgrimage. Due to its setting and cultural heritage remains and traditions there is no comparable archaeological monument to Sceilg Mhichíl currently known.

In addition, Sceilg Mhichíl has important nineteenth-century evidence for the early establishment and history of lighthouses on the Irish coast (Taylor, 2006; O'Reilly, 2018). Two separate lighthouses were constructed on the island. Both were particularly challenging building projects due to the location and remoteness of the island. A rock-cut road was also constructed to connect the two lighthouses to the pier at the eastern end of the island. This pier remains the primary landing place for island visitors today,

Sceilg Mhichíl (Great Skellig) island is a National Monument in State ownership, No. 61.<sup>7</sup> In 1996 UNESCO inscribed the island onto the World Heritage List in recognition of its Outstanding Universal Value.<sup>8</sup> The island is located in the barony of Iveragh and the civil parish of Killemlagh. It comprises a single townland of Sceilg Mhichíl or Skellig Rock Great and its name derives from the Irish translated as 'the steep rock of Michael'; Michael being the Archangel Saint Michael.<sup>9</sup>

Cultural assets comprise features and monuments of architectural and archaeological heritage. There are 129 recorded archaeological monuments on the island which are described in detail in Tables B-1 and B-2 (Figures B-1; B-2; B3). There are no features on Sceilg Mhichíl that are designated as being of specifically architectural interest in the National Inventory of Architectural Heritage<sup>10</sup> and there are

<sup>6</sup> Baseline study undertaken by Dr Tracy Collins, Aegis Archaeology Limited

<sup>7</sup> <https://www.archaeology.ie/sites/default/files/media/pdf/monuments-in-state-care-kerry.pdf>.

Accessed 28 July 2020.

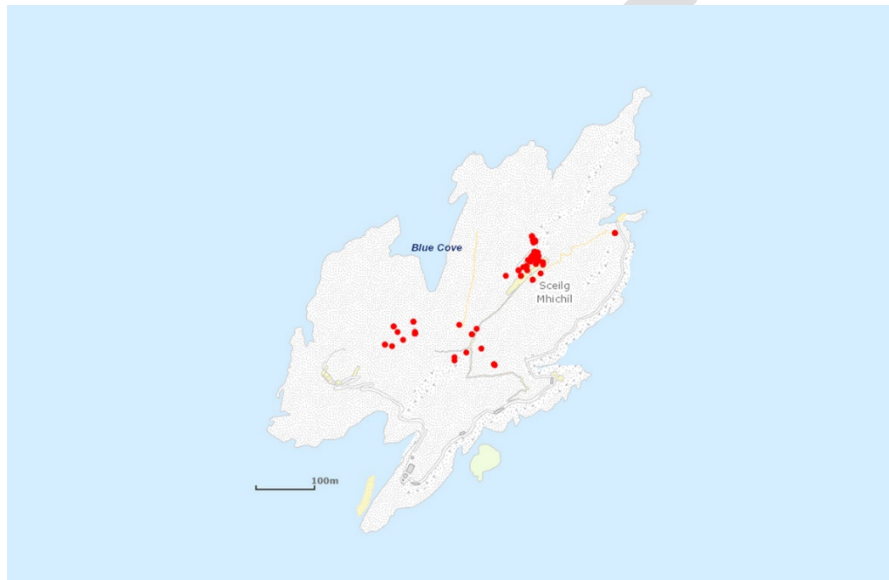
<sup>8</sup> <http://www.worldheritageireland.ie/skellig-michael/>; <http://whc.unesco.org/en/list/>. Accessed 28 July 2020.

<sup>9</sup> <https://www.logainm.ie/22405.aspx>. Accessed 28 July 2020. For a comprehensive discussion of the placename, including its reputed Viking associations see Bourke 2011, 18.

<sup>10</sup> Available at: <https://webgis.archaeology.ie/historicenvironment/>; <https://www.buildingsofireland.ie/buildings-search/>. Accessed 28 July 2020.

currently no protected structures on the island.<sup>11</sup> There are historic wrecks known from the waters around the island. The closest known wreck is a ship the *Lady Nelson* which was wrecked on Little Skellig on 14 October 1809 (Wreck No. 5762).<sup>12</sup> It is approximately 1.9km from the eastern edge of Sceilg Mhichíl. It is probable that there are a number of unrecorded wrecks in the waters around the island (Figure B-4).

**Figure B-2 Recorded archaeological monuments on Sceilg Mhichíl (after National Monuments Service). Red dots indicate archaeological monuments. North to top.**



**Figure B-3 First edition OS six-inch map of Sceilg Mhichíl (after National Monuments Service). North to top.**



<sup>11</sup> <http://atomik.kerrycoco.ie/ebooks/devplan/pdfs/Vol2/protected.pdf>. Accessed 28 July 2020.

<sup>12</sup>

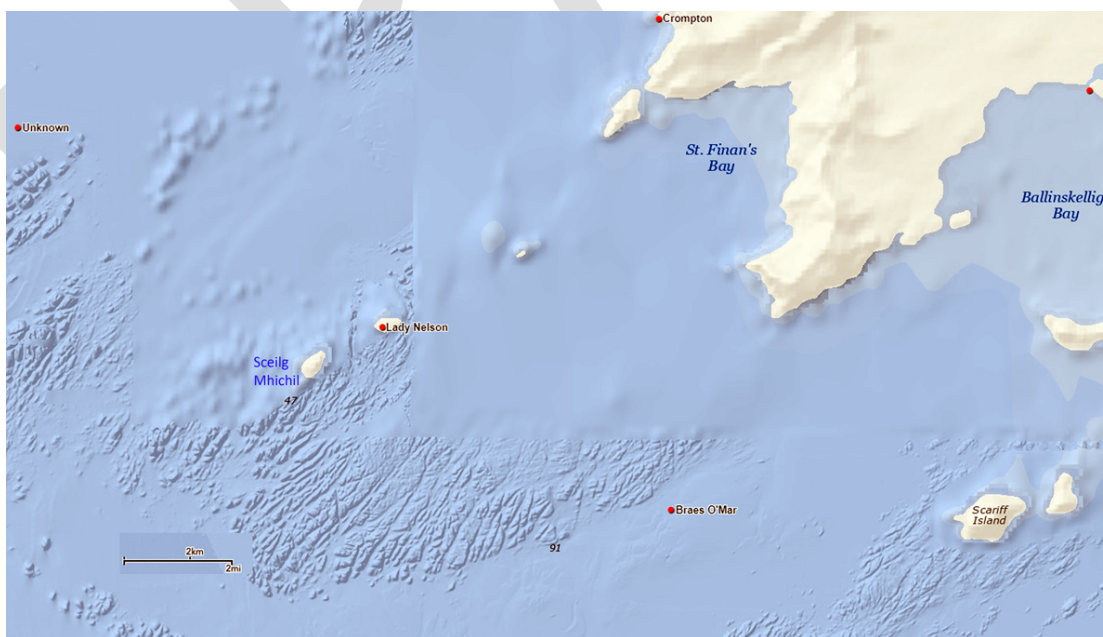
<https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=89e50518e5f4437abfa6284ff39fd640>. Accessed 20 August 2020.



Figure B-4 Vertical aerial view of Sceilg Mhichíl (after Google Earth 2020).



Figure B-5 Recorded historic wrecks around Sceilg Mhichíl (after National Monuments Service Underwater Unit).





**Table B-6 Class (type) and Numbers of Recorded Archaeological Monuments on Sceilg Mhichíl.**

Class (type)	Numbers	ASI Description
Building	1	A structure that has or had a roof where there is insufficient evidence to determine function. These may date to any period from prehistory onwards.
Burial Ground	1	An area of ground, set apart for the burial of the dead, not associated with a church. These date from the medieval period (5th - 16th centuries AD) onwards.
Church	5	A building used for public Christian worship. These can be of any date from c. 500 AD onwards.
Cistern	6	A covered tank in which rainwater is stored. These were in use from the early medieval period (5th -12 centuries AD) up to the 17th century.
Clochan	7	A circular or rectangular structure of drystone-walling with a corbelled roof. (A corbelled roof is one in which the masonry courses or stones are each built projecting beyond the one below until they join at the roof's apex). Derived from the Irish word 'cloth' meaning stone; 'clochán' means a stone structure. These date to the early medieval period (5th-12th centuries AD).
Cross	65	A free-standing structure, in the form of a cross (+), symbolising the structure on which Jesus Christ was crucified. See also High cross, Market cross, Tau cross. These can be of any date from c. 400 AD onwards.
Cross-inscribed stone	2	A stone with a cross carved into its surface. These can be of any date from c. 400 AD onwards.
Cross slab	11	A slab of stone, either standing or recumbent, inscribed with a cross and generally used as a grave-marker or memorial. Where a slab has an ogham inscription (ogham is a type of early writing based on a series of lines and spaces, thought to be based on the Latin alphabet) this is classified as 'Ogham stone'. This term is applied only to slabs dating to pre-1200 AD.
Enclosure	2	An area defined by an enclosing element (e.g. bank, wall, fosse, scarp), or indicated as such cartographically, and occurring in a variety of shapes and sizes, possessing no diagnostic features which would allow classification within another monument category. These may date to any period from prehistory onwards. Enclosures with a diameter greater than 70m should be classed as Large Enclosure.
Hut site	1	A structure, usually discernible as a low, stone foundation or earthen bank enclosing a circular, oval or subrectangular area, generally less than 5m in maximum dimension. The remains are generally too insubstantial to classify as a house but the majority probably functioned as dwellings. These may date to any period from prehistory (c. 8000 BC - AD 400) to the medieval period (5th-16th centuries AD).
Inscribed stone	1	A slab of stone, either standing or recumbent, inscribed with lettering, used as a grave-marker or memorial. Applied only to slabs dating to pre-1200 AD. If a slab with lettering also bears an inscribed cross then use cross-slab.

Class (type)	Numbers	ASI Description
Latrine	1	A small building housing a lavatory. These date from the later medieval period (12th-16th centuries AD) onwards.
Leacht	6	A feature found on Early Christian ecclesiastical sites (5th-9th centuries AD). The name 'leacht' is derived from the Irish meaning a grave, cairn or sepulchral monument. It usually consists of a low, often rectangular, drystone-faced cairn. The leacht (plural leachta) may have marked a special grave, such as that of the site's founder saint, and may have served as a focal point for outdoor services. Crosses, cross-slabs or cross-inscribed pillars are sometimes placed on the leachta or are found in association and they are used as penitential stations.
Metal-working site	1	A place where metal is produced. These may date from the Bronze Age (c. 2400-500 BC) onwards.
Platform	2	An artificially raised area composed of earth or earth and stone. The platform may be defined by a stone revetment and the surface is usually level. These may date to any period from prehistory onwards.
Road/trackway	2	A way, or section thereof, which has been deliberately constructed between places. These may be of any date from prehistory onwards.
Shrine	1	A stone structure built to house the relics of a saint. Some examples were erected in the form of a house/church with a steep-pitched roof. They are associated with early medieval ecclesiastical sites (5th-12th centuries AD).
Standing stone	1	A stone which has been deliberately set upright in the ground, usually orientated on a north-east-south-west axis, although other orientations do occur, and varying in height from 0.5m up to 6m. They functioned as prehistoric burial markers, commemorative monuments, indicators of routeways or boundaries and date from the Bronze and Iron Ages (c. 2400 BC - AD 500), with some associated with early medieval ecclesiastical and burial contexts (c. 5th-12th centuries).
Steps	4	A series of flat-topped structures, usually made of stone or wood, used to facilitate a person's movement from one level to another. Use is restricted to Early Christian ecclesiastical contexts (5th-12th centuries AD).
Structure	1	A construction of unknown function, either extant or implied by archaeological evidence. These may date to any period from prehistory onwards.
Terrace	8	An artificially raised area of ground, usually contained by a revetment, designed to create a flat space on sloping ground. Use is restricted to Early Christian ecclesiastical contexts (5th-12th centuries AD).

**Table B-7 Recorded Archaeological Monuments on Sceilg Mhíchíl (sorted by class).**

SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
KE104A001031-	Building	424941	560846	On a steep slope at the lower end of the East Steps (KE104A001022-) above Blind Man's Cove on Sceilg Mhíchíl. Clearance of vegetation in 2002 revealed part of a rectangular stone structure to the E of, and abutting, the outer face of the steps. Partial excavation of the structure in 2002 uncovered burnt spreads (ibid.). Subsequent excavation in 2003 revealed this structure to be a subrectangular building (c. 5m x 2.5m), part of which had fallen into the sea, and which appeared to have been occupied in the Early Christian period. A cross-slab (KE104A001109) was found beneath the threshold of the building.
KE104A001104-	Burial ground	424701	560676	De Paor (1955, 186) recorded a tradition that the wall enclosed an area used as a burial ground. No corroborating evidence has been found to support this (pers. comm. G. Rourke). (O'Sullivan and Sheehan 1996, 278-90, no. 948 (23).)
KE104A001001-	Church	424606	560680	Oratory. The remains of this drystone building, measuring 2.1m wide internally, consist of its SW end-wall, a 2.55m long section of its NW side-wall, and a short stretch of the inner face of the opposite side-wall. The NE end of the structure appears to have collapsed with the subsidence of the terrace revetment wall at this point. The surviving end-wall was built on a low plinth, .35m high and .25m wide, which continues along the NW side-wall at a higher level. Here it also serves as a pathway at the foot of a natural ledge, with steps cut into it, which ascends the rock-face at the NW side of the terrace. The NW and SW walls of the oratory are preserved to internal heights of 0.95m and 1.2m respectively, and the internal face of the former is corbelled. A doorway, 0.57m in average width, occurs in the surviving end-wall; a pair of threshold slabs survive in situ, and just inside the entrance a long slab, 1m x 0.45m x 1.2m thick, may represent a displaced lintel. The interior of the oratory is infilled with rubble, and outside it at SW a section of the paved surface of the terrace remains <i>in situ</i> .
KE104A001039-	Church	424806	560806	This is the larger of the two oratories, which was refurbished for use by the lighthouse personnel in the nineteenth century. Building is of corbelled drystone sandstone rubble construction and measures 6.1m NE-SW by 4.25m NW-SE externally.

<sup>13</sup> These descriptions are those from the Archaeological Survey of Ireland, National Monuments Service Available at: <https://webgis.archaeology.ie/historicenvironment/>. Last accessed 4 August 2020. Other publications have also been used: (Bourke, Hayden and Lynch, 2011; De Paor, 1955; Henry, 1948; Radford, 1959; O'Kelly, 1973; O'Sullivan and Sheehan, 1996; Smith, 1756; Lynch, 1902)

SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				Walls are on average 1.1m, rising to 1.5m high external offset, above which they corbel to a dome-shaped vault 3.25m high, closed with flat flags. It is lit by a lintelled window and the single doorway is in the W wall. A Latin cross formed by quartz stones is set above the door externally, the date of which is unclear. Excavations were carried out here by Lynch in 1988 (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (3).)
KE104A001040-	Church	424808	560833	Oratory. Excavated by Lynch in 1987, which showed that this structure was built directly on the stone paving of the upper terrace. Conserved in the 1980s by the OPW. It is of drystone sandstone rubble construction (with some quartz) measuring 4.05m E-W by 3.85m N-S externally. Walls rise vertically to a level of 0.3m wide external offset about 0.85m high, above which they corbel to form a vault. Internally, the side walls commence corbelling from the base. It is lit by a window at its E end, and a single door in its W end, which is double-lintelled one of which is a re-used cross-inscribed slab (no. 74). (see O'Sullivan and Sheehan (1996, 278-90, no. 948 (4)).
KE104A001042-	Church	424800	560798	St Michael's Church, South Peak. Traditionally associated with St Michael this may be the church that was noted in the Papal taxation lists for the Ardfert Diocese in the early fourteenth century. It measures 4.9m NE-SW by 3.8m NW-SE internally and it is partially upstanding. Walls are 1.2m wide built with a coursed split stone set in a gravel and lime mortar with marine shell inclusions. Quoins of Valentia sandstone are on N and S angles. NE end wall has a window off centre; doorway in NW wall. A large slab featuring an incised cross with T-shaped terminals on its upper surface, surmounts the doorway, though is not original. The NE end features a plinth interpreted as an earlier structure (see KE104A001162-). There are a number of nineteenth-century grave-markers in the church and an altar was recorded by Dunraven in the nineteenth century of which no trace remains. (See O'Sullivan and Sheehan (1996, 278-90, no. 948 (2)).
KE104A001162-	Church	424800	560798	The base of the NE end-wall [of St Michael's Church (KE104A001042-), which features a plinth, incorporates a small section of an earlier structure, interpreted as a possible earlier church. Berger obtained a radiocarbon date of 1250±25 BP (UCLA 2738D), which calibrates to the mid-ninth century, from a mortar sample from this structure (cited in Harbison 1991, 89, 150). (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (2)).

SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
KE104A001005-	Cistern	424606	560677	Water-Collecting Basins: These two adjoining rectangular hollows are cut into the upper surface of a low rock shelf close to the W corner of the oratory. They are fed by a channel, running beneath the NW wall of the oratory, and by two grooves, cut into the rock-face above. The NE basin, 0.5m x 0.36m x 0.12m deep, features a circular depression in its base, and water from it overflows along a small channel into the second basin at SW; this measures 0.55m x 0.26m x 0.13m deep.
KE104A001006-	Cistern	424606	560677	Two adjoining rectangular hollows cut into upper surface of a rock shelf. Fed by a channel running beneath the wall of the adjacent oratory and by two grooves cut into rock face above. Water from NE basin overflows into SW basin. (Described as water-collecting basins in 196; see O'Sullivan and Sheehan (1996, 278-90, no. 948 (28).)
KE104A001055-	Cistern	424780	560783	Recorded in 1996 as a souterrain, now reclassified as a cistern after conservation work. Associated with clochan. Its lintelled opening 0.6m high and 0.38m wide, faces SE and cistern itself is 3.1m max. length, 0.9m wide and 0.55m high. N side formed of bedrock; S side low drystone masonry. Cover formed by 12 lintels still <i>in situ</i> . (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (19).)
KE104A001058-	Cistern	424800	560799	Slab-lined recess named St Michael's Well on Ordnance Survey (OS) maps, built in to the foundation of the stepped platform on which a clochan stands. Faces onto terrace through an ope (opening) 0.73m wide and 0.26m high. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (17).)
KE104A001059-	Cistern	424804	560809	Similar recess to KE104A001058-. It is located on base of platform on which a clochan stands. Its ope measures 0.4m wide and 0.35m high. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (18).)
KE104A001107-	Cistern	424817	560778	This is located beneath an overhanging rock face which forms two of its sides. The other sides are formed with upright slabs; trapezoidal in plan it measures 1.5m by 0.75m. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (22).)
KE104A001032-	Clochan	424796	560801	Corbelled drystone split-stone masonry construction, external offsets and projecting slabs internally and externally. Single doorway facing onto paved and steeped area. Quadrangular floor plan, flag covered, sloping towards doorway; walls assume a circular plan as it rises to domed roof. Largest of six clochans on main terrace upstanding. Doorway lintel has two incised superimposed triangles and an equal-armed cross with T-shaped terminals. Several lintelled opes interpreted as

SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				windows. (Clochan A. See O'Sullivan and Sheehan (1996, 278-90, no. 948, (5).)
KE104A001033-	Clochan	424799	560802	Adjoins KE104A001035-. Constructed on platform, accessed to rear of several clochans including this one via a curved flight of steps. Clochan measures 2.9m by 2.8m, internally, flagged floor slopes to tapered doorway 1.3m high and 0.61m wide at base. Corbelled roof apex 3.15m high. Two wall niches in interior. (Clochan B. See O'Sullivan and Sheehan 1996, 278-90, no. 948, (6).)
KE104A001035-	Clochan	424801	560806	Adjoins KE104A001033-. Measures 2.85m by 2.45m internally, flagged floor, overlying a covered drain, slopes to doorway, which tapered maximum width 0.64m and 1.34m high. Corbelled roof apex at 3.55m. (Clochan C. see O'Sullivan and Sheehan 1996, 278-90, no. 948, (7).)
KE104A001036-	Clochan	424803	560805	Measuring 2.5m by 2.3m internally; this example appears to have been conserved in the nineteenth century and in the 1980s. Floor partially flagged, sloping to conserved doorway, 1.04m high. Several internal niches. It was unclear in 1996 if the clochan was corbelled. (Clochan D. See O'Sullivan and Sheehan 1996, 278-90, no. 948, (8).)
KE104A001037-	Clochan	424806	560814	Situated on a stepped platform which rises over 3m above level of main terrace. Accessed via 2 sets of steps. Floor flagged internally is 3.8m square, sloping to a tapered doorway 1.34m high by 0.85m maximum width. Four internal niches/beam holes; corbelled roof apex 3.6m high. (Clochan E. See O'Sullivan and Sheehan 1996, 278-90, no. 948, (9).)
KE104A001038-	Clochan	424809	560811	Measuring 2.5m square, flagged floor, tapering doorway 1.2m high and 0.62m maximum width. Three internal niche, two low slabs may demarcate a hearth. Apex of domed roof (with perforated cap, probably later), 3.8m high. (Clochan F. See O'Sullivan and Sheehan 1996, 278-90, no. 948, (10).)
KE104A001066-	Clochan	424821	560796	In the NE sector of the terrace (KE104A001102-) on Sceilg Mhichíl. The remains of a clochan, defined by an arc (C-shaped, c. 7.5m) of a drystone wall (Thickness c. 1m; Height c. 1.2m) SW-NNE, were uncovered during conservation and repair work. There is evidence of an entrance at the end of the wall at SW. A structure (KE104A001029-) lies 3m to the S. (pers. comm. E. Bourke).
KE104A001012-	Cross	424556	560659	This damaged stone cross (L 0.21m; Wth 0.11m; T 0.03m) <sup>14</sup> was found in an enclosure (KE104A001013-) on the South Peak of Sceilg Mhichíl (Horn <i>et al.</i> ,

<sup>14</sup> In the following descriptions the following abbreviations have been used throughout: Height (H); Length (L); Width (W) and Thickness (T).



SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				1990). It has a rounded head and one partially broken short arm with a rounded angle beneath. The other arm is missing but its rounded angle is intact. The lower end of the shaft is partially broken. It is now in the care of the OPW (Office of Public Works, National Monuments Depot, Killarney). (O'Sullivan and Sheehan, 1996, 278-90, no. 948 (24).)
KE104A001015-	Cross	424571	560690	Found on the outer terrace (KE104A001016-) on the steep rocky W-facing slopes of the South Peak of Sceilg Mhichíl (Horn et al. 1990, 62-3). This roughly shaped damaged stone cross (L 0.48m; Wth 0.25m; T 0.04m) has one arm and a rounded head. The shaft is intact, but one arm is largely gone. This cross is now in the care of the OPW (National Monuments Depot, Killarney).
KE104A001018-	Cross	424740	560625	Located close to the E flight of steps, this rough stone cross is cut from the natural rock. H: 1.03m. W: 0.47m. T: 0.12m.
KE104A001019-	Cross	424739	560626	Located close to the E flight of steps, this well-formed stone cross is cut from the natural rock. H: 0.93m. W: 0.3m. T: 0.13m.
KE104A001023-	Cross	424692	560646	This rough stone cross stands close to the poorly preserved wall on Christ's Valley (23). H: 0.45m. W: 0.28m. T: 0.06m.
KE104A001027-	Cross	424811	560812	Standing on the W side of the Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. This fragment of a stone cross (H 0.26m; Wth 0.28m; T 0.06m) has a flat head and two short arms.
KE104A001028-	Cross	424811	560812	Standing on the W side of the Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. This rough stone slab (H 0.45m; Wth 0.24m; T 0.04m) has a flat head and displays two notches on the left side and one notch on the right side.
KE104A001034-	Cross	424809	560794	Standing on the NE end of leacht (12), this roughly shaped slab features a rounded head. H: 0.58m. W: 0.3m. T: 0.03m.
KE104A001044-	Cross	424811	560812	Forming part of the SW side of the Monks' Graveyard (11), this stone cross features a linear Latin cross on its NE face. H: 0.92m. W: 0.52. T: 0.07m.
KE104A001045-	Cross	424811	560812	This stone cross stands close to the SW side of the Monks' Graveyard (11). On its SW face is a double-armed linear cross surmounted by a diagonal cross. H: 0.6m. W: 0.42m. T: 0.05m.
KE104A001048-	Cross	424811	560812	This rough stone cross stands on the Monks' Graveyard (11), close to its SW side. H: 0.37m. W: 0.44m. T: 0.1m.



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KE104A001052-	Cross	424805	560807	The head of this stone cross, which forms part of the SW side of the Monks' Graveyard (11), is broken. H: 0.83m. W: 0.34m. T: 0.09m.
KE104A001054-	Cross	424809	560794	This large stone cross with hollowed angles and a rounded head, sometimes referred to as the Priest's Stone, stands on the SW end of leacht (12). Occupying much of its SW face is an outline Latin cross. Its head is recessed slightly and the shaft expands in width to the base. Beneath each arm a diagonal cross is framed by a grooved rectangle, from the outer side of which a groove extends upwards to frame the head of the cross in double outline form. A diagonal line joins the upper angles of the head to the arms below. Faint traces of an encircled equal-armed cross are preserved on the head of the slab. H: 2.4m. W: 0.71m. T: 0.14m.
KE104A001056-	Cross	424780	560783	This upright slab, possibly a very rough stone cross, is located just above the opening to the souterrain (19). H: 0.77m. W: 0.36m. T: 0.13m.
KE104A001057-	Cross	424811	560812	This roughly shaped stone cross stands close to the SW side of the Monks' Graveyard (11). Its arms are somewhat indistinct, but feature hollowed lower angles. H: 0.65m. W: 0.3m. T: 0.08m.
KE104A001060-	Cross	424808	560803	This large stone cross, with hollowed angles and slightly projecting arms, stands on leacht (13). Almost the entire length of its W face is occupied by an outline Latin cross, the open-ended arms of which extend to the sides of the stone. A series of diminishing L-shaped grooves occupy the spaces between the arms of the cross and the upper sides and top of the slab, while beneath each arm is a diagonal cross framed by a grooved rectangle. Extending down from the inner end of each rectangle is a long linear groove; that at N turns outwards sharply to form an angular volute. Beneath both examples, on the arms of the slab, are traces of grooved rectangles. H: 1.47m. W: 0.57m. T: 0.06m.
KE104A001064-	Cross	424811	560812	This stone cross stands close to the SW side of the Monks' Graveyard (11). One arm is rounded, while the second is angular. H: 0.73m. W: 0.58m. T: 0.05m.
KE104A001065-	Cross	424811	560812	This stone cross stands close to the SW side of the Monks' Graveyard (11). Two of the angles of its rudimentary arms are slightly hollowed. H: 0.66m. W: 0.34m. T: 0.04m.
KE104A001067-	Cross	424811	560812	This stone cross, from which one arm has broken off, stands close to the SW side of the Monks' Graveyard (11). H: 0.55m. W: 0.36m. T: 0.05m.

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KE104A001068-	Cross	424811	560812	This roughly cross-shaped slab forms part of the SW side of the Monks' Graveyard (11). H: 0.46m. W: 0.4m. T: 0.03m.
KE104A001069-	Cross	424811	560812	This small, poorly preserved stone cross stands on the Monks' Graveyard (11). H: 0.26m. W: 0.22m. T: 0.03m.
KE104A001070-	Cross	424811	560812	This stone cross forms part of the SW side of the Monks' Graveyard (11). On the exposed face is an encircled linear Latin cross. H: 0.56m. W: 0.47m. T: 0.08m.
KE104A001071-	Cross	424811	560812	This round-headed slab stands on the Monks' Graveyard (11). On one face is a groove which may represent the transom of a cross. The vertical element is unclear. H: 0.36m. W: 0.2m. T: 0.05m.
KE104A001072-	Cross	424811	560812	This rough slab, which narrows in width towards its base, forms part of the SW side of the Monks' Graveyard (11). H: 0.63m. W: 0.3m. T: 0.06m.
KE104A001073-	Cross	424811	560812	This rough stone cross, of which one arm is missing, forms part of the SW side of the Monks' Graveyard (11). H: 0.99m. W: 0.35m. T: 0.08m.
KE104A001074-	Cross	424811	560812	This rough stone cross, with barely projecting arms and hollowed angles, forms part of the SE side of the Monks' Graveyard (11). H: 0.43m. W: 0.31m. T: 0.08m.
KE104A001075-	Cross	424813	560807	This, the upper portion of a stone cross, lies on the SE end of the Monks' Graveyard (11). L: 0.43m. W: 0.35m. T: 0.05m.
KE104A001076-	Cross	424811	560812	This stone cross, featuring short arms and hollowed angles, stands on the Monks' Graveyard (11). H: 0.68m. W: 0.4m. T: 0.04m.
KE104A001077-	Cross	424811	560812	This tall stone cross features a rounded head and is the largest example on the Monks' Graveyard (KE104A-001035-). H: 1m. W: 0.52m. T: 0.09m.
KE104A001078-	Cross	424811	560812	This rough slab stands on the Monks' Graveyard (KE104A-001035-) and may be a defaced stone cross. H: 0.45m. W: 0.2m. T: 0.06m.
KE104A001079-	Cross	424811	560812	This poorly preserved stone cross stands on the Monks' Graveyard (11). Its upper portion has broken off. H: 0.22m. W: 0.35m. T: 0.05m.
KE104A001080-	Cross	424811	560812	The head and one arm of this stone cross have broken off. The lower angle of the remaining arm is hollowed, and there are slight traces of a linear Latin cross on its W face. The cross stands on the NE side of the Monks' Graveyard (KE104A-001035-). H: 0.3m. W: 0.26m. T: 0.05m.

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KE104A001081-	Cross	424811	560812	Standing at the centre of the Monks' Graveyard (KE104A-001035-), this stone cross features a straight top and hollowed angles. H: 0.37m. W: 0.46m. T: 0.04m.
KE104A001082-	Cross	424811	560812	This small, rough stone cross stands on the Monks' Graveyard (KE104A-001035-). A portion of its lower shaft has broken off. H: 0.3m. W: 0.31m. T: 0.05m.
KE104A001083-	Cross	424811	560812	The shaft of this tall stone cross tapers inwards as it rises. A portion of the head has broken off. It stands on the Monks' Graveyard (KE104A-001035-). H: 0.7m. W: 0.27m. T: 0.09m.
KE104A001084-	Cross	424811	560812	This small stone cross stands towards the centre of the Monks' Graveyard (KE104A-001035-). H: 0.34m. W: 0.31m. T: 0.04m.
KE104A001085-	Cross	424811	560812	Upright on the Monks' Graveyard (KE104A-001035-), this stone cross features barely projecting arms and hollowed angles. H: 0.48m. W: 0.19m. T: 0.05m.
KE104A001087-	Cross	424811	560812	Standing close to the NE edge of the Monks' Graveyard (KE104A-001035-), this stone cross features short arms and a straight head. H: 0.47m. H: 0.25m. T: 0.03m.
KE104A001088-	Cross	424811	560812	This rough slab stands on the Monks' Graveyard (KE104A-001035-). H: 0.33m. W: 0.25m. T: 0.03m.
KE104A001089-	Cross	424811	560812	This rough slab stands on the Monks' Graveyard (KE104A-001035-) and may be a defaced stone cross. H: 0.6m. W: 0.24m. T: 0.07m.
KE104A001090-	Cross	424802	560840	This large stone cross lies close to the oratory (4) on the upper terrace. One of its rather short arms is broken off. L: 1.3m. W: 0.34m. T: 0.08m.
KE104A001091-	Cross	424802	560840	This small, rough stone cross, with rudimentary arms, is located close to (71) on the upper terrace. L: 0.48m. W: 0.19m. T: 0.05m.
KE104A001092-	Cross	424802	560840	The shaft of this small stone cross is broken off just below its well-defined short arms. It is located close to (71) on the upper terrace. L: 0.33m. W: 0.27m. T: 0.04m.
KE104A001093-	Cross	424793	560790	This thick slab features a broad flat head. It is located close to the entrance to the main terrace. L: 0.44m. W: 0.16m. T: 0.12m.
KE104A001094-	Cross	424793	560790	The shaft is broken off this small, rough stone cross. L: 0.4m. W: 0.34m. T: 0.04m.
KE104A001095-	Cross	424793	560790	This rough stone cross features a tall head and a wide lower shaft. It lies on the surface of leacht (14). L: 0.6m. W: 0.45m. T: 0.05m.

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KE104A001096-	Cross	424793	560790	This rough stone cross features one rudimentary area and a flat head. It stands on leacht (14). H: 0.58m. W: 0.31m. T: 0.04m.
KE104A001097-	Cross	424793	560790	This stone cross stands on leacht (14) and features slightly projecting arms and a flat head. H: 0.53m. W: 0.27m. T: 0.04m.
KE104A001099-	Cross	424803	560768	This large stone cross, with roughly hollowed lower angles, lies in two pieces on the N wall of hut (21). It was depicted standing close to the hut in a nineteenth century engraving (Dunraven, 1875). L: 1.82m. W: 0.73m. T: 0.16m.
KE104A001100-	Cross	424813	560807	Lying on a wall to the S of the Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. This rough stone (L: 0.35m; W: 0.28m; T: 0.04m) features a portion of a rounded head and one arm of a cross. The junction between the head and arm is notched.
KE104A001108-	Cross	424811	560812	This poorly preserved stone cross, with one broken arm, forms part of the SW side of the Monks' Graveyard (11). H: 0.64m. W: 0.28m. T: 0.04m.
KE104A001112-	Cross	424811	560812	Lying flat on the S end of the Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. An irregularly-shaped stone (L: 0.43m; W: 0.19m; T: 0.21m), which narrows towards its base, has an equal-armed cross pocked on the wider end.
KE104A001113-	Cross	424813	560807	Lying on the wall to the S of the Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. This rough stone cross (L: 0.96m; W: 0.56m; T: 0.09m) has a rounded slightly expanded head. One of its arms is damaged.
KE104A001114-	Cross	424813	560807	Lying on the wall to S of the of Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. This is a rough fragment (L: 0.5m; W: 0.56m; T: 0.1m) of the head of a cross broken at the junction between the shaft and head. It has one short arm, the other arm having been broken off.
KE104A001115-	Cross	424813	560807	Lying on the wall to the S of the Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. This rough stone cross (L: 0.85m; W: 0.42m; T: 0.06m) has one arm broken off and a rudimentary notch under the other arm. A fault line, with some quartz inclusions, runs vertically through the stone.
KE104A001116-	Cross	424813	560807	Lying on the wall to the S of the Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. This rough stone cross (L: 0.61m; W: 0.26m; T: 0.05m), which has a partially rounded head, displays two rough notches 0.24m below the head.
KE104A001118-	Cross	424811	560812	Standing on the E side of the Monks' Graveyard (KE104A001046-) on Sceilg Mhichíl. This stone cross (H: 1.2m; W: 0.35m; T: 0.09m) has a rectangular

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				shaft, a flat head and short squared arms. Between the arms of the cross is an incised Latin cross.
KE104A001126-	Cross	424808	560814	This stone cross (L: 0.47m; W: 0.13m; T: 0.03m) was found in the main ecclesiastical complex on the NE peak of Sceilg Mhichíl and is now in the care of the OPW (Office of Public Works, National Monuments Depot, Killarney). It displays one rectangular arm and part of the head; the shaft is intact and tapers slightly towards the base.
KE104A001139-	Cross	424808	560814	This small stone cross (L: 0.19m; W: 0.1m; T: 0.02m) was found in the main ecclesiastical complex on the NE peak of Sceilg Mhichíl and is now in the care of the OPW (National Monuments Depot, Killarney). The shaft is intact and both arms display rounded angles. Part of the head is missing.
KE104A001142-	Cross	424808	560814	This stone cross (L: 0.2m; W: 0.09m; T: 0.03m) was found in the main ecclesiastical complex on the NE peak of Sceilg Mhichíl and is now in the care of the OPW (National Monuments Depot, Killarney). It displays a head and two short rounded arms, one higher than the other, and each having slightly rounded angles underneath. The shaft is missing.
KE104A001143-	Cross	424808	560814	This stone cross (L: 0.21m; W: 0.12m; T: 0.03m) was found in the main ecclesiastical complex on the NE peak of Sceilg Mhichíl and is now in the care of the OPW (National Monuments Depot, Killarney). It has two short arms, each with a slightly rounded angle underneath. The roughly rectangular shaft is intact and the head is missing.
KE104A001145-	Cross	424808	560814	This stone cross (L: 0.48m; W: 0.25m; T: 0.05m) was found in the main ecclesiastical complex on the NE peak of Sceilg Mhichíl and is now in the care of the OPW (National Monuments Depot, Killarney). It has two short rounded arms, each with a rounded angle underneath. The shaft narrows towards the lower end where part of it is missing. The head is also missing.
KE104A001147-	Cross	424808	560814	This small stone cross (L: 0.16m; W: 0.15m; T: 0.03m) was found in the main ecclesiastical complex on the NE peak of Sceilg Mhichíl and is now in the care of the OPW (National Monuments Depot, Killarney). It displays two short arms, one of which is partially damaged. The head is rounded and the shaft is missing.
KE104A001152-	Cross	424808	560814	This fragment of a stone cross (L: 0.38m; W: 0.28m; T: 0.03m) was found in the main ecclesiastical complex on the NE peak of Sceilg Mhichíl and is now in the care of the OPW (National Monuments Depot, Killarney). It consists of a rounded head and one arm

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				with a rounded lower angle. The second arm and most of the shaft are missing.
KE104A001025-	Cross-inscribed stone	424673	560638	In a natural cave on the SW side of Christ's Valley (KE104A001104-) on Sceilg Mhichíl. A Latin cross (H: 0.24m; W: 0.19m), with 'INRI' scratched above it, is carved on the smooth vertical face of a S-facing rock in the cave. (O'Sullivan and Sheehan 1996, 278-90, no. 948 (23).)
KE104A001117-	Cross-inscribed stone	424800	560798	On the upper face of a lintel (L: 1.4m; W: 0.73m; T: 0.7m) over the doorway in the NW wall of St Michael's Church (KE104A001042-) on Sceilg Mhichíl. The cross (L: 0.17m; W: 0.15m), with three bar terminals and one expanded terminal, is carved on the centre of the lintel.
KE104A001004-	Cross-slab	424606	560677	This was described by Dunraven as standing near the oratory (1875, 34). Now broken, its lower portion lay recumbent midway between the oratory and the leacht prior to being taken into OPW care. It measures 0.68m x 0.43m x 0.15m thick, and features the lower section of an outline ringed Latin cross with a wide open-ended shaft. This slab has been identified as Valentia slate (information: G. Rourke).
KE104A001021-	Cross-slab	424709	560685	Located close to the flight of steps that ascends from Christ's Valley to the ecclesiastical complex on the NE peak, this rough slab tapers from a broad base to a rounded head. Its SW face features a roughly grooved Latin cross with bulbous terminals. The slab inclines markedly to SW. H: 1.08m. W: 0.56m. T: 0.1m.
KE104A001024-	Cross-slab	424672	560632	This rough slab stands close to the natural shelter on Christ's Valley (23). On its S face is a roughly grooved Latin cross. L: 0.95m. W: 0.36m. T: 0.11m.
KE104A001041-	Cross-slab	424808	560831	This cross-inscribed slab tapers regularly in width towards its base from a broad, flat top. It features a circular perforation near the top, from which three radial grooves extend. The central groove is the most pronounced and extends down to the upper terminal of a linear Latin cross. The shaft of the cross features bulbous terminals and the crossing of its arms is ringed by a groove. The slab, which may be a sundial, now serves as the inner lintel of the oratory on the upper terrace (4). Little of its decoration is visible in this position. L: 1.6m. W: 0.25m.
KE104A001049-	Cross-slab	424811	560812	This slab, of rectangular elevation, stands close to the SW side of the Monks' Graveyard (11) and is cross-inscribed on both faces. On the NE face is an encircled outline cross, beneath which is a horizontally disposed, elongated, outline rectangle. The field of vertical grooves on this face of the slab are natural (information: G. Rourke). On the



SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				opposite face is a linear Latin cross. H: 0.74m. W: 0.34m. T: 0.08m.
KE104A001061-	Cross-slab	424808	560803	Standing at the SW end of leacht (13), the E face of this round-headed slab features an encircled linear cross, the lower shaft of which extends beyond the circle where it is cut by two horizontal grooves. The upper groove is disposed just beneath the circle and extends to both edges of the slab. H: 0.79m. W: 0.29m. T: 0.04m.
KE104A001086-	Cross-slab	424811	560812	Standing close to the NE edge of the Monks' Graveyard (KE104A-001035-), this slab is of regular rectangular elevation. It features an encircled cross, the lower shaft of which extends outside the circle, on its W face. H: 0.45m. W: 0.29m. T: 0.07m.
KE104A001098-	Cross-slab	424780	560783	De Paor noted a slab standing a short distance SW of (80) (De Paor, 1955)
KE104A001101-	Cross-slab	424794	560783	This tall, thick slab stands outside the lintelled entrance to the main terrace and features a tall, Latin, linear cross on its SW face. The base of its shaft is enclosed within a rough ovoid. H: 1m. W: 0.28m. T: 0.16m.
KE104A001109-	Cross-slab	424941	560846	This 'small cross slab' was found under the threshold of a building (KE104A001031-) during archaeological excavations on Sceilg Mhichíl in 2003. This is now in the care of the OPW (National Monuments Depot, Killarney).
KE104A001136-	Cross-slab	424808	560814	This cross-slab (L: 0.53m; W: 0.24m; T: 0.06m) was found in the main ecclesiastical complex on the NE peak of Sceilg Mhichíl and is now in the care of the OPW (National Monuments Depot, Killarney). The slab, which tapers towards one side of its lower end, features an equal armed Maltese cross (0.12m x 0.12m) defined by a pockmarked groove (W: 0.01m).
KE104A001013-	Enclosure	424556	560659	Located on a level rock spur, W of the route to the summit from the Needles' Eye, this U-shaped enclosure or small hut, measures .3m NE-SW by 1.2m NW-SE internally. Walls are max. 0.5m wide and preserved to 0.3m high. A small stone cross was found in the rubble infilling of this feature, measuring 0.21m by 0.13m. (See O'Sullivan and Sheehan 1996, 278-90, no. 948, (24).)
KE104A001030-	Enclosure	424739	560626	On a platform (KE104A001062-) to the NE of the S steps on Sceilg Mhichíl. This possible subrectangular enclosure is indicated by the remains of a partially collapsed drystone wall (L: 6.3m; T: 0.8m; H: 0.55m) NE-SW, with the short return of a second wall (L: c. 3m) extending from its SW end in a WNW direction. The NE end of the longer wall ends in a clean break but continues at a much lower level disappearing



SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				into rubble suggesting a possible entrance here. The interior is obscured by rubble and overgrowth.
KE104A001026-	Hut site	424803	560768	Located below revetment of lower terrace, to SE of the E flight of steps. Subrectangular in plan, measuring internally 5m NE-SW by 2.5m NW-SE. Entrance at E, 0.85m wide, and internal wall niche. Stone cross on N wall (82). Hut and cross drawn by Dunraven in nineteenth century. (See O'Sullivan and Sheehan (1996, 278-90, no. 948, (21).)
KE104A001043-	Inscribed stone	424811	560812	This slab, of irregular elevation, forms part of the SW side of the Monks' Graveyard (11). One face features a radial arrangement of incised linear grooves and small, natural circular depressions. The former has led to the slab being interpreted as a sundial, but they may be tool-sharpening marks. H: 0.98m. W: 0.49m. T: 0.06m.
KE104A001051-	Latrine	424804	560834	Located at the N edge of a possible leacht on the upper terrace, the drystone foundations of a sub-circular structure, measure 0.9m by 0.8m internally. An entrance gap faces onto the terrace. A vertically placed slab crosses the interior of the structure, forming the top of a shaft which debouches into a gully below. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (16).).
KE104A001003-	Leacht	424606	560677	Leacht: Located close to the SW end of the terrace are the poorly preserved remains of this rectangular drystone structure. It measures 1.6m NE-SW x 1.1m NW-SW and is up to 0.45m high.
KE104A001046-	Leacht	424811	560812	In 2001 limited archaeological excavation of the leacht, which is traditionally known as the 'Monks' Graveyard', involved the removal of a 19th-century and later drystone revetment. This work revealed that the Monks' Graveyard consisted of two conjoined leachta. This, the northernmost leacht, was revetted with stones set on edge. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (11).) KE104A001158- below is the conjoined leacht.
KE104A001047-	Leacht	424808	560803	Wedge-shaped platform abutting SW wall of St Michael's Church. Measuring 5m NE-SW by 3.4m and 0.60m high. Surmounted by large cross, and cross inscribed stone at W end. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (13).)
KE104A001050-	Leacht	424805	560829	Drystone rectangular structure, measuring 1.65m by 0.85m by 0.75m high. Revealed during excavations by Lynch. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (15).)
KE104A001053-	Leacht	424805	560807	Rectangular in plan, measuring 3.65m by 0.6m high. Constructed with horizontally laid slabs. Upper surface divided into two rectangular areas by quartz

SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				covered coping slabs, associated with cross slab and inscribed stone and two Latin crosses pocked marked in paving slabs adjacent. It was renovated in the nineteenth century. Stratigraphically earlier than larger oratory KE104A001039-. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (12).)
KE104A001158-	Leacht	424811	560812	Traditionally known as the Monks' Graveyard, this structure is rectangular in plan, measuring 6.8m NW-SW and 2.7m NE-SW and is a max. height of 0.8m. Close to the edge of its upper surface and facing it are a number of stone crosses and cross-inscribed slabs, some of which have been repositioned over time. (See O'Sullivan and Sheehan (1996, 278-90, no. 948 (11).) In 2001 limited archaeological excavation of the leacht, involved the removal of nineteenth-century and later drystone revetment. This work revealed that it was actually two conjoined leachta. This is the southernmost leacht. KE104A001046- is the conjoined leacht.
KE104A001160-	Metalworking site	424783	560774	O'Kelly (1973, 3) recorded that iron-working waste was found on the surface of the Lower Monks' Garden in the 1960s. This clearly relates to nineteenth-century workings by the lighthouse builders (pers. comm. G. Rourke). (See O'Sullivan and Sheehan 1996, 286, no. 948, (20).)
KE104A001020-	Platform	424814	560799	On top of a small terrace (KE104A001110-). The remains of a drystone-walled platform (L: 2.4m; W: 1.7m; H: c. 1.2m), set against bedrock at the external base of the SE revetment wall of the main terrace (KE104A001105-), were revealed during restoration works (pers. comm. E. Bourke).
KE104A001062-	Platform	424739	560626	On a steep SE-facing rocky slope to the E of the S steps (KE104A001017-) on Sceilg Mhichíl. An arc of a platform (L: c. 17m NE-W) is defined by the remains of a well-constructed drystone wall (H c. 1.5m) sloping inwards as it rises. The wall survives best at S; both ends of the arc are totally collapsed and obscured by overgrowth. An enclosure (KE104A001030-) stands on top of the platform.
KE104A001009-	Road - road/trackway	424603	560697	Traditionally known as the Spit, this comprises a short narrow steep sided ridge running to E from just below the summit of the S peak. It is 3m long and varies in width, 0.2m minimum. A broad upright slab stood at the end of this feature (KE104A001008-). (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (33).) This was used by pilgrims to gain access to the standing stone (KE104A001008-) (Smith 1756, 115).
KE104A001014-	Road - road/trackway	424577	560680	On the route from the oratory terrace (KE104A001011-) to the summit of the South Peak of Sceilg Mhichíl. The remains of a drystone masonry

SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				trackway (L: 9m; W: 2m), built on a steep sloping rock-face, facilitates the difficult ascent to the summit. (Horn et al. 1990, 51)
KE104A001002-	Shrine	424606	560677	Three upright slabs occur on the NE extension to the terrace. Two of these, each 0.35m high, stand at right angles to each other, while the third, located 0.45m to SW, is 0.25m high. It has been suggested that they are the remains of a reliquary shrine (Horn et al, 50).
KE104A001008-	Standing stone	424603	560697	Located at the end of The Spit; KE104A001009-, a broad, upright slab, c. 1m high, formerly stood at its E end; this fell in the late 1970s.
KE104A001007-	Steps	424568	560657	On the pathway from Christ's Valley to the South Peak of Sceilg Mhichíl. A steep cleft contains the remains of masonry steps leading to a ledge that spirals around the W face of the peak. Steps are cut into the sharply rising rock-face, after which the remains of the paved way lead to the Needle's Eye, a narrow 7m high shaft in the rock. Ascent through the shaft is aided by chiselled toeholds and handgrips (Horn et al. 1990, 26-30).
KE104A001017-	Steps	424701	560676	On the steep S-facing rocky slopes of Sceilg Mhichíl. The S steps (W: 1–1.5m; H: 0.1–0.2m) are formed by stone flags set on a foundation of coursed stone and wind upwards to the NW from the south landing to Christ's Valley. Here they join with steps (KE104A001111-) from the north landing and continue to the NE to merge with the E steps (KE104A001022-) outside the lintelled entrance to the main ecclesiastical complex. The lighthouse road, which was constructed near the shoreline in the 1820s, cuts across this flight of steps.
KE104A001022-	Steps	424941	560846	On the steep E-facing slope leading upwards to the W from Blind Man's Cove on Sceilg Mhichíl. During excavation and conservation work in 2001 over 400 steps (W: 1–1.5m; H: 0.1–0.2m) were uncovered and damaged steps were repaired. The steps were constructed from stone flags set on a foundation of coursed stone. Known as the 'East Steps', they lead up to the main ecclesiastical complex through a lintelled passage into the Lower Monks' Garden (KE104A001102-) and thence wind upwards leading into the monastic enclosure. The lower section of the steps was destroyed during the construction of the lighthouse road in the 1820s; the remains of a building (KE104A001031-) were uncovered in 2002 at the lower end of the steps.
KE104A001111-	Steps	424681	560692	On the steep NW-facing slopes, overlooking Blue Cove, on Sceilg Mhichíl. The N steps, initially rock-cut are formed by stone flags set on a foundation of

SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				coursed stones (W: 1–1.5m; H: 0.1–0.2m). These lead upwards from the N landing to NNE and then to S leading up to Christ's Valley/Saddle.
KE104A001029-	Structure	424821	560792	In the NE sector of a terrace (KE104A001102-) on Sceilg Mhichíl. A rectangular structure, indicated by the linear remains of a drystone wall (L: c. 4m NE-SW; T: c. 0.6m; H: c. 1m) with a short return to the SE at both ends, was revealed during excavation and conservation repairs. A hut site (KE104A001066-) is c. 3m to the N (pers. comm. E. Bourke).
KE104A001103-	Structure	424788	560789	Following excavations in this area it is considered that this is a structure dating from the time of the occupation of the island by lighthouse personnel in the early nineteenth century (pers. comm. G. Rourke). It was described in 1996 as a leacht; subrectangular in plan 2.5m NW-SW by 1.9m NE-SW, sides were faced with horizontally laid slabs. Three stone crosses were on its upper surface. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (14).)
KE104A001010-	Terrace	424586	560667	Located at the top of the shaft of a narrow rock cut chimney known as 'Needle's Eye' in Christ's Valley/Saddle. Described in 1996 as 2 platforms and a U-shaped enclosure, this terrace is one of a series facilitating staging points in ascent to the South Peak. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (25).)
KE104A001011-	Terrace	424606	560677	The ledge on which this is built is located above the previous terrace and is disposed at right angles to it. The principal area, which may have been paved, measures 11m NE-SW by a maximum of 6.7m NW-SE; its NW and SW sides are formed by steep rock-faces. On it stand the oratory and other structures (27-31) noted. It was retained by a drystone wall at S which may have been up to 2.5m high originally at its E angle; only slight traces of it remain. A small extension to the terrace was constructed at NE. Triangular in plan, it measures 7m x 3m and also retains traces of its drystone revetment wall. On it are the remains of a possible shrine (31). It is likely that this terrace is the feature on the S peak marked 'Burial Ground' on the OS maps.
KE104A001016-	Terrace	424571	560690	This terrace, the most exposed and difficult to reach on the South Peak, is located on its W side. It consists of a 17m long stretch of drystone walling built along the outer edges of three irregular ledges whose elevations differ by up to 4m. The wall, carefully constructed with smooth faces, varies from 0.6m to 0.8m in thickness. Its external face survives to a height of 3.2m at one point. Horn et al have suggested that a shelter may have existed at its SW angle, evidenced by a small area of rough paving

SMR No.	Class (type)	ITM E	ITM N	Summary description <sup>13</sup>
				(1990, 60-1). At the N end of the terrace a roughly shaped stone, 0.48m x 0.25m, described as a broken stone cross, was discovered.
KE104A001102-	Terrace	424783	560774	This is known as the Lower Monks' Garden. Prior to excavation it consisted of two abutting terraces separated by a 19th century wall. The NE terrace is noted in O'Sullivan and Sheehan as a separate 'small poorly preserved terrace' (1996, 286 (20)). Excavation and conservation work in this area have demonstrated that this NE terrace was not separate but originally formed part of the Lower Monks' Garden. They revealed traces of a short NESW stretch of stepping stones, as well as the remains of a hut site (KE104A001066-), an enclosure (KE104A001029-) and a smaller terrace (KE104A001110-) with a platform (KE104A001020-) on top (pers. comm. G. Rourke, E. Bourke;). For a descriptive account of the SW element of the Lower Monks' Garden see O'Sullivan and Sheehan (1996, 278-90, no. 948 (20)).
KE104A001105-	Terrace	424808	560814	This is the main terrace accessed via the E steps and contains some of the main ecclesiastical remains on the NE peak of the island. It is retained by a drystone revetment wall. It is connected to the upper terrace KE104A001161- via a narrow-stepped pathway, or by a flight of steps. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (1, main terrace).)
KE104A001110-	Terrace	424718	560652	Along the NW side of the Lower Monks' Garden (KE104A001102-), just below the entrance into the SE corner of the main terrace (KE104A001105-) on Sceilg Mhichíl. This smaller terrace (L: 12m NE-SW; W: 2.25m NW-SE; H: c. 2m) was fully revealed during conservation and repair work. It stands on bedrock and is revetted by a drystone wall. A platform (KE104A001020-) stands on top. (pers. comm. E. Bourke).
KE104A001161-	Terrace	424808	560814	This is the upper terrace accessed by the main terrace KE104A001105-. It contains features (2; 3; 4; 15; 16). St Michael's Church abuts a revetting wall and contains a number of clochans, leachts and cisterns. (See O'Sullivan and Sheehan 1996, 278-90, no. 948 (1, upper terrace).)
KE104A001163-	Terrace	424758	560774	The Upper Monks' Garden (c. 70m NE-SW; c. 8m NW-SE) is bounded at NW by the revetment wall of the main terrace (KE104A001105-), which extends in a SW direction. At SE it is bounded by a substantial retaining wall which curves around to enclose the SW end of the terrace where it joins the NW revetment wall. At NE a short retaining wall separates this terrace from the Lower Monks' Garden (KE104A001102-).

### B.3.1.1 Historical Overview

Historical records which refer to the island have been outlined in a number of previous publications (Bourke, Hayden and Lynch, 2011; O’Sullivan and Sheehan, 1996). Table B-3 provides an overview of that history and has been compiled from those sources with dates provided where known. It is noted that despite the fact that the site is now internationally known, its early history remains relatively sparse. It is not clear when the ecclesiastical settlement was first established on the island. It is possible that there was a religious foundation as early as the sixth century but this cannot be verified, and most scholars would agree that there was likely a religious community on the island sometime before 700 AD. The founding of a religious community on the island is attributed to Saint Fíonán, a local saint of West Kerry, though this is by no means clear (Ó Riain, 2011).

**Table B-8 Outline of Known Historical Records mentioning Sceilg Mhíchíl.**

Century	Date	Event
-	mythology	Burial place of Ir, son of Milesius, who drowned during the landing of the Milesians.
Fifth?		Text dating to eighth or ninth century refers to conflict between the kings of West Munster and of Cashel. Duagh, King of West Munster is said to have fled to ‘Sellecc’.
Sixth?		Founding of a religious community by Saint Fíonán.
Eighth	c. 700	Reference to the Skelligs in the text <i>Conall Corc and Corco Luigde</i> .
Ninth	824	The Vikings raid the community on the island. Etgal was carried off by the heathens (Vikings?) and died of hunger, Annals of Ulster and Annals of Inisfallen.
		Possible second undated raid by Vikings in text <i>Cogad Gáedel re Gallaib</i> (sometime before 887?)
	828?	The death of Suibhni, a monk of Skellig is recorded in the Martyrology of Tallaght. This event is recorded in later texts of the twelfth century which appear to be copies of the original from Tallaght.
	882	Repose of Flann son of Cellach, abbot of Scelec. Annals of Inishfallen.
Tenth	900-950?	Dedication to St Michael may have occurred as early as this.
	950	Mentioned in the Annals of Inishfallen and Annals of the Four Masters Blathmhac of Sgeillic died.
Eleventh	1044	Annals of the Four Masters (itself written in seventeenth century) records the dedication to St Michael in Aedh of Sgelic-Mhíchíl. The entry in the Annals of Inishfallen only refers to Sceilic. Aed Sceilic, the noble priest, the celibate, and the chief of the Gaedil in piety, rested in Christ.
Twelfth		Skelligs referred to in text <i>Caithréim Cellacháin Chaisil</i> . Reform of the Church in Ireland.
		Mention of the Skelligs by Gerald of Wales? He refers to a miracle (a hollow stone situated outside a church miraculously produces wine for the celebration of the Eucharist each day), occurring ‘in the south of Munster near Cork’ on a ‘certain island which has within it a church of Saint Michael, revered for its true holiness since ancient times’



Century	Date	Event
Thirteenth	1210?	Ballinskelligs Priory established as mainland religious house for island community and over time the island may have become a seasonal and pilgrimage place.
		Reference in <i>Libellus de fundacione ecclesie Consecrati Petri</i> , commonly referred to as the <i>Regensburger Schottenlegende</i> . This is a mid-thirteenth-century Latin text. This may have been written by an Irish monk from Kerry, which provides an account of the career of St Patrick which includes a version of Patrick's expulsion of the demons from Ireland, featuring an intervention by St Michael that occurs on a rock off the coast of Ireland. This rock (according to the text) is known as 'Silex Sancti Michaelis' as a result. This text may also be showing that by this time Skellig Michael was a place of pilgrimage.
Fourteenth	1302-4	Papal taxation lists mention the Skelligs.
Sixteenth	1578	Dissolution of the monastery and granted to the Butlers of Waterville. Island continues as a place of pilgrimage.
Seventeenth		Account in <i>Praesulibus Hiberniae</i> that Skelligs was still a place of pilgrimage.
Eighteenth	1756	Charles Smith writes that the pilgrimage is difficult and dangerous and suggests that the pilgrimage to the island is on the wane.
Nineteenth	1820s	Corporation for Preserving and Improving the Port of Dublin (the predecessor of the Commissioners of Irish Lights) purchased Skellig Michael by compulsory purchase order from John Butler of Waterville for two lighthouses to be positioned on the Atlantic side of the island.
	1820-1826	Lighthouse personnel and builders use early medieval structures, amending several for their own purposes.
	1826	Lighthouses and associated domestic accommodation completed.
	1880	Office of Public Works takes ecclesiastical remains into its guardianship.
Twentieth	1989	The state purchases island from the Commissioners of Irish Lights, with the exception of the lower lighthouse and helipad. These were later leased by the state. The Office of Public Works commences a long period of conservation events, which continues today.
	1996	UNESCO inscribes the island of Sceilg Mhichíl onto the World Heritage List in recognition of its Outstanding Universal Value.
	2008	The first draft Management Plan for the island is produced.



### B.3.2 Archaeological Investigations

The excavations carried out on Sceilg Mhichíl from 1986 to 2010 have been previously summarised and provided in detail (Bourke, Hayden and Lynch, 2011), and so have not been repeated here. Table B-4 summarises archaeological investigations carried out on the island from 2011 to 2020 inclusive. During that period two licenced archaeological investigations took place.

**Table B-9 Licenced Archaeological Investigations carried out on Sceilg Mhichíl 2011 to present.**

Year	Licence Nos	Director	Details <sup>15</sup>
2016	E4663; C418	Alan Hayden	A small excavation was undertaken on the side of the roadway at the east side of Cross Cove to facilitate the rebuilding of a section of the parapet wall of the early nineteenth-century Lighthouse Roadway damaged by a rockfall. Nothing of archaeological interest was encountered.
2011	E4337; C475; R272	Martin Reid	<p>Excavations took place in advance of conservation/reconstruction works by the Office of Public Works (OPW) at the site of a partially collapsed lighthouse platform. The site is located on the south side of Skellig Michael, adjacent to the south steps and on the opposite side of the steps from the feature known as 'The Wailing Woman' and marked 'yellow cross' on the 1st-edition OS map.</p> <p>The aims of the excavation and works were to make safe the platform or terrace and to establish the nature and significance of the archaeological remains. These aims were to be achieved in spite of restrictions due to the presence of protected nesting birds (puffins and storm petrels). The work proceeded sensitively and in consultation with staff from the OPW, BirdWatch Ireland and the National Parks and Wildlife Service (NPWS).</p> <p>The work uncovered evidence for two walls of a previously unknown building. The walls were internally plastered, and roof slates and mortar for holding the slates onto the eaves were found. Fragments of window glass and occasional red brick fragments were found. This building was built against a rock face that had been quarried out to give some shelter from the severe weather. Evidence for occupation included fragments of stoneware jars and 19th-century cups and plates, glass bottles and animal bones, including pig, sheep, bird and fish bones. The structure may have been a store for building materials, or a workshop associated with a working platform used during the construction of the south steps. Several new steps were also found leading from the exposed stone stairs down onto the terrace. Corroded iron nails and fragments of iron bars and other amorphous lumps of iron may be all that remains of the tools and implements used by the busy construction workers to quarry stone and shape it to make the stairways leading up to the earlier monastic site.</p> <p>The dangerous nature of this site was clearly demonstrated by the discovery that one large boulder had fallen and partially crushed one of the side walls of the terrace. No attempt had been made to remove the boulder from where it fell. It seems possible that the effect of the rockfall made the lighthouse men reconsider their use of this terrace, as the building was deliberately dismantled. Following demolition, some</p>

<sup>15</sup> Available from: <https://excavations.ie/>. Accessed 30 June 2020.

Year	Licence Nos	Director	Details <sup>15</sup>
			<p>stone was removed for use elsewhere and a limited clearance took place. Two new side terrace walls were built, reusing some of the stone from the demolished building. A plastic dinner tray, glass bottle fragments and a halfpenny of George V dated 1936 were among the finds recovered from this phase of use of the terrace. The age of the tourist had clearly arrived.</p> <p>The collapsed part of the front terrace wall was reconstructed, reusing the same stones that had subsided. When these works were finally completed (in 2012) it is intended that the terrace will provide a safe staging point for visitors to rest on their journey up the steps towards the monastery. It is hoped that the reinstatement of the terrace will improve the experience of visitors, especially those who are daunted by the full scale of the climb of 620 steps or more to the monastery.</p>
2018-2020	E4885; C819	Alan Hayden	<p>Work started on the Upper Lighthouse road which involved removing material that had fallen from above the road and wall repairs where this material had breached the sea wall. This work was carried out under archaeological supervision and revealed that the majority of the original road surface, drains etc. had survived intact. The road had not been fully maintained since the 1870's, but some mid-20<sup>th</sup> century interventions to install cabling were revealed, work will continue into the 2021 season.</p>

### B.3.3 Artefacts

Excepting those artefacts discovered during archaeological excavations and conservation works (Bourke et al 2011), a number of artefacts have been recorded. These include a thirteenth-century bronze crucifixion figure, that was found sometime before 1826 in the ecclesiastical complex on the northeast peak. In the 1820s a clay figure of the Virgin Mary was also recovered but is now lost—it is thought to have been of fifteenth or sixteenth century date (Ó Floinn, 1980).

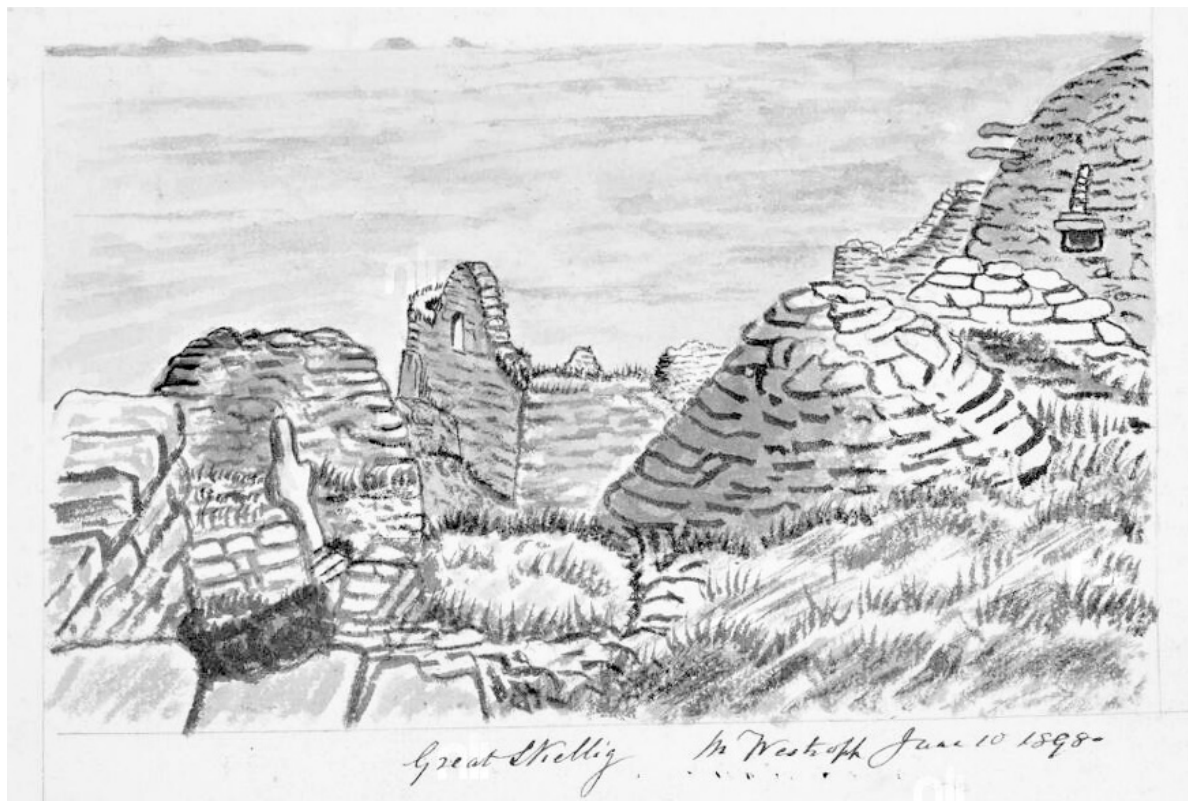
### B.3.4 Folklore and Early Imagery

Following a search of the online depository of the National Folklore Collection,<sup>16</sup> 23 results were returned from the schools' collection, which recount several stories of the island in relation to poets, marriage customs and Lent, particularly Shrove Tuesday (the day before Lent begins on Ash Wednesday). The National Library of Ireland has 42 digitised images of the Skellig Michael clustered around the 1890s period, along with some that have not been digitised.<sup>17</sup> These include line drawings (Figure B-5) and early photographs of feature on the island (Figure B-6).

<sup>16</sup> <https://www.duchas.ie/en/src?q=skelligs&t=CbesTranscript&ct=CI>. Accessed 18 August 2020.

<sup>17</sup> <http://catalogue.nli.ie/Search/Results?lookfor=Skellig+Michael&type=AllFields&submit=Find&filter%5B%5D=digitised%3A%22Digitised%22>. Accessed 18 August 2020.

Figure B-6 An example of a nineteenth-century sketch (dated 1898) by W. Frazer held by the National Library of Ireland.<sup>18</sup>



<sup>18</sup> <http://catalogue.nli.ie/Record/vtls000742504>. Accessed 18 August 2020.

**Figure B-7** An example of a nineteenth-century photograph (dated 1890–1910) by T. Holmes Mason held by the National Library of Ireland.<sup>19</sup> View of Christ's Saddle/Valley and North steps.



<sup>19</sup> <http://catalogue.nli.ie/Record/vtls000519858>. Accessed 18 August 2020.



## B.4 LANDSCAPE AND VISUAL AMENITY

### B.4.1 Landscape character assessment

The island of Sceilg Mhichíl is characterised by its steep imposing sea cliffs and twin peaks, rising 218m and 185m above sea level, and the U-shaped valley that has formed between the peaks which itself is 130m above sea level (NMS, 2020). Such a distinctive topography, in conjunction with the archaeological heritage features present on the island, has created a landscape which is very sensitive to new developments.

The nearby coastline of Co. Kerry and the Iveragh Peninsula is included in the Landscape Character Area (LCA) of St. Finan's Bay and Valentia Island, of which the boundary includes the entirety of Valentia Island and the coastline stretching southwards to Bolus Head and eastwards to Ballinskelligs Bay (See Figure B-8) (Kerry County Council Planning Policy Unit, 2012). This area is characterised by scattered coastal communities within a larger landscape of very rugged bogs, uplands and rocky peninsulas, with extensive areas of designated landscapes and protected views (Fáilte Ireland, 2015). Due to the area's scenic nature and numerous protected viewpoints and seascapes, the area is considered to have a generally high sensitivity to new developments, with correspondingly little capacity to absorb new development outside the immediate environs of the limited number and extent of areas of existing settlement and infrastructure (Fáilte Ireland, 2015).

**Figure B-8** Extent of St. Finan's Bay and Valentia Island LCA



## B.5 MATERIAL ASSETS AND INFRASTRUCTURE

### B.5.1 Sceilg Mhichíl

#### B.5.1.1 Lighthouse complex

There is little pre-existing infrastructure present on Sceilg Mhichíl. The newest structures on the island include the lower lighthouse complex and adjoining road and pier, which all originate from the 19<sup>th</sup> century with maintenance work having been conducted in the years since construction. A preliminary works programme has been carried out on the lower lighthouse which has included the removal of refurbishments carried out in the 1970's, the removal of asbestos and the removal of some plaster to examine the current state of this largely 19th century structure. The lighthouse road running from the pier to the lower lighthouse is still in frequent use and is now maintained by OPW since its transfer to the state from the Commissioners of Irish Lights (CIL). While the road itself remains in good condition, over time the seas have reduced the strength of the external retaining walls, causing much of the original mortar in the walls joints to be removed. A detailed pre-works survey, programme of works and post-work survey was undertaken between 2011 and 2016 to strengthen the wall, while ensuring the existing nesting populations of puffin and storm petrel were unaffected by the developments (NMS, 2020).

### B.5.2 Irish mainland

#### B.5.2.1 Tourist vessels

Access to the island by tourist vessels is regulated by a permit system operated by the OPW, with their currently being a maximum of 15 operators permitted to land visitors. Of these vessels, 13 operate from Portmagee, with the remaining vessels operating from Derrynane and Ballinskelligs. These vessels carry a maximum of 12 passengers and due to restrictions on visitor numbers allowed on the island, are permitted to make one-round trip each day (MKO, 2018). This list of permitted boatmen is renewed on a 3-yearly basis by way of public competition (NMS, 2020). Restrictions on visitor numbers were introduced in 1994, when they were capped at 180 per day. The number of vessels permitted to land at Sceilg Mhichíl based on this restriction since then are displayed in Table B-10 below.

**Table B-10 No. of boats with permits to carry passengers to Skellig Michael**

Year	Number of permits	Year	Number of permits
1994	22	2007	13
1995	19	2008	13
1996	19	2009	13
1997	19	2010	14
1998	19	2011	14
1999	15	2012	14
2000	16	2013	14
2001	13	2014	14
2002	15	2015	13

Year	Number of permits	Year	Number of permits
2003	15	2016	13
2004	15	2017	15
2005	13	2018	15
2006	13	2019	15

The visitor season typically runs from mid-May through to the end of September, but is heavily dependent on both the weather conditions being favourable to land visitors on the island and the requirement for pre-season maintenance works to be completed by the OPW staff prior to the season opening. As such the visitor season is variable in length from year-to-year. Details on the length of each season from 2008 onwards, in addition to the number of visitors to Sceilg Mhichíl per season, is presented in Table B-11 below.

**Table B-11 Length of visitor season from 2008-2019 and number of visitors per season**

Year	Length of Season	No. of Days in season*	Visitors
2008	25 May – 29 Sep	128	10,324
2009	22 May – 2 Oct	134	10,642
2010	25 May – 17 Oct	146	12,343
2011	10 Jun – 6 Oct	119	9,750
2012	18 May – 19 Oct	155	11,577
2013	17 May – 1 Oct	138	13,221
2014	16 May- 29 Oct	137	12,560
2015	20 May- 2 Oct	136	15,315
2016	14 May-2 Oct	142	14,648
2017	12 May-5 Oct	147	16,755
2018	23 May-2 Oct	132	16,792
2019	25 May -5 Oct	135	15,616

\* The Number of days in season does not equate to sailing days; analyses at various times have indicated a “fail rate” of approx. 45% + of days during the season when no or only partial access has been possible.

### B.5.2.2 Piers

As described previously, vessels transiting to Sceilg Mhichíl originate from three locations on the Irish mainland: Portmagee, Derrynane and Ballinskelligs. These locations and their facilities are described below.

#### Portmagee

The majority of tourist vessels for Sceilg Mhichíl depart from the recently constructed Portmagee Pontoon, which opened in 2014 (MKO, 2018). While primarily being used by the tourist vessels, the 20-berth facility also hosts other visiting yachts and ribs. The pontoon features power and water facilities, in addition to toilet and recycling facilities, and is located in the centre of Portmagee village. The site is managed by Kilrush Marina on behalf of Kerry County Council (Afloat.ie, 2020).



In some instances, passenger vessels will also depart from Portmagee Pier, also located in the centre of Portmagee. The pier is utilised not only by passenger vessels but is also an active fishing port. In addition, trips will occasionally transit from the Skelligs Experience Centre landing stage, located just north of Portmagee on Valentia Island. The OPW's work vessel for the island also transits from this location.

#### Derrynane

At present only one tourist vessel operates out of Derrynane Pier. This small pier is used by a variety of commercial fishing and recreational vessels throughout the year.

#### Ballinskelligs

Similar to Derrynane Pier, Ballinskelligs Pier is a small remote pier found at the southern end of Ballinskelligs Bay (Discover Ireland, 2020). At present only one tourist vessel operates from this location.

In a review of safety arrangements in 2015 of tourist access to Sceilg Mhichíl, the State Claims Agency noted that the departure of boats from a number of locations did not ideally facilitate the process of imparting a consistent safety message to all visitors prior to departure. As such they recommended that all sailings depart from a single location. However, the OPW has to date declined to make this change, because:

- Designating a single port of departure would interfere with the principle of free competition introduced in 2016;
- It would severely disadvantage local tourism economies in Ballinskelligs and Caherdaniel.

### B.5.3 Waste management

Currently on Sceilg Mhichíl, any waste from food (e.g. packaging) is sorted directly on the island itself and removed from the island on a weekly basis in labelled bags and disposed of and/or recycled on the Irish mainland. This approach is reviewed prior to the opening of each visitor season with the Environmental Officer of Kerry County Council. Any organic food waste is stored in a composting bin found adjacent to the dry toilet on the island. This toilet is cleared of composting waste once a year, with the waste being transported off the island by the OPW.

### B.5.4 Future trends for material assets and infrastructure

On Sceilg Mhichíl it is planned to repurpose the existing lower lighthouse complex for accommodation for workers and researchers and toilet facilities for visitors (NMS, 2020). Regarding permits for tourist boats, during the lifetime of the Proposed Plan the competition cycle will be repeated in the closed season in 2021, 2024 and 2027.

## B.6 POPULATION AND HUMAN HEALTH

### B.6.1 Population

#### B.6.1.1 Population Density

The population density of Ireland is 70 persons per km<sup>2</sup> in 2016, which has increased from 67 persons per km in 2011. The average population density in urban areas was 2,008 persons per km<sup>2</sup> compared to 27 persons per km<sup>2</sup> in rural areas (Central Statistics Office, 2019a).

#### B.6.1.2 Population Demographics

The townland of Derrynane, town of Ballinskelligs and the village of Portmagee are located in County Kerry, Ireland. The most recent estimated population of County Kerry was 147,707, recorded in 2016 (Central Statistics Office, 2019d). The population of Kerry has been steadily increasing since 1979 rendering the most recent recorded population (147,707) the highest on record since 1936. Population change between 2002 and 2016 is shown in Table B-12 below. Since 2011, county Kerry has experienced an increase of 2,205 people representing a population growth of approximately 1.5%.

**Table B-12 Population change for County Kerry 2011 and 2016 (Central Statistics Office, 2019d)**

Year	Population
2011	145,502
2016	147,707

Table B-13 shows age distributions in County Kerry and Ireland for 2016. The figures show that the County Kerry population is relatively older than the average for Ireland but has a lower percentage of the population under 16 and aged 16 – 65. In general, statistics for County Kerry are comparable to those for Ireland.

**Table B-13 Age distributions 2016 (Central Statistics Office, 2019b)**

Age Group	County Kerry	Ireland
% of population under 16	20.74	22.43
% of population 16-65	62.31	64.18
% of population over 65	16.95	13.39

#### B.6.1.3 Future Trends for Population

The population within County Kerry is expected to increase by 8,108 over the period between 2015 – 2021. The population growth of 8,108 is allocated to the four Municipal Districts of Tralee, Killarney, Listowel and South/West Kerry. Of the 8,108 estimated growth, 1,213 is predicted for the South/West of Kerry, with Tralee and Killarney expecting the greatest increase in population (Kerry County Council, 2015b).

#### B.6.1.4 Economic Output

Gross Domestic Product (GDP) is one of the primary indicators used to gauge the health of a country's economy. It represents the total value of all goods and services produced over a specific time period.

Gross Value Added (GVA) measures the contribution to the economy of each individual producer, industry or sector and is used to estimate GDP. GDP at the County Kerry level is not available from the Central Statistics Office however, GDP is available at the regional level. The GDP for the South West region was in excess of €30.9 billion in 2011. Kerry's GDP was calculated at €5.5 billion which represents 18% of the estimated GDP for the South West region (Kerry County Council, 2015a).

GVA is sometimes used as a measure of economy instead of GDP. GVA is often shown at basic prices which includes taxes (minus subsidies) on products, such as VAT are also included then GVA is shown at market prices. GVA at market prices is equivalent to GDP. Table B-14 shows the GVA per person in the South West region (which includes County Kerry) compared to Ireland. The results show that County Kerry has a higher GVA per head than Ireland as a whole.

**Table B-14 Gross Value Added (GVA) per head 2010 (Central Statistics Office, 2019e)**

Area	2010 GVA (€)
South West (including County Kerry)	39,648
Ireland	33,455

GVA statistics recorded for individual industries are often considered unreliable due to the types of businesses sampled. GVA is reported for three sectors including agriculture, industry and services and is presented in Table B-8. As Table B-15 shows, from the information available the South-West region was responsible for 23.3% of Agriculture GVA and 12.3% of Services GVA.

**Table B-15 Gross Value Added (GVA) per Sector (Central Statistics Office, 2019e)**

GVA per Sector (€m)	Area	
	South West (including County Kerry)	Ireland
Agriculture	546m	2,340m
Industry	-*	100,633b
Services	17,277m	140, 325b
Total	-	243,178 b

\* Data was suppressed for reasons of confidentiality

### B.6.1.5 Employment

County Kerry's traditional sectors are retail and manufacturing with the remaining sectors comprising agriculture and tourism. As of 2011, there were 69,286 persons aged 15 years and over in the labour force and of these, 80.5% (55,767 persons) were at work. Table B-16 summarises the percentage of the daytime working population by sector.

**Table B-16 County Kerry Employment by Sector (Central Statistics Office, 2011)**

Sector	Individuals	Percentage
Agriculture, forestry and fishing	3,572	8.74
Building and construction	1,083	2.65
Manufacturing	3,959	9.68
Commerce and trade	10,463	25.59

Sector	Individuals	Percentage
Transport and communications	1,554	3.80
Public administration	2,402	5.87
Professional services	10,479	25.63
Other	7,379	18.05
<b>Total</b>	<b>40,891</b>	<b>100</b>

Unemployment levels in County Kerry remain low. Unemployment rates for County Kerry and Ireland in 2011 and 2016 are shown in Table B-10. The unemployment rate in County Kerry has decreased since 2011 and is slightly lower than the unemployment rate for Ireland. The decreasing trend in unemployment rate is comparable for both County Kerry and Ireland.

**Table B-17 Unemployment Rate in 2011 and 2016 (Central Statistics Office, 2019c)**

Sector	County Kerry	Ireland
2011	10.85%	10.83%
2016	6.61%	7.08%

## B.6.2 Human Health

### B.6.2.1 Life Expectancy

Over the last decade, Ireland has experienced an increase of almost three years in life expectancy and was higher than the EU average. These increases are generally attributed to reductions in mortality rates from causes of death such as heart disease and cancer. Life expectancy data at the County level is not available, however information on regions is. Table B-18 below shows the life expectancy for the South West region and Ireland between 2005 – 2007. As can be seen, life expectancy at birth is higher for females within the region with male life expectancy at birth slightly below the national average. Life expectancy at age 65 is higher for females than males within the South West region and is higher than the national average. Male life expectancy at age 65 is lower than the national average. Trends within the South West region are comparable with the national statistics.

**Table B-18 Life Expectancy at birth and at Age 65 (Central Statistics Office, 2009, 2013)**

Region	At-birth		Age 65	
	Male	Female	Male	Female
South West	76.5	81.6	16.4	20.0
Ireland	76.8	81.6	16.6	19.8

### B.6.2.2 General Health

The most recent data on the health of the County Kerry population comes from the 2011 census of the county. The census included questions regarding self-perceived health status. Table B-19 shows the results of the census showing that trends in self-perceived health are similar to the statistics for Ireland. Some notable differences are the population of County Kerry perceiving themselves in very good health and fair health is higher than for Ireland, however the percentage of the population in

County Kerry with very good health is below that of Ireland. The percentage of the County Kerry population considering themselves in bad health or very bad health is slightly lower than the national average.

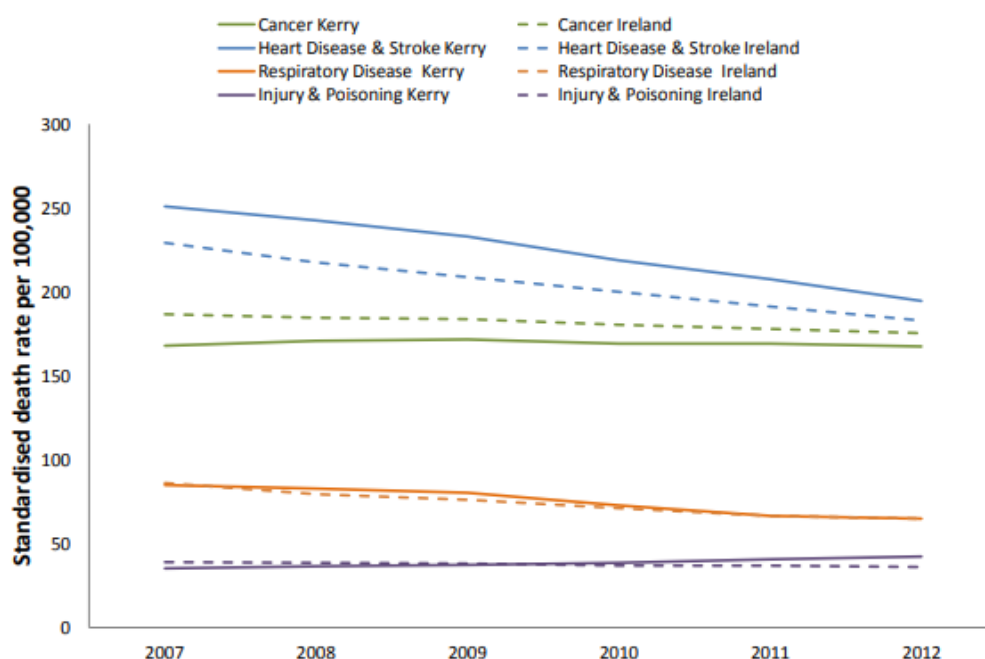
**Table B-19 Population by General Health Status (Central Statistics Office, 2013)**

Health Status	County Kerry (%)	Ireland (%)
Very Good Health	58.27	60.32
Good Health	29.67	27.96
Fair Health	8.61	7.80
Bad Health	1.15	1.25
Very Bad Health	0.26	0.27
No Health Stated	2.04	2.18

### B.6.2.3 Causes of Death

Between 2007 – 2012, County Kerry had a higher number of death rates from heart disease and stroke and injury and poisoning when compared to Ireland. Death rates from cancer were lower than the average for Ireland and death rates from respiratory disease very much being comparable to the national statistics. Figure B-9 below shows the trends in death rates from principal causes of death in County Kerry and Ireland. Death rates from all, but injury and poisoning are on a downward trend for both County Kerry and Ireland.

**Figure B-9 Trends in Death Rates per 100,000 of the population for the four principal causes of death over the period 2007 – 2012 for all ages compared to Ireland (Central Statistics Office, 2013)**



### B.6.2.4 Future Trends for Human Health

Population projections produced by the Central Statistics Office (CSO) indicate that the most dramatic change in the structure of the population in the coming decades will be the increase in numbers of older people. This is already occurring with an increase in the number of people over the age of 65 approaching 20,000 per year. The population of those aged 65 years and over has been increasing at a faster rate than that of other EU countries. The numbers of people in this age group is expected to almost double in the next 20 years, with the greatest proportional increase in the 85+ age group. Kerry's population over the age of 60 is 20.2% which is 3.7% higher than the national figure of 16.5%. At a national and county level one of the major health challenges will be successfully addressing the needs of an aging population.

### B.6.2.5 Health and Safety

The Health and Safety Authority (HSA) are responsible for ensuring workers and those affected by work activity are protected from work related injury and ill-health in Ireland. The HSA collect statistics on reportable health and safety incidents which have been summarised in Table B-20 below. In 2018, County Kerry had 169 reportable non-fatal injury or illness incidents which represents roughly 1.8% of the total for Ireland in that year. The South West region had 8 reported fatalities in 2018 which represents 20.5% of the reported incidents for Ireland in 2018.

**Table B-20 Reportable Workplace injury, illness and Fatality Statistics 2017 - 2018 (HSA, 2019)**

Incident Type	County Kerry	Ireland
Non-fatal injury or illness	169	9,199
Fatalities	8*	39

\*Statistics on County Kerry were not available, therefore statistics for the South West region was used

Of the 39 fatalities reported in 2018 for Ireland, 20 were in the agriculture, forestry and fishing economic sector, representing 51% of fatalities reported. The second highest sector was transportation and storage with eight and construction with five. Despite this, the number of fatalities in the agriculture, forestry and fishing sector is decreasing as the number of fatalities reported in 2018 were the lowest in the agriculture, forestry and fishing sector since 2009 (HSA, 2019).

## B.7 SOILS

### B.7.1 Geology and soils

Both Sceilg Mhichíl and Sceilg Bheag are composed of durable Old Red Sandstone (GSI, 2020). The Old Red Sandstone that takes up the islands, along with much of the Iveragh and Beara Peninsulas, Kerry Head and to the east of the Dingle Peninsula, was laid down in the Devonian period (415Ma). The overall topography of the region was the result of a period of folding and mountain building that occurred approximately 100 million years ago. After sea levels subsequently rose in the region, which in turn formed the deep marine inlets that characterise the south-west coast such as Kenmare River, the Sceilgs were isolated from the mainland (NMS, 2020).

Sceilg Mhichíl rises to 218m above sea level at the peak of the islands pinnacle. A faulting of the underlying sandstone created a U-shaped valley known as 'Christ's Saddle' which is found between the islands two peaks 130m above sea level (UNESCO World Heritage Centre, 2010), with the islands second peak reaching 185m above sea level. In comparison, Sceilg Bheag rises to 134m above sea level at its tallest point (BirdWatch Ireland, 2015). Further erosion along fault and cleavage lines on Sceilg Mhichíl also created the three landing coves on the island.

The Irish Geological Heritage Programme (IGH) of the Geological Survey of Ireland (GSI) is working in partnership with NPWS to identify and select important geological and geomorphological sites throughout the country. The aim is to designate the sites as Natural Heritage Areas (NHAs) and as County Geological Sites (CGS) for integration into the County Development Plan. One such area identified on Sceilg Mhichíl for further study is the use of rainwater cisterns for collection of water for the monastic community when the site was in active use (GSI, 2020). This site is currently listed as unaudited, with further research on the site required.

### B.7.2 Soils

Sceilg Mhichíl is characterised by areas of thin soil cover, due to the steep undulating nature of the terrain, exposure to salt spray and high winds. The soil that is present is typical of that found occurring on Devonian Old Red Sandstone rock, also being found extensively in the Iveragh and Dingle peninsulas. They consist primarily of highly degraded soils (peaty podzols) and skeletal mineral soils. Occurring under a high rainfall regime, these soils are associated with steep topography with more elevated areas exhibiting outcropping rock (Kerry County Council, 2014).

Erosion events on Sceilg Mhichíl have increased in recent years. This trend has been noted since 2012 and 2013, where extreme winter storms and extremes in heat and rainfall in the summer months have led to significant loss of soil and vegetation. Such erosion events also increase the potential for significant rockfall events to occur. This occurred across 2016 and 2017 in four separate rockfall events, with these incidents causing damage to the Lower Lighthouse Road and in some cases requiring remedial works to be undertaken, thus closing the site to visitors.

### B.7.3 Future Trends

Due to the projected increase in the frequency and intensity of storm events around Sceilg Mhichíl, it is likely that erosion events (and subsequent rockfalls) will continue to occur in Sceilg Mhichíl, altering the character of the site and leading to a loss in soil available for other flora and fauna to utilise.



# APPENDIX C






## Full Assessment Results

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### C.1.1 Assessment of effects

The assessment of significant environmental effects was undertaken using a matrix to consider the Proposed Plan Objectives and Actions against a set of defined SEA Objectives. Table C-2 – C-12 provide the detailed findings of the assessment. In addition to the text, scoring symbols have been used to denote the effect on the SEA Objectives, the key for which is found in Table C-1 below.








**Table C-1 Significance criteria for assessment**

Significance of effect	Description of effect significance
<b>Substantially supports SEA objective</b> 	Is considered significant, e.g. beneficial impacts are substantial, substantially accelerate an improving trend, substantially decelerate a declining trend, substantially support delivery of a declared objective.
<b>Support SEA objective</b> 	Supports SEA objective but not to a significant extent, e.g. beneficial impacts are not substantial, do not substantially accelerate an improving trend, do not substantially decelerate a declining trend, do not substantially support from delivery of a declared objective.
<b>Neutral contribution to SEA objective</b> 	Either no impacts or on balance (taking account of positive and negative impacts) a neutral contribution.
<b>Detracts from SEA objective</b> 	Detracts from SEA objective but not to a significant extent, e.g. adverse impacts are not substantial, do not substantially decelerate an improving trend, do not substantially accelerate a declining trend, do not substantially detract from delivery of a declared objective.
<b>Substantially detracts from SEA objective</b> 	Is considered significant, e.g. adverse impacts are substantial, substantially decelerate an improving trend, substantially accelerate a declining trend, substantially detract from delivery of a declared objective.

Any effects will each impact on the site in a different manner. The definitions of such impacts are detailed below:

- **Direct effects:** Direct impacts represent for example loss of habitat, disturbance of bird species, changes in biodiversity abundances or loss of resources.
- **Indirect effects:** effects on the environment, which are not a direct result of the activities of the project, often produced away from or as a result of a complex pathway.
- **Irreversible:** an effect which is likely to be permanent, effects that cannot be undone even through remediation and the resource cannot turn to its original state.
- **Reversible:** an effect which is temporary and effects that can be undone, for example through remediation or restoration.








**Table C-2 Assessment of Objective 1**

<b>Objective 1: To have in place an effective management framework to protect the Outstanding Universal Value of Sceilg Mhichíl.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.  Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.  Prevent introduction of invasive species to Sceilg Mhichíl.  Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.  Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner.  Improve the safety of staff and visitors to Sceilg Mhichíl.  Protect and improve visitor experience to Sceilg Mhichíl.
<b>A1.1:</b> Continue supporting the activities of the site-management team and agencies responsible for the management and care of Sceilg Mhichíl and its visitors.  <b>A1.2:</b> Continue the oversight role of the SMIG throughout the lifetime of this plan.  <b>A1.3:</b> Ensure compliance with World Heritage Convention requirements.	  Action A1.1, through the provision of care for Sceilg Mhichíl through the appropriate agencies, will aid in conserving the natural heritage of the site and in ensuring good management structures are in place to protect it. It will therefore have an indirect positive effect.  The other listed Actions have no strong links to the protection of the sites' biodiversity, flora and fauna.	  Action A1.1, through the supporting of agencies responsible for the management of Sceilg Mhichíl, should in turn support the work in adapting the island for the effects of climate change.  The other listed Actions have no strong links to adapting to the	  Actions A1.1 and A1.2 will assist in the continued protection of the entire cultural heritage environment of the island. Action <b>A1.3</b> is critical to the continued inscription of the island on the World Heritage Site list and recognition of its Outstanding Universal Value.	  Action A1.1, through the supporting of agencies responsible for the management of Sceilg Mhichíl, should aid in reducing the impacts of erosion to the site.  The other listed Actions have no strong links to	  These Actions have no strong links to the protection of landscape/seascape of the area and will have a neutral effect on their SEA Objectives.	  Action A1.1, through the supporting of agencies responsible for the management of Sceilg Mhichíl, should ensure that the existing infrastructure on Sceilg Mhichíl is protected.  The other listed Actions have no	  Action A1.1, through the supporting of the staff working on Sceilg Mhichíl, should aid in ensuring their safety, having an indirect positive effect.  The remaining Actions will have a neutral effect on

**Objective 1: To have in place an effective management framework to protect the Outstanding Universal Value of Sceilg Mhichíl.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
		effects of climate change.		adapting to the minimising of soil erosion.		strong links to the protection or enhancement of infrastructure on Sceilg Mhichíl.	population and human health.








**Table C-3 Assessment of Objective 2**

<b>Objective 2: To improve liaison with local interest groups and other relevant parties.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.  Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.  Prevent introduction of invasive species to Sceilg Mhichíl.  Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.  Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner.  Improve the safety of staff and visitors to Sceilg Mhichíl.  Protect and improve visitor experience to Sceilg Mhichíl.
<b>A2.1:</b> Engage with the Commissioners of Irish Lights to secure the lower lighthouse complex for use by staff and visitors.  <b>A2.2:</b> Engage with outside groups and stakeholders to facilitate the effective implementation of the management plan.  <b>A2.3:</b> Create a Sceilg Mhichíl stakeholder forum to address issues	  A2.1 provides a dedicated space from which natural heritage research could be facilitated, which in turn could have positive effects by enabling monitoring of the site's species and habitats to take place.  The other listed Actions have no strong links to the	  The listed Actions have no strong links to the climatic factors of the SEA study area, being general in scope with no clear pathway for effect being identifiable. Their effects expected to be neutral.	  A2.1 provides a dedicated space from which cultural heritage research might be facilitated. A2.2, A2.3 and A2.4 engagements with various interested parties affords an opportunity to increase awareness of the cultural heritage importance of	  A2.1 provides a dedicated space from which natural heritage research could be facilitated, which in turn could have positive effects by enabling monitoring of soil	  The listed Actions have no strong links to the landscape and visual amenity of the SEA study area, being general in scope with no clear pathway for effect being	  Action 2.1 will ensure the existing lower lighthouse complex is maintained in a habitable condition, ensuring it is	  These Actions all aim to improve the safety and experience for staff and visitors to Sceilg Mhichíl, through securing of the Lower Lighthouse complex which will include toilet facilities for visitors currently not available, or through increasing the

**Objective 2: To improve liaison with local interest groups and other relevant parties.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p>of mutual interest and inform decision-making processes.</p> <p><b>A2.4:</b> Meet with local boat operators to discuss issues of mutual interest, including health and safety and the operational framework.</p>	<p>biodiversity, flora and fauna features of the SEA study area, being general in scope with no clear pathway for effect being identifiable. Their effects expected to be neutral.</p>		<p>the site within an established framework.</p>	<p>erosion to take place.</p> <p>The other listed Actions have no strong links to the soil and geology of the SEA study area, being general in scope with no clear pathway for effect being identifiable. Their effects expected to be neutral.</p>	<p>identifiable. Their effects expected to be neutral.</p>	<p>protected into the future.</p> <p>The other actions do not present a clear positive or negative pathway for effect.</p>	<p>transparency and communication between the interested parties and the organisations who manage the site. These Actions will have a direct positive effect.</p> <p>This objective does not however provide a pathway for reports and information to be made available for public viewing. Publicly releasing reports online would provide greater transparency to the decision-making process on Sceilg Mhichíl and the data that underpins these decisions.</p> <p><b>Recommendation</b></p> <p><i>We recommend an additional Action should be included under this Objective: 'Make publicly available existing and future reports on Sceilg Mhichíl via a dedicated website page for Sceilg Mhichíl.'</i></p>

**Table C-4 Assessment of Objective 3**








<b>Objective 3: To preserve the cultural heritage of the island and sustain its Outstanding Universal Value.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.  Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.  Prevent introduction of invasive species to Sceilg Mhichíl.  Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.  Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner.  Improve the safety of staff and visitors to Sceilg Mhichíl.  Protect and improve visitor experience to Sceilg Mhichíl.
<b>A3.1:</b> Carry out a full pre-works survey and detailed specification for each annual phase of works in advance of any work commencing on the site.  <b>A3.2:</b> Prepare a formal, structured maintenance programme for all conserved structures.  <b>A3.3(a):</b> Report on archaeological works undertaken each year.	  A3.1, provisions for works on the site that could potentially impact the resident species of Sceilg Mhichíl. However, through carrying out pre-works surveys and studies, they will ensure that any planned works on Sceilg Mhichíl are assessed for their	  A3.1 and A3.2 make provision for works to take place on the cultural heritage features of the site. Maintenance of these structures,	  This is a key objective for cultural heritage as it addresses the underlying reason for the WHS inscription of the island. A3.1, A3.3 (a-b), A3.4 (a-b) and A3.5–A3.6 reflect current national policy and best practice in	  A3.1 and A3.2 make provision for works to take place on the cultural heritage features of the site. The conservation of such structures	  The listed Actions have no strong links to the landscape and visual amenity of the SEA study area, being general in scope with no clear pathway for effect being identifiable.	  A3.1 and A3.2 make provision for works to take place on the cultural heritage features of the site. Such activities may include works on	  A3.1 and A3.2 make provisions for the continued conservation and maintenance of the cultural heritage features of Sceilg Mhichíl, which will ensure the site



**Objective 3: To preserve the cultural heritage of the island and sustain its Outstanding Universal Value.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p><b>A3.3(b):</b> Publish a full monograph of archaeological works undertaken on the island.</p> <p><b>A3.4(a):</b> Report on conservation works undertaken each year.</p> <p><b>A3.4(b):</b> Publish a full monograph of conservation works undertaken on the island.</p> <p><b>A3.5:</b> Ensure that heritage objects for Sceilg Mhichíl are archived and cared for appropriately.</p> <p><b>A3.6:</b> Ensure that the Expert Advisory Committee continues to advise on future research and publication.</p>	<p>potential to affect the biodiversity, flora and fauna of the site, supporting the SEA objectives.</p> <p>The other listed Actions do not present a clear pathway for effect and are expected to have a neutral effect.</p>	<p>will increase their resilience to the effects of climate change, having a positive effect.</p> <p>The other listed Actions do not present a clear pathway for effect and are expected to have a neutral effect.</p>	<p>relation to archaeological monuments and cultural heritage. A3.2 is beneficial as it will record data and chart ongoing deterioration and consolidation over time which may prove useful in the future for this site and inform others like it in the future. Predicted impact of this objective considered to be a direct positive effect.</p>	<p>may itself present an indirect positive effect to the underlying soils through the prevention of structures collapsing leading to further erosion events.</p> <p>The other listed Actions do not present a clear pathway for effect and are expected to have a neutral effect.</p>	<p>Their effects expected to be neutral.</p>	<p>key pieces of historical infrastructure on the island, such as the 18<sup>th</sup> century lower lighthouse road which remains in use to this day. As such these actions will have a positive effect on the infrastructure of Sceilg Mhichíl.</p> <p>The other listed Actions do not present a clear pathway for effect and are expected to have a neutral effect.</p>	<p>remains attractive and safe for tourists to visit, protecting the visitor experience and ensuring economic opportunities that arise from the visitor interest continue into the future.</p>

**Table C-5 Assessment of Objective 4**

<b>Objective 4: To identify and conserve the natural heritage of the island</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas. Minimise impact of noise from vessels and helicopters on seabirds and marine mammals. Prevent introduction of invasive species to Sceilg Mhichíl. Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape. Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner. Improve the safety of staff and visitors to Sceilg Mhichíl. Protect and improve visitor experience to Sceilg Mhichíl.
<b>A4.1:</b> Prepare site-specific conservation objectives for the bird species for which the Skelligs SPA has been designated. <b>A4.2:</b> Maintain close co-operation between the SMIG, Site Management Team, the guide service and NPWS. <b>A4.3:</b> Secure ministerial consent, underpinned by relevant scientific data and analyses where required, for relevant interventions as required.	 These Actions make provision specifically for the protection/monitoring of the biodiversity, flora and fauna features within the SEA Study area. A4.1 and A4.5 in particular should substantially support the SEA Objectives through enabling a more specific	 A4.4 should have a positive effect on ensuring any works do not have a negative effect on the habitats of Sceilg Mhichíl, ensuring its resilience to the impacts of climate	 The listed Actions have no strong links to the protection of the island's specific cultural heritage. Predicted impact of this objective considered to be a neutral effect.	 A4.4 should have a positive effect on ensuring any works do not have a negative effect on the habitats of Sceilg Mhichíl, reducing the potential for such activities to	 The listed Actions have no strong links to the protection of the island's landscape and visual amenity. Predicted impact of this objective considered to be a neutral effect.	 The listed Actions have no strong links to the protection the existing infrastructure present on Sceilg Mhichíl. Predicted impact of this objective	 The listed Actions have no strong links to the improvement of economic opportunities or safety of visitors and staff. Predicted impact of this objective

**Objective 4: To identify and conserve the natural heritage of the island**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p><b>A4.4:</b> Ensure an ecological assessment is undertaken for any project or activity which might significantly impact on the biodiversity of the island (including appropriate assessment or screening for any plan or project likely to have a significant effect on the species and their habitats for which the SPA has been designated).</p> <p><b>A4.5:</b> Continue to develop the seabird monitoring programme with particular attention to burrow-nesting seabirds in order derive, among other things, robust population estimates, population trends and the identification of pressures acting on the populations. Such data will inform the management of both public access and the works programme in monitoring potential effects of human activities.</p> <p><b>A4.6:</b> On an annual basis carry out a census count of all cliff nesting seabird species and estimate the breeding productivity of Sceilig Mhichíl's kittiwake population.</p>	<p>understanding of the needs of the resident bird species within Skelligs SPA, allowing for more targeted measures to be taken to ensure their continued success.</p> <p>A4.1 does not however currently detail if the conservation objectives will include any quantitative targets and attributes which would allow for the conservation status of each SCI to be defined. As such, revised wording has been detailed below.</p> <p>A4.9 and A4.13 also substantially support the prevention of invasive species to Sceilig Mhichíl through the implementation of the recommendations prescribed in the 2018 Biosecurity Review and the study of existing INNS on the site.</p> <p>The other listed Actions all support the conservation of the natural environment through their own means.</p> <p>A4.10, while supporting the exclusion of helicopters from the airspace surrounding Sceilig Mhichíl, this Action could be strengthened to be more</p>	<p>change is not hindered. The other Actions relate more specifically to other natural features of the site and will have a neutral effect on climatic factors.</p>		<p>lead to an increase in soil erosion. A4.13 will have a positive effect on prevention of soil erosion because the biosecurity review highlighted overgrazing by rabbits may expose larger soil surfaces, leading to greater erosion.</p> <p>The other Actions relate more specifically to other natural features of the site and will have a neutral effect on climatic factors.</p>		<p>considered to be a neutral effect.</p>	<p>considered to be a neutral effect.</p>








**Objective 4: To identify and conserve the natural heritage of the island**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p><b>A4.7:</b> Ensure that the value of the seabird data collected at Sceilg Mhichíl is optimised by contributing to national and international seabird survey and monitoring initiatives.</p> <p><b>A4.8:</b> Participate in national and international seabird survey and monitoring initiatives.</p> <p><b>A4.9:</b> Implement the biosecurity action plan to deal with accidental or deliberate introductions of predator species.</p> <p><b>A4.10:</b> Ensure that helicopter flights over and in the vicinity of Skelligs SPA are avoided during the birds' breeding season.</p> <p><b>A4.11:</b> Finalise and publish a vegetation survey, including an investigation of species that may have been cultivated by the monks.</p> <p><b>A4.12:</b> Promote and undertake survey, research, and where needed, conservation work of other biodiversity taxa on the island.</p> <p><b>A4.13:</b> Research the impacts of mice and rabbits on the biodiversity and</p>	<p>specific in the area helicopters are excluded from. As such, revised wording has been detailed below.</p> <p>There are currently no Actions relating to the wildlife that utilise the seas surrounding Sceilg Mhichíl, such as rafting seabirds and seals. With an increasing number of boat operators offering tours around the islands, measures to reduce potential disturbance should be implemented. An additional Action on this topic is detailed below.</p> <p><b>Alternative Recommendation</b></p> <p><i>We recommend the wording of Action 4.1 read: Prepare site-specific conservation objectives for the bird species for which the Skelligs SPA has been designated. Include in the conservation objectives attributes and targets which are quantitative.</i></p> <p><i>We recommend the wording of Action 4.10 read: 'Exclude recreational and other non-essential helicopter flights from an exclusion zone of 1km surrounding Skelligs SPA. .</i></p>						

**Objective 4: To identify and conserve the natural heritage of the island**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
archaeological heritage of the islands. Consider whether eradication is necessary.	<i>We recommend an additional action A4.14 relating to the protection of the resident grey seal population on Sceilg Mhichíl: 'Develop guidance for boat operators to follow to reduce potential impacts on wildlife on Sceilg Mhichíl, and in the surrounding waters'.</i>						

**Table C-6 Assessment of Objective 5**








<b>Objective 5: To further promote the importance of the WHS to ensure continued coordination by government departments, agencies and other statutory bodies with responsibilities for making and implementing national policies and undertaking activities that may impact on Sceilg Mhichíl and its environs</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	<p>Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.</p> <p>Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.</p> <p>Prevent introduction of invasive species to Sceilg Mhichíl.</p> <p>Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.</p>	<p>Contribute to effective adaptation to the predicted effects of climate change.</p>	<p>Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.</p> <p>Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.</p>	<p>Minimise the impact of soil and coastal erosion</p>	<p>Protect the landscape/seascape character and visual amenity in the vicinity of the area.</p>	<p>Protect and enhance the existing infrastructure present on Sceilg Mhichíl.</p>	<p>Improve economic opportunities for the local community in a sustainable manner.</p> <p>Improve the safety of staff and visitors to Sceilg Mhichíl.</p> <p>Protect and improve visitor experience to Sceilg Mhichíl.</p>
<p><b>A5.1:</b> Adopt this management plan as a framework for the policies, future plans and decisions regarding Sceilg Mhichíl.</p> <p><b>A5.2:</b> Ensure compliance with all relevant statutory provisions for the protection of the WHS.</p> <p><b>A5.3:</b> Work with the local authority to ensure recognition of this</p>	 <p>Action 5.1 will have an indirect positive effect on the biodiversity of Sceilg Mhichíl. As the Proposed Plan has been assessed to have an overall positive effect on biodiversity (see Section 4.3), its adoption and implementation will therefore have a positive</p>	 <p>The listed Actions have no strong links to the adaptation to the predicted effects of climate change Predicted impact of this objective</p>	 <p>A5.1 and A5.2 are beneficial as they will provide a point-of-reference for other bodies, such as the local authority. Kerry County Council is noted as an interested party in actions A5.3 and A5.4 and closer engagement with it and</p>	 <p>The listed Actions have no strong links to the soil and coastal erosion. Predicted impact of this objective considered to</p>	 <p>The listed Actions have no strong links to the protection of the existing landscape/seascape of the Study Area. Predicted impact of this objective considered to be a neutral effect.</p>	 <p>The listed Actions have no strong links to the protection of the existing material assets/infrastructure on Sceilg Mhichíl. Predicted impact of this objective considered to be a neutral effect.</p>	 <p>The listed Actions have no strong links to the improvement of economic opportunities or safety of visitors and staff. Predicted impact of this objective considered</p>

**Objective 5: To further promote the importance of the WHS to ensure continued coordination by government departments, agencies and other statutory bodies with responsibilities for making and implementing national policies and undertaking activities that may impact on Sceilg Mhichíl and its environs**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
management plan in its county development plans. <b>A5.4:</b> Heighten awareness by Kerry County Council and other relevant agencies and stakeholders of the obligations arising from a WHS designation.	effect on the biodiversity, flora and fauna of Sceilg Mhichíl. The remaining Actions have no strong links to the conservation of biodiversity, flora and fauna and will have a neutral effect.	considered to be a neutral effect.	its County Archaeologist is considered beneficial. Predicted impact of this objective considered to be a direct positive effect.	be a neutral effect.			to be a neutral effect.



**Table C-7 Assessment of Objective 6**

<b>Objective 6: To manage visitors to Sceilg Mhichíl effectively.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.  Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.  Prevent introduction of invasive species to Sceilg Mhichíl.  Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.  Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner.  Improve the safety of staff and visitors to Sceilg Mhichíl.  Protect and improve visitor experience to Sceilg Mhichíl.
<b>A6.1:</b> Continue to manage the National Monument, Nature Reserve and SPA at Sceilg Mhichíl while allowing a system of managed public access that ensures the conservation of the World Heritage Site is maintained as a first priority.  <b>A6.2:</b> Maintain a strictly defined annual season within which the island will, weather and sea	  A6.2, A6.3, A6.8, A6.9 and A6.10 should have a positive effect on the SEA Objectives for biodiversity, flora and fauna. Action 6.2, through outlining that a defined visitor season should be maintained, ensures that the exposure of the biodiversity features to visitor access will be consistently limited each year. The presence of appropriately	  The listed Actions have no strong links to the adaptation to the predicted effects of climate change. Predicted impact of this objective considered to be a neutral effect.	  Visitor numbers are considered to be one of the primary causes of both direct and indirect negative impacts on the cultural heritage of the island. A balance is required as recognised in actions A6.1 and A6.2. The data from the commissioned report	  Action 6.1 makes provision for the introduction of visitors to Sceilg Mhichíl. This brings with it the potential for increased erosion events to occur due to footfall of the number of individuals	  Under A6.1, The conservation of the WHS as a priority will aid in ensuring the current landscape character is maintained, with the work to mitigate against the deployment of drones and other aircraft protecting	  The listed Actions have no strong links to the material assets and infrastructure. Predicted impact of this objective considered to be a neutral effect.	  Actions A6.2 – 6.7 and A6.9 – 6.13 should have a positive effect on the population and human health SEA Objectives.  Action A6.2 will help ensure the health and safety of visitors to the island and should have a direct positive effect on visitor experience

**Objective 6: To manage visitors to Sceilg Mhichíl effectively.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p>conditions permitting, be open to visitors and publicise this appropriately with details of the permitted transit services.</p> <p><b>A6.3:</b> Maintain a quality guide service to directly invigilate the island during the season, offer appropriate information to visitors and manage safety systems.</p> <p><b>A6.4:</b> Collect Visitor Statistics for each season and analyse trends in order to provide quality management information.</p> <p><b>A6.5:</b> Liaise with Fáilte Ireland and local tourism networks in the implementation of the tourism strategy for the greater south Kerry area outlined in the Sceilg Coast Visitor Experience Development Plan.</p> <p><b>A6.6:</b> Continue to regularly review both the sustainable total number of visitors allowed and the patterns of</p>	<p>trained guides on Sceilg Mhichíl during the visitor season ensures that all visitors are aware of the sensitivity of the biodiversity features on the site and will guide visitors to remain on the designated pathways across the site. The management of the deployment of drones and aircraft over Sceilg Mhichíl will aid in reducing disturbance to seabirds. Ensuring local boat users are aware of and following the latest biosecurity requirements will lower the risk of invasive species reaching Sceilg Mhichíl or Sceilg Bheag. The exclusion of large vessels from landing visitors will help to prevent individuals from exploring the site without the presence of guides and causing damage to the existing habitat.</p> <p>A6.8, while supporting the SEA Objectives, the Action could be strengthened by specifically stating that drones are prohibited from the site, as the exclusion of helicopters is already covered in A4.11 above.</p> <p>A6.1, A6.4, A6.5, A6.6, and A6.7 will have a neutral effect on the biodiversity objectives for the study area. A6.1, 6.4 and 6.5</p>		<p>An Analysis of the Visitor Carrying Capacity of the Monastic Enclosure, Skellig Michael on behalf of the OPW April 2019 (Creagh House Environmental 2019) has been considered in this regard. It is considered beneficial to the cultural heritage that an optimum number of visitors is agreed and maintained through proposed actions A6.6; A6.9; A6.10, and A6.11. Monitoring and data collection of visitor numbers will also assist in future management of the resource, which is also of benefit, in proposed actions A6.3 and A6.4.</p> <p>The proposed provision of facilities in action A6.12 is considered beneficial as it mitigates the necessity to provide modern welfare facilities at an</p>	<p>visiting the site each year, some of which could potentially venture from the designated pathways leading to exacerbation of areas already prone to erosion. The remaining Actions have no strong links to the soils of Sceilg Mhichíl and will have a neutral effect.</p> <p><b>Mitigation recommendation</b></p> <p><i>Applicable mitigation proposed in NIS: M5, M7 see Appendix E.</i></p>	<p>the land-and seascape for visitors.</p> <p>The remaining Actions will have a neutral effect on the protection of the landscape/seascape within the Study Area.</p>		<p>to Sceilg Mhichíl which will help achieve the SEA objectives.</p> <p>The presence of an appropriately trained guide to invigilate visitors, offer information and manage safety systems will have a positive effect on the safety of visitors and their experience to Sceilg Mhichíl.</p> <p>Actions A6.4 and A6.6 will assist with the on-going management of a sustainable number of visitors and associated patterns, however, does not specifically address the existing issues of boat congestion.</p> <p>The delivery of Action A6.5 may generate further interest in visiting Sceilg Mhichíl which will have a positive effect on the achievement of the SEA objectives by improving local</p>

**Objective 6: To manage visitors to Sceilg Mhichíl effectively.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p>movement across the site.</p> <p><b>A6.7:</b> Continue to maintain safety systems and procedures on Sceilg Mhichíl to ensure that visitor or staff safety is not compromised and there is an effective and trained emergency response in place in the event of accident.</p> <p><b>A6.8:</b> Engage with aircraft regulatory authorities to mitigate conservation risks arising from inappropriate deployment of airborne devices and aircraft above and around Sceilg Mhichíl in order to manage risks to the site.</p> <p><b>A6.9:</b> Disseminate information to inform the seagoing community of the necessary controls on access to the island, including biosecurity requirements.</p> <p><b>A6.10:</b> Continue the practice of recent years to exclude larger private vessels from landing visitors to the island.</p>	<p>may benefit from re-wording however to strengthen their existing wording.</p> <p>A6.1 could be interpreted as giving priority to the cultural heritage features over the other features of Sceilg Mhichíl however, and re-worded has been proposed to remove any ambiguity.</p> <p>A6.4 should specify that any reporting on this topic should be released publicly to provide transparency in the decision-making processes for the site.</p> <p>A6.5 should better specify what is currently viewed as 'sustainable' in terms of visitor numbers for the site.</p> <p>A6.11 and A6.12 could have a detrimental impact on the biodiversity objectives for the site if visitor numbers increase to a level where they have a negative effect on biodiversity features.</p> <p>A6.11, in describing the need for a balance between visitor numbers and protection of the National Monument, does not mention balancing visitor numbers for the protection of biodiversity features. As such there exists the possibility that</p>		<p>archaeological monument by incorporating them in an existing later historic structure thereby avoiding negative visual impacts on the cultural heritage of the island.</p> <p>Protection of the historical integrity of the island and its raison d'être as the location of an isolated monastic complex which underlines its WHS inscription is of paramount importance. The proposed liaison with Bord Fáilte and local tourism promoters in Action A6.5 and the regulation of airborne devices which may affect the experiential qualities of the cultural heritage in Action A6.8 are both considered substantially beneficial. The Skellig Coast Visitor Experience Development Plan (Fáilte Ireland, 2016)</p>				<p>economic opportunities.</p> <p>There is the potential for positive benefits to human health from Action A6.9 by ensuring the community are informed of the requirements to safely access Sceilg Mhichíl.</p> <p>Action A6.10 has the potential for positive effects to human health by controlling the sustainable number of visitors allowed on the island.</p> <p>Action A6.11 will ensure the number of visitors and boats able to land at the island is controlled which has the potential for positive benefits to the health and safety of visitors to the island.</p> <p>Action 6.13 has the potential for positive effects to human health by providing safe and hygienic facilities for visitors to use.</p>








**Objective 6: To manage visitors to Sceilg Mhichíl effectively.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p><b>A6.11:</b> Continue to balance the need to preserve the National Monument and facilitate public access through the operation of the boat permit scheme for landing visitors on the island during the visitor season.</p> <p><b>A6.12:</b> Work on the provision of toilet facilities on the island, based in the compound around the lower lighthouse.</p>	<p>through addressal of this balance, biodiversity features may be negatively impacted.</p> <p>A6.12 makes provision for works to occur on Sceilg Mhichíl, which could potentially disturb any nearby birds in the vicinity from the noise they generate. It is likely that any such disturbance event would not be significant however, due to the localised nature of the works and existing levels of ambient noise in the site reducing its reach.</p> <p><b>Alternative Recommendations</b></p> <p><i>We recommend that Action 6.1 instead reads as: 'Continue to balance the need to preserve the integrity of the National Monument, Nature Reserve and SPA at Sceilg Mhichíl while allowing a system of managed public access so as to ensure the conservation of the World Heritage Site and Sceilg Mhichíl's other Statutory Designations are maintained as a first priority over public access'.</i></p> <p><i>We recommend that Action 6.4 reads as: 'Collect Visitor Statistics for each season and analyse trends in order to</i></p>		<p>has been considered as background in the assessment of this objective.</p> <p>Predicted impact of this objective considered to be a direct positive effect.</p>				<p>There is no clear pathway for effect, positive or negative, between Action A6.8 and population and human health.</p> <p><b>Mitigation recommendation</b></p> <p><i>Applicable mitigation proposed in NIS: M15, M7 see Appendix E.</i></p>

**Objective 6: To manage visitors to Sceilg Mhichíl effectively.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
	<p><i>provide quality management information. Publish annual statistics and analytical report online.</i></p> <p><i>We recommend that Action 6.6 reads as: 'Continue to regularly review both the patterns of movement across the site and whether the 180 visitors per-day limit is sustainable, with regards to the cultural and natural heritage features of the site and to visitor safety.'</i></p> <p><i>We recommend that Action 6.8 reads as: 'Implement a ban on general recreational drone (UAV) usage from an exclusion zone of 1km surrounding Skelligs SPA and create a process for evaluating and authorising appropriate and responsible drone use within this area.'</i></p> <p><i>We recommend that Action 6.11 reads as: 'Continue to balance the need to preserve the cultural and natural heritage designated features of Sceilg Mhichíl and facilitate public access through the operation of the boat permit scheme for landing visitors on the island during the visitor season.'</i></p>						

**Table C-8 Assessment of Objective 7**

<b>Objective 7: To maintain an appropriate standard of safe, regulated visitor access system that supports conservation aims.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.  Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.  Prevent introduction of invasive species to Sceilg Mhichíl.  Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.  Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner.  Improve the safety of staff and visitors to Sceilg Mhichíl.  Protect and improve visitor experience to Sceilg Mhichíl.
<b>A7.1:</b> Continue to address, in cooperation with boat operators and the Marine Survey Office of the Department of Transport, safety issues relevant to the sea crossing.  <b>A7.2:</b> Continue the ongoing review of the criteria for the granting of permits for boats to land visitors on the island to ensure that the system	  The majority of these Actions will have a neutral effect on the Biodiversity of the study area.  A7.4 and A7.8 may detract from the SEA objectives, however.	  Maintenance of the pier and steps leading to the monastery during the visitor season, as detailed in A7.8, will aid in ensuring these structures and	  As in Objective 6, visitor numbers pose impacts to the material cultural heritage and historical integrity of the island. Hence, the regulation of visitors is considered to be a beneficial proposal for the wider cultural	  Action 7.9, in restricting access to the South Peak where the route is not as clearly demarcated by steps and requires	  The listed Actions have no strong links to the landscape and visual amenity. Predicted impact of this objective considered to be a neutral effect.	  Action 7.1 will aid in ensuring the crossing to Sceilg Mhichíl remains safe for the vessels that currently operate the route. Action 7.8 will ensure that that the existing pier and	  Actions 7.1 and 7.4-7.9 will have a positive effect on the SEA Objectives for population and human health, while Actions 7.2 and 7.3 may detract from the SEA Objectives.

**Objective 7: To maintain an appropriate standard of safe, regulated visitor access system that supports conservation aims.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p>adapts to any changing circumstances.</p> <p><b>A7.3:</b> Collect visitor-traffic data and analyse trends with a view to providing quality data for informed decision-making.</p> <p><b>A7.4:</b> Maintain the current minimum time limit of two and a half hours for visits to the island on days when normal weather conditions prevail to improve the visitor experience.</p> <p><b>A7.5:</b> Continue to work with emergency response agencies to prepare and train for a variety of serious accident and rescue scenarios.</p> <p><b>A7.6:</b> Train guide staff appropriately and maintain regular personal-competency certifications.</p> <p><b>A7.7:</b> Entrust OPW, as site manager, with the maintenance of an up-to-date safety statement for the island, in accordance with health and safety legislation, and continue to use appropriate risk-assessment modelling on the island to plan for visitor and staff safety.</p>	<p>The presence of visitors on the island for a minimum of two-and-a-half hours could lead to disturbance of burrowing nesting seabirds present near the designated visitor pathways. Reducing this minimum time however may lead to visitors feeling rushed on their visit, potentially leading to instances where individuals may inadvertently cause damage to habitat. As such the possible negative is offset by the possible positive effects.</p> <p>A7.8 makes provision for the maintenance of the pier and steps leading to the monastery during the visitor season, with such works potentially disturbing burrowing nesting birds nearby. Such works would be very localised and occur over a short period of time however, ensuring any</p>	<p>pathways remain resilient to the effects of climate change on the site.</p> <p>The remaining Actions will have a neutral effect on the adaptation to climate change within the study area.</p>	<p>heritage as proposed by actions A7.2, A7.3, A7.4, and A7.9.</p> <p>Proposals for visitor safety as set out in actions A7.1, A7.5, A7.6, A7.7 and A7.8 and 7.9 are important but have no strong links to the protection of the island's specific cultural heritage.</p> <p>Predicted impact of this objective considered to be a direct positive effect and specific safety issues are considered neutral in respect of the cultural heritage.</p>	<p>venturing over natural habitat, should aid in minimising erosion events at this section of the site.</p> <p>The remaining Actions will have a neutral effect on the minimising of erosion within the study area.</p>		<p>pathways on Sceilg Mhichíl are protected from damages that may occur during the visitor season.</p> <p>The remaining Actions will have a neutral effect on the protection of the material assets/infrastructure within the Study Area.</p>	<p>Action 7.1 will aid in ensuring the crossing to Sceilg Mhichíl remains safe for the vessels that operate the route and for visitors to the island. This will have a direct positive impact on the safety of visitors to Sceilg Mhichíl.</p> <p>Action 7.4 may have a potential positive effect to health and safety of visitors and for visitor experience ensuring sufficient time in order to explore the island.</p> <p>Action 7.5 will have a positive effect on the health and safety of visitors the island by ensuring an emergency response is in place should it be required.</p> <p>Action 7.6 has the potential to help meet the SEA objectives and have positive benefits to the health and safety of visitors and visitor experience by having appropriately trained staff experienced in health and safety and knowledge the island.</p>










**Objective 7: To maintain an appropriate standard of safe, regulated visitor access system that supports conservation aims.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p><b>A7.8:</b> Continue to ensure safe access to the island during the season by regular maintenance of the pier and steps during the official visitor season and ensure that appropriate signage is in place at the pier and at the steps to the South Peak.</p> <p><b>A7.9:</b> Maintain an appropriate access arrangement for the South Peak in particular that recognises its particularly challenging nature; ensure that casual visitor access is controlled.</p>	<p>impact would not cause significant disturbance.</p>						<p>Action 7.7 has the potential to provide positive benefits for the health and safety of visitors ensuring appropriate safeguards are in place to keep visitors safe. It is recommended that the safety statement and annual health and safety statistics are monitored and published annually in order to continually improve and review health and safety measures and performance.</p> <p>Action 7.8 will have a positive effect on the health and safety of visitors ensuring that that they are aware of the dangers of the island and reduce risks of disembarking from boats when landing on the island.</p> <p>Action 7.9 has the potential to have positive effects for the health and safety of visitors ensuring appropriate access for the South Peak. This action however should</p>

**Objective 7: To maintain an appropriate standard of safe, regulated visitor access system that supports conservation aims.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
							<p>outline what appropriate access would be and how visitor access would be controlled</p> <p>Action 7.2 and 7.3 may detract from the SEA objective as its current wording does not address the issues of boat clustering in the mornings and afternoons. The boat clustering has potential negative effects for the safety of visitors but also the visitor experience of the island.</p> <p><b>Mitigation recommendation</b></p> <p><i>Applicable mitigation proposed in NIS: M6 see Appendix E.</i></p>

**Table C-9 Assessment of Objective 8**

<b>Objective 8: To increase understanding of and appreciation for Sceilg Mhichíl and its environs.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.  Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.  Prevent introduction of invasive species to Sceilg Mhichíl.  Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.  Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner.  Improve the safety of staff and visitors to Sceilg Mhichíl.  Protect and improve visitor experience to Sceilg Mhichíl.
<b>A8.1:</b> Continue to publish, for public distribution, the multilingual visitor guide pamphlet interpreting the monastic and natural history of Sceilg Mhichíl.  <b>A8.2:</b> Maintain the website for Sceilg Mhichíl and continue to provide relevant information on the significance of the site, provide periodic updates on the implementation of the plan and to advise visitors	  A8.2 will aid in ensuring visitors are aware of the difficulties of the terrain of Sceilg Mhichíl, enabling them to prepare sufficiently for the trip. This in turn should have the indirect benefit of ensuring	  The listed Actions have no strong links to the adaptation to the predicted effects of climate change Predicted impact of this	  The dissemination of correct quality information and knowledge is a core principle of archaeological research. This objective proposes several methods of dissemination of such	  A8.2 will aid in ensuring visitors are aware of the difficulties of the terrain of Sceilg Mhichíl, enabling them to prepare sufficiently for the trip. This in turn	  The listed Actions have no strong links to the landscape and visual amenity. Predicted impact of this objective considered to be a neutral effect.	  A8.2 will aid in ensuring visitors are aware of the difficulties of the terrain of Sceilg Mhichíl, enabling them to prepare sufficiently for the trip. This in turn	  A8.1, A8.2, A8.4 and A8.7-A8.8 will have a positive effect on the SEA Objectives for population and human health.  A8.1 will have a direct positive effect on the SEA objectives with the








**Objective 8: To increase understanding of and appreciation for Sceilg Mhichíl and its environs.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p>how to prepare for a safe visit to the island.</p> <p><b>A8.3:</b> Enhance the dissemination of information on Sceilg Mhichíl by providing materials in diverse media and meeting any reasonable requests for information insofar as possible.</p> <p><b>A8.4:</b> Work to create an education outreach programme within the context of the landside facilities being contemplated at the Skellig Experience Visitor Centre in Portmagee, linking to schools and other educational institutions.</p> <p><b>A8.5:</b> Continue to support and give natural history public lectures/case study seminars on the conservation works and the history of the island.</p> <p><b>A8.6:</b> Promote public awareness of other heritage sites of importance in the area in order to broaden visitor experience; provide resources to support this</p>	<p>visitors are aware of the importance of adhering to the designated pathways within the site.</p> <p>A8.2 would benefit, however, from the inclusion of a link to the Sceilg Mhichíl website, to ensure it is clear to the reader of the Plan where the correct website is located.</p> <p>Action 8.7, through encouraging groups to visit other natural heritage features on the Irish mainland, may reduce the pressure in visitor numbers to the site, potentially aiding in slowing/reducing the recent rise in visitor numbers to the site.</p> <p>The other listed Actions do not present a clear pathway for effect and are expected to have a neutral effect.</p> <p><b>Alternative Recommendations</b></p> <p><i>We recommend that Action 8.2 reads as: 'Maintain the website for Sceilg Mhichíl [Please</i></p>	<p>objective considered to be a neutral effect.</p>	<p>knowledge through a variety of methods to different audiences through proposed actions A8.1–A8.5 and A8.8. These proposed actions are considered beneficial to the cultural heritage resource of the island.</p> <p>A8.6 and A8.7 propose to broaden the scope of cultural heritage interest in Sceilg Mhichíl to the mainland of the Iveragh Peninsula. This would be beneficial in that it would provide a knowledge base of the cultural heritage of the wider region, while also reflecting the island's zone of influence. In more practical terms these actions may also indirectly result in releasing some of the pressure on the island by distributing increasing visitor numbers across more attractions.</p> <p>Predicted impact of this objective considered to be a direct and indirect positive effect.</p>	<p>should have the indirect benefit of ensuring visitors are aware of the need to remain on the designated pathways, reducing the potential for visitors to venture from the path and damage areas susceptible to erosion.</p> <p>The remaining Actions will have a neutral effect on the minimising of erosion within the study area</p>		<p>should have the indirect benefit of ensuring visitors are appropriately equipped for their trip to the site, reducing the potential for damage to the existing infrastructure to occur.</p> <p>The remaining Actions will have a neutral effect on the protection of the material assets/infrastructure within the Study Area.</p>	<p>distribution of multilingual visitor guides supporting the site's status as a world heritage site.</p> <p>A8.2 will a direct positive benefit to the health and safety of visitors providing information of how to visit the island safely and will contribute to the achievement of the SEA objectives.</p> <p>A8.4 may have a direct positive effect on population and human health by creating opportunities for local people as part of an education outreach programme.</p> <p>A8.7 may provide benefits to the local population providing additional opportunities as part of local Initiatives.</p> <p>A8.8 will help achieve the SEA objectives ensuring that visitor experience is protected, having an indirect positive effect.</p> <p>There is no clear pathway for effect between Actions A8.3, A8.5 and A8.6 and</p>

**Objective 8: To increase understanding of and appreciation for Sceilg Mhichíl and its environs.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p>in the Skellig Experience Visitor Centre in Portmagee in particular.</p> <p><b>A8.7:</b> Support and incentivise local initiatives, such as organised walks/tours of historical and biodiversity sites of interest, in the Iveragh Peninsula.</p> <p><b>A8.8:</b> Liaise with Fáilte Ireland and any other appropriate third parties to ensure high-quality information and offsite interpretation for visitors is provided where appropriate, including in the Skellig Experience Visitor Centre.</p>	<p><i>insert website and webpage address] and continue to provide relevant information on the significance of the site, provide periodic updates on the implementation of the plan and to advise visitors how to prepare for a safe visit to the island'.</i></p>						<p>population and human health.</p>

**Table C-10 Assessment of Objective 9**








<b>Objective 9: To maintain and enhance the landscape setting of Sceilg Mhichíl.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.  Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.  Prevent introduction of invasive species to Sceilg Mhichíl.  Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.  Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner.  Improve the safety of staff and visitors to Sceilg Mhichíl.  Protect and improve visitor experience to Sceilg Mhichíl.
<b>A9.1i):</b> Design alternative onsite accommodation based in the lower lighthouse.  <b>A9.1ii):</b> Ensure the design of temporary work huts is in keeping with the landscape of the island.  <b>A9.2:</b> Maintain the current waste-management strategy, agreed with Kerry County Council, for the recycling and removal of waste.  <b>A9.3:</b> Continue regular liaison with the local-	  Action 9.2 aids in reducing any potential food sources for invasive species on Sceilg Mhichíl, limiting their ability to spread, having a direct positive effect.  Actions 9.1ii) and 9.3 does not present a clear pathway for effect and are expected to have a neutral effect.  Actions 9.1i) and 9.4 could detract from the SEA	  The listed Actions have no strong links to the adaptation to the predicted effects of climate change Predicted impact of this objective considered to be a neutral effect.	  The maintenance and enhancement of the landscape/seascape of Sceilg Mhichíl is important. The actions proposed in A9.1i, A9.1ii and A9.4 are proposed to improve the visual aspects of necessary facilities. These actions are considered to be beneficial to the cultural heritage.	  The listed Actions have no strong links to the soils of Sceilg Mhichíl. Predicted impact of this objective considered to be a neutral effect.	  These Actions all aim to conserve the natural landscape of Sceilg Mhichíl where possible, through the future consolidation of existing structures on the site to the lower lighthouse complex, maintaining the current structures aesthetics to remain	  Actions 9.1i) and 9.4 will ensure the existing historic lower lighthouse complex is maintained and enhanced moving into the future, protecting the complex to be used for future generations.	  Action A9.4 has the potential for direct positive benefits to human health by providing dedicated toilet facilities to the island which will help achieve the safety and visitor experience objectives.  There is no clear pathway for effect,

**Objective 9: To maintain and enhance the landscape setting of Sceilg Mhichíl.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
authority Environmental Officer. <b>A9.4:</b> Design and build visitor toilet facilities in the lower lighthouse compound.	Objectives. This may occur during building works due to be undertaken on the island, which could potentially disturb any nearby birds in the vicinity from the noise they generate. It is likely that any such disturbance event would not be significant however, due to the localised nature of the works and existing levels of ambient noise in the site reducing its reach.		Actions A9.2, A9.3 have no strong links to the protection of the island's specific cultural heritage.  Predicted impact of this objective considered to be direct and indirect positive effects and a neutral effect.		in-keeping with the landscape and continued removal of waste from the site.	The remaining Actions will have a neutral effect on the protection of the material assets/infrastructure within the Study Area.	positive or negative, between the remaining actions and population and human health.










**Table C-11 Assessment of Objective 10**

<b>Objective 10: To monitor those factors with the potential to impact on the built and natural environment of Sceilg Mhichíl.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.  Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.  Prevent introduction of invasive species to Sceilg Mhichíl.  Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.  Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner.  Improve the safety of staff and visitors to Sceilg Mhichíl.  Protect and improve visitor experience to Sceilg Mhichíl.
<b>A10.1:</b> Develop a framework for monitoring climate change.  <b>A10.2:</b> Ensure that any possible impact of climate change on Sceilg Mhichíl is monitored and taken into account in the development of the National Climate Change Strategy.	  These Actions, in-combination, will aid in reducing the potential effects of climate change on Sceilg Mhichíl, protecting its natural habitat and therefore the flora and fauna also found here.	  These Actions will each aid in the adaptation of Sceilg Mhichíl to the predicted effects of climate change moving into the future. For example, a	  Climate change and its effects is considered to be an increasing negative predicted impact on the cultural heritage of the island. The proposed actions A10.1–A10.4 intend to monitor such impacts	  These Actions will allow for areas susceptible to erosion and rockfall to be monitored, so that erosion events may be minimised or prevented entirely.	  Through reducing the potential future impacts of climate change on Sceilg Mhichíl, adverse effects on the landscape and seascape of the site may be mitigated	  Reducing the potential effects of climate change and monitoring the decay of existing structures on Sceilg Mhichíl will aid in ensuring the existing	  Consideration of climate change will have indirect positive benefits to the local population and human health, through the potential improvement to

**Objective 10: To monitor those factors with the potential to impact on the built and natural environment of Sceilg Mhichíl.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p><b>A10.3:</b> Monitor the change of structures using technical assistance as required.</p> <p><b>A10.4:</b> Monitor, on an ongoing basis, other factors that may impinge on the built and natural environment.</p>		<p>monitoring programme may allow for the identification of areas potentially susceptible to events such as rockfalls in the event of extreme storm events, allowing for proactive works to be undertaken to reduce the effects of such a storm.</p>	<p>over time to gather data on the effects of long- term climate change on the cultural heritage over the life of the Plan. This is considered to be beneficial to the cultural heritage of the island, in particular action A10.3.</p> <p>Predicted impact of this objective considered to be a direct positive effect.</p>		<p>against/avoided entirely.</p>	<p>infrastructure on the island is protected where possible.</p>	<p>safety on the island as a result of monitoring the effects of climate change.</p>








**Table C-12 Assessment of Objective 11**

<b>Objective 11: To establish a research framework for Sceilg Mhichíl.</b>							
<b>Topics</b>	<b>Biodiversity, flora and fauna</b>	<b>Climatic factors</b>	<b>Cultural, architectural &amp; archaeological heritage</b>	<b>Soil</b>	<b>Landscape and visual amenity</b>	<b>Material assets and infrastructure</b>	<b>Population and human health</b>
<b>SEA Objectives</b>	Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas. Minimise impact of noise from vessels and helicopters on seabirds and marine mammals. Prevent introduction of invasive species to Sceilg Mhichíl. Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.	Contribute to effective adaptation to the predicted effects of climate change.	Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape. Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.	Minimise the impact of soil and coastal erosion	Protect the landscape/seascape character and visual amenity in the vicinity of the area.	Protect and enhance the existing infrastructure present on Sceilg Mhichíl.	Improve economic opportunities for the local community in a sustainable manner. Improve the safety of staff and visitors to Sceilg Mhichíl. Protect and improve visitor experience to Sceilg Mhichíl.
<b>A11.1:</b> Support any relevant national research programmes. <b>A11.2:</b> Establish a research framework that would encourage involvement from third-level institutions and other interested parties. <b>A11.3:</b> Complete the research programme on geology and historic quarrying.	 A11.1, A11.2 and A11.7 present no clear pathway for effect, positive or negative, between themselves and the conservation of the biodiversity, flora and fauna of the study area. A11.3-A11.6 could however, potentially have a detrimental effect on the natural features of Sceilg Mhichíl, with the	 The listed Actions have no strong links to the adaptation to the predicted effects of climate change Predicted impact of this objective considered to	 It is noted in the assessment that the other WHS in the Republic Brú na Bóinne, has a research framework in place (Smyth, 2009) and this has been considered in the context of this proposed objective. A similar approach to a	 The listed Actions have no strong links to the soils of Sceilg Mhichíl. Predicted impact of this objective considered to be a neutral effect.	 The listed Actions have no strong links to the landscape and visual amenity. Predicted impact of this objective considered to be a neutral effect.	 The listed Actions have no strong links to the material assets and infrastructure. Predicted impact of this objective considered to be a neutral effect.	 A11.7 will have a direct positive effect on the visitor experience to Sceilg Mhichíl through the dissemination of research findings to the public. There is no clear pathway for effect between the

**Objective 11: To establish a research framework for Sceilg Mhichíl.**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p><b>A11.4:</b> Complete research on water collection and management.</p> <p><b>A11.5:</b> Complete the programme of vegetation surveys and investigation of plant species which may have been cultivated by the monks.</p> <p><b>A11.6:</b> Complete research into the development of drystone construction based on the work being carried out on the monastic structures.</p> <p><b>A11.7:</b> Enhance visitors experience of visiting the island by supporting research and ensuring that the results are disseminated.</p>	<p>presence of researchers venturing into areas away from the designated pathways potentially causing disturbance of the resident bird population and damage to existing habitat. Due to the likely minimal number of individuals required to conduct such studies and the requirement for such programmes to be approved by the bodies responsible for the management of the site however, any impacts would likely be negligible in significance.</p> <p><b>Mitigation recommendation</b></p> <p><i>Applicable mitigation proposed in NIS: M3 see Appendix E.</i></p>	<p>be a neutral effect.</p>	<p>research framework for Sceilg Mhichíl would be very beneficial to the cultural heritage of the island and the proposed actions A11.1 and A11.2 would achieve this.</p> <p>Other actions proposed would enhance knowledge of aspects of the cultural heritage, i.e. A11.3, A11.6 (historic stone and construction); A11.4 (historic water uses); A11.5 (historic plant uses).</p> <p>Proposed action A11.7 ensures that up-to-date knowledge would be disseminated. This supports Objective 8 above.</p> <p>Predicted impact of this objective considered to be a direct positive effect.</p>				<p>remaining Actions and population and human health.</p>

**Table C-13 Assessment of proposed re-worded/new Actions**

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<b>SEA Objectives</b>	<p>Avoid damage to the biodiversity, flora and fauna of Sceilg Mhichíl, Sceilg Bheag and the surrounding seas.</p> <p>Minimise impact of noise from vessels and helicopters on seabirds and marine mammals.</p> <p>Prevent introduction of invasive species to Sceilg Mhichíl.</p> <p>Conserve and enhance the natural heritage of Sceilg Mhichíl and surrounding seas.</p>	<p>Contribute to effective adaptation to the predicted effects of climate change.</p>	<p>Conservation and protection of the extensive archaeological and architectural resources of a historic landscape/seascape.</p> <p>Ensuring any physical interventions are appropriate, reflective and in keeping with the archaeological and architectural landscape/seascape.</p>	<p>Minimise the impact of soil and coastal erosion</p>	<p>Protect the landscape/seascape character and visual amenity in the vicinity of the area.</p>	<p>Protect and enhance the existing infrastructure present on Sceilg Mhichíl.</p>	<p>Improve economic opportunities for the local community in a sustainable manner.</p> <p>Improve the safety of staff and visitors to Sceilg Mhichíl.</p> <p>Protect and improve visitor experience to Sceilg Mhichíl.</p>
<p><b>Action 4.1:</b> Prepare site-specific conservation objectives for the bird species for which the Skelligs SPA has been designated.</p> <p>Include quantitative conservation objectives attributes and targets.</p> <p><b>Action 4.10:</b> Exclude recreational and other non-essential helicopter flights from an exclusion zone of 1km surrounding Skelligs SPA.</p>	 <p>Actions 4.1, 4.11, 6.1, 6.6, 6.8, 6.11 and 4.15 will have a positive effect in the SEA Objectives for biodiversity, flora and fauna.</p> <p>Action 4.1 will ensure that any conservation objectives developed for each species</p>	 <p>The listed Actions have no strong links to the adaptation to the predicted effects of climate change</p> <p>Predicted impact of this objective</p>	 <p>Actions 6.1 and 6.11 will ensure that the conservation of the cultural heritage features of the site are given priority over public access to such features, having</p>	 <p>The listed Actions have no strong links to the soils of Sceilg Mhichíl.</p> <p>Predicted impact of this objective considered to be a neutral effect.</p>	 <p>The listed Actions have no strong links to the landscape and visual amenity.</p> <p>Predicted impact of this objective considered to be a neutral effect.</p>	 <p>The listed Actions have no strong links to the material assets and infrastructure.</p> <p>Predicted impact of this objective</p>	 <p>Action 4.11 and 6.8 will prevent helicopters and drones from flying within 1km of Skelligs SPA. This will ensure that visitors are not disturbed by the</p>

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p><b>Action 6.1:</b> Continue to balance the need to preserve the integrity of the National Monument, Nature Reserve and SPA at Sceilg Mhichíl while allowing a system of managed public access so as to ensure the conservation of the World Heritage Site and Sceilg Mhichíl's other Statutory Designations are maintained as a first priority over public access.</p> <p><b>Action 6.4:</b> Collect Visitor Statistics for each season and analyse trends in order to provide quality management information. Publish annual statistics and analytical report online.</p> <p><b>Action 6.6:</b> Continue to regularly review both the patterns of movement across the site and whether the 180 visitors per-day limit is sustainable, with regards to the cultural and natural heritage features of the site and to visitor safety.</p> <p><b>Action 6.8:</b> Implement a ban on general recreational drone (UAV) usage from an exclusion zone of 1km surrounding Skelligs SPA and create a process for</p>	<p>include quantitative targets and indicators that can be assessed in the future to accurately determine the conservation status of the SCIs of Skelligs SPA. This Action will therefore have an indirect positive effect.</p> <p>Action 4.11 and 6.8 will exclude helicopters and drones from within 1km of Skelligs SPA. This will prevent birds from being disturbed by the noise generated by these aircraft, prevent the downdraft from rotors buffeting individuals and displacing them, and reduce the potential for bird strikes to occur in the skies above Sceilg Mhichíl. These Actions will have a direct positive effect.</p> <p>Action 6.1 and 6.11 will ensure that the natural heritage features of the site have equal conservation priority with the sites other designating features and ensure their priority over public access to the site. This Action will therefore have an indirect positive effect.</p>	<p>considered to be a neutral effect.</p>	<p>a direct positive effect.</p> <p>Action 6.6 will ensure that visitor numbers remain sustainable for the conservation of the cultural heritage features, having an indirect positive effect.</p> <p>The remaining Actions have no strong links to the Cultural, Architectural &amp; Archaeological Heritage, and will have a neutral effect.</p>			<p>considered to be a neutral effect.</p>	<p>noise of circulating helicopters, having a direct positive effect.</p> <p>Actions 6.4, 2.5 and 8.2 will enable information and reporting on Sceilg Mhichíl to be released publicly online, increasing the transparency of decision making for the site. They will therefore have a direct positive effect.</p> <p>The remaining Actions have no strong links population and human health and will have a neutral effect.</p>

Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
<p>evaluating and authorising appropriate and responsible drone use within this area.</p> <p><b>Action 6.11:</b> Continue to balance the need to preserve the cultural and natural heritage designated features of Sceilg Mhichíl and facilitate public access through the operation of the boat permit scheme for landing visitors on the island during the visitor season.</p> <p><b>Action 8.2:</b> Maintain the website for Sceilg Mhichíl [<a href="http://worldheritageireland.ie">worldheritageireland.ie</a>] and continue to provide relevant information on the significance of the site, provide periodic updates on the implementation of the plan and to advise visitors how to prepare for a safe visit to the island.</p> <p><b>Action 2.5:</b> Make publicly available existing and future reports on Sceilg Mhichíl via a dedicated website page for Sceilg Mhichíl.</p> <p><b>Action 4.14:</b> Develop guidance for boat operators to follow to reduce potential impacts on wildlife on Sceilg</p>	<p>Action 6.6 will ensure that current 180 visitor per-day limit to the site is sustainable for the site's natural heritage features, and if not will ensure the limit is altered to a sustainable number. This Action will therefore have an indirect positive effect.</p> <p>Action 4.15, through appropriate awareness campaigns with boat operators and the public, will help to reduce the potential for the increasing number of vessels that transit around Sceilg Mhichíl to disturb the wildlife that is found in these seas, thus having an direct positive effect.</p> <p>The other listed Actions do not present a clear pathway for effect and are expected to have a neutral effect.</p>						



Topics	Biodiversity, flora and fauna	Climatic factors	Cultural, architectural & archaeological heritage	Soil	Landscape and visual amenity	Material assets and infrastructure	Population and human health
Mhichíl, and in the surrounding waters.							

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# APPENDIX D

## Consultation responses

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**Table D-1 Summary of consultation responses**

Consultee	Summary of response	How comments have been addressed
Department of Agriculture, Food and the Marine	<p>The Department of Agriculture, Food and the Marine (DAFM) commented on one inaccuracy in the wording regarding fishing on Page 115 of the Proposed Plan. In reference to site specific operations or Activities Requiring Consent listed in S.I. No. 74/2010 - European Communities (Conservation of Wild Birds (Skelligs Special Protection Area 004007)) Regulations 2010, the Proposed plan lists those activities requiring a licence. This list includes 'fishing by any type of nets'.</p> <p>Such actions are notifiable to the Minister for DHLGH only if the actions are not licenced by another Government Minister, in this case the Minister of Agriculture, Food and the Marine. All commercial fishing is licenced by the Minister, so they are not activities requiring consent.</p>	<p>Fishing by any type of nets" is listed in Schedule 4 of S.I. No. 74/2010 - European Communities (Conservation of Wild Birds (Skelligs Special Protection Area 004007)) Regulations 2010 (<a href="http://www.irishstatutebook.ie/eli/2010/si/74/made/en/print">http://www.irishstatutebook.ie/eli/2010/si/74/made/en/print</a>). This list has been reproduced in the plan and cannot be changed without updating the S.I. that designates the site.</p>
Environmental Protection Agency	<p>The Environmental Protection Agency (EPA) promote the full and transparent integration of the findings of the Environmental Assessment into the Plan and provide specific comments focused primarily on the EPA's remit and areas of expertise (e.g. water, air, climate change, waste and noise).</p> <p>Scope of SEA</p> <p>This submission highlights key environmental issues for considerations relating to the scope of the SEA, including infrastructure related considerations, transport, climate change resilience, biodiversity, ecosystem services and green infrastructure, water quality, landscape, and geology.</p>	<p>The Scope and remit of the SEA has been described in Section 1.5 of the SEA ER. The Plan is for the management of the Sceilg Mhichíl UNESCO World Heritage Site therefore primarily focuses on the island of Sceilg Mhichíl (and where appropriate, includes Sceilg Bheag). Since some of the Actions in the Proposed Plan relate to the boat operators transiting to and around the island, the sailing routes from the three piers, Portmagee, Ballinskelligs and Derrynane to Sceilg Mhichíl and the waters surrounding the Skelligs have also been included. The remit of the plan does not cover the Sceilg Experience Visitor Centre, the piers or any other mainland infrastructure.</p> <p>The findings of the SEA which seek to amend the plan have been listed in Section 5 of this report.</p> <p>The issues highlighted by the EPA for the relevant topics discussed (climate change resilience, biodiversity, invasive alien species control and management, landscape and geology) have been considered.</p>

Consultee	Summary of response	How comments have been addressed
EPA	<p>Integration with other key Plans and programmes</p> <p>EPA recommend including schematics in the Plan and SEA ER, showing the links and key inter-relationships with other key relevant national, regional, sectoral and environmental plans. Additional plans to consider for inclusion have been provided.</p>	<p>A cumulative effects assessment has been conducted in Section 4.4 of this report, which details what, if any, effects may arise from the implementation of the Proposed Plan in-combination with other relevant regional plans and policies.</p> <p>Appendix A of this report lists all the P/P which have been reviewed alongside the Proposed Plan, identifies their environmental objectives and summarises how they affect or are affected by the Proposed Plan.</p> <p>The additional plans provided by the EPA have been considered and added to Appendix A.</p>
EPA	<p>Alternatives</p> <p>The EPA Note in Section 3.2 of the SEA Scoping Report, that it is likely that some of the actions will be prioritised over others. There would be merit in considering the options regarding the prioritisation of the implementation of the Plan actions in the assessment of alternatives.</p>	<p>The potential prioritisation of Actions in the Proposed Plan has been considered in the mitigation measures proposed in the NIS that accompanies this report.</p>
EPA	<p>Sustainable Development Goals</p> <p>The Plan should be consistent with, and contribute to achieving, relevant UN Sustainable Development Goals (SDGs). Relevant targets and actions in Ireland's SDG Implementation Plan (DCCAE, 2018) should be reflected as appropriate in the Plan. This is with a view to ensuring that future tourism-related development is planned and managed within the context of the wider sustainable development agenda.</p> <p>The Plan should be aligned with the relevant objectives and policy commitments of the National Planning Framework, the Regional Spatial and Economic Strategy for the Southern Region, Kerry County Development Plan and West Iveragh LAP. The National Marine Policy Framework and the Draft National Marine Planning Framework should also be considered.</p>	<p>The Proposed Plan has been developed in the context of Ireland's SDG Implementation Plan, with Objective 6 of Proposed Plan (and its associated Actions) aiming to ensure that visitor access to Sceilg Mhichíl is conducted in a sustainable manner.</p> <p>The Proposed Plan is aligned with the listed plans and policies and has been developed in accordance with their relevant objectives and commitments.</p>

Consultee	Summary of response	How comments have been addressed
EPA	<p>Community Engagement</p> <p>One of the key messages from our State of the Environment Report (EPA, 2016) is the importance and value of Community Engagement. In preparing the Plan and carrying out the SEA (including developing alternatives), the need to proactively engage local communities should be a core consideration.</p>	<p>Objective 8 of the Proposed Plan and its associated Actions seeks to further increase the understanding of and appreciation for Sceilg Mhichíl and its environs. This will be achieved through Actions such as developing an education outreach programme for local schools and pursuing broader public engagement through the use of public lectures, seminars and conferences, among other Actions to be implemented.</p>
EPA	<p>Transition to a low carbon climate resilient economy and society</p> <p>The Plan should align with national commitments on climate change mitigation and adaptation, as well as any relevant sectoral, regional and local adaptation plans.</p>	<p>Objective 10 of the Proposed Plan (and its associated Actions) has been developed in accordance with relevant national policy such as the National Adaptation Framework 2018, along with regional plans such as the Kerry County Development Plan 2015 – 2021.</p>
EPA	<p>Integration of SEA and Plan</p> <p>All recommendations from the SEA and AA processes, including mitigation measures and the SEA environmental monitoring programme, should be integrated in the Plan by way of a specific actions.</p> <p>We recommend that the Plan includes summary tables outlining the key findings of the SEA and linking the significant environmental effects identified with the proposed mitigation measures, environmental monitoring programme and Plan objectives/actions.</p>	<p>Section 5 of the SEA ER details the re-wording of Actions, addition of new Actions and mitigation measures proposed as a result of the assessment conducted for this report. The Proposed Plan has already been updated with the eight re-worded Actions and two new Actions, which were identified in the SEA ER. Integration of the SEA and NIS conclusions with the Proposed Plan will be completed when the Plan is finalised after all responses to the consultation have been considered.</p>

Consultee	Summary of response	How comments have been addressed
EPA	<p><b>Monitoring, Review &amp; Reporting</b></p> <p>The Plan should include a commitment to implement the SEA environmental monitoring programme and associated reporting. We suggest including a separate section on 'Monitoring, Review and Reporting' in the Plan, setting out the provisions for monitoring and reporting on the implementation phase of the Plan as well as periodic reviews.</p> <p>There may be merits, where feasible, in aligning the periodic reviews of the Plan with existing cyclical reporting e.g. Ireland's Environment, National Planning Framework, Water Framework Directive, Marine Strategy Framework Directive etc. The commitment to monitoring included in Objective 10 of the Draft Plan is acknowledged. This could be further informed by the findings of the SEA and AA and the respective monitoring recommendations.</p> <p>The SEA-related monitoring should address positive, negative and cumulative effects where they are likely to occur and should include provision for on-going review to facilitate an early response to any environmental issues that may arise.</p> <p>The Environmental Report should specify the monitoring frequency and responsibilities and include provisions for reporting on the monitoring. To avoid duplication in data collection, the same environmental indicators should be used for the plan-related and SEA-related monitoring, where possible.</p> <p>The Plan should include a commitment to monitoring visitor numbers and to incorporate these into the Plan-implementation and SEA-related monitoring and associated reporting. This is with a view to assessing the potential environmental effects which may occur with increased tourism numbers. It may also assist in determining the capacity of sensitive areas to accommodate visitor numbers at a given time, and during sensitive seasons.</p>	<p>The SEA ER has a separate section on Monitoring, Section 5.2, which details those Actions of the Proposed Plan that require monitoring of their outputs, the indicators of their progress and approximate timescales within which each indicator should be completed/achieved. This is presented in Table 5-3: Framework for the monitoring of specific Actions of the Proposed Plan. The targets, indicators and timescales detailed in Table 5-3 have been incorporated into the Proposed Plan, Appendix 1: Summary of Action Programme 2020–2030 of the Proposed Plan.</p> <p>After public consultation has concluded and any revisions to the consultation documents have been made, the conclusions of the SEA and NIS will be included as an appendix in the Final Plan.</p>

Consultee	Summary of response	How comments have been addressed
EPA	<p>Consideration should be given to the merits and feasibility of developing an Environmental Management System and associated documentation, for investigative, conservation and related works being undertaken on Sceilg Mhichíl (and where relevant and appropriate on Sceilg Bheag).</p> <p>This could cover aspects such as fuel storage (where relevant), conservation materials, conservation related waste and general waste and, where relevant, invasive species. Relevant induction training could be provided to those involved in works at the Sceilg Mhichíl site. Procedures to be followed in the event of fuel spillages on Sceilg or in the surrounding waters could also be developed.</p>	<p>The current waste management procedures on Sceilg Mhichíl are detailed on page 51 of the Proposed Plan. The procedures for waste in relation to invasive species are detailed in the recommendations of the 2018 Skelligs Biosecurity Review, with the Proposed Plan following these recommendations to protect the site against invasive species incursion.</p> <p>It is considered that the development and implementation of a formal Environmental Management System for Sceilg Mhichíl is not required at this time due to the lack of material storage, low level of waste production and the existing waste management procedures that are in place as well as the small spatial and temporal scale of any works on the island.</p> <p>All works on the Lower Lighthouse complex, and its day-to-day running, will be conducted in a sustainable manner.</p>
EPA	<p>Scoping of SEA Topics</p> <p>For Biodiversity, Flora and Fauna, regarding potential environmental effects, we note the identified potential effects as listed. Biodiversity related aspects should also consider fisheries/ shellfisheries.</p> <p>While we note that 'Water' has been scoped out, there would be merits in considering the potential risk to water quality from implementation of the Plan. Relevant SEA Environmental Objective(s) and Plan action(s) should be assigned, as appropriate</p>	<p>A baseline of fisheries and shellfisheries has been incorporated in Appendix B.1: Biodiversity, Flora and Fauna.</p> <p>Following consultation with other key stakeholders and NMS, it was decided that Water Quality was outside the remit of the SEA.</p>
Geological Survey Ireland	<p>Geological Survey Ireland (GSI) provided comment on how the Geoheritage of Sceilg Mhichíl and Geohazards (e.g. landslides) should be incorporated into the report in addition to providing information on the CHERISH project and its plans for the planned survey of Sceilg Mhichíl. Comment was also provided on the re-wording of certain text in the Proposed Plan and how the CHERISH project may support the implementation of various Actions and outcomes detailed in the Proposed Plan.</p>	<p>The potential for rockfalls on Sceilg Mhichíl and their resulting effects has been considered in the SEA Assessment. Information pertaining to the Proposed Plan itself has been passed onto NMS for incorporation into future Plan revisions.</p>



Consultee	Summary of response	How comments have been addressed
Skellig Boatmen Association	Comment was provided on specific sections of the Proposed Plan, including the potential to extend the time period of the current visitor season into April, the extension of the current permit system from 3 to 5 years, the need for the Boatmen to be represented in the Group Review Committee, how Sceilg Mhichíl should be the focal point of the Plan as opposed to the development of tourism within the South Kerry region and that the current visitor numbers to the site are sustainable.	<p>The potential for the visitor season to be extended into April has been assessed in Section 4.1.1 of this report.</p> <p>Consultation with OPW highlighted that there are no current plans to extend the current permit system from 3 to 5 years, current arrangement provides a balance between allowing competition for new entrants while also lasting for a sufficiently long period to provide some stability to permit holders.</p> <p>Objective 2 of the Proposed Plan details how liaison with groups such as the Boatmen will be maintained and improved upon, for example with the creation of a Sceilg Mhichíl Stakeholder Forum to address issues of mutual interest and inform decision-making processes.</p> <p>While Objective 8 of the Proposed Plan contains individual Actions that aim to support other local initiatives in the local area on the Irish mainland, the overriding aim of the Objective is to spread awareness and appreciation of Sceilg Mhichíl itself.</p> <p>Through the SEA ER and NIS process, it has been determined that, with the re-wording/addition of new actions and mitigation measures, the current visitor numbers can be sustainable.</p>
Skellig Boatmen Association	Comment on Section 1.2.2, Task 1.2, Criteria no. 4 of the Scoping Report This states <i>"the number of visitors to the site and the increasing number of cruises travelling around the island is a key issue. This is having an impact on the site itself and visitor safety"</i> . The management plan already states that 180 visitors per day to Skellig Michael is sustainable. Also, the cruises around the island having a negative impact is surprising - can we get clarification on how this conclusion was determined.	Consultation responses from other key stakeholders highlighted concerns regarding the current 180 visitors per-day cap as potentially being problematic, and so was assessed in the SEA Assessment alongside the NIS that partners this submission. The statement regarding the effects of cruises travelling around the island was derived from discussion with key stakeholders and review of previous public consultation submissions from the Skellig Michael Management Plan – Public Consultation conducted in 2019.
Transport Infrastructure Ireland	Recommendations regarding general guidance in preparation of the SEA were provided. This general guidance related to SEA scoping issues that may have implications for the national road network.	As the Irish road network is outside the scope of the Proposed Plan, potential issues regarding the road network were not considered in the SEA.

Consultee	Summary of response	How comments have been addressed
Fáilte Ireland	<p>Fáilte Ireland provided specific observations and recommendations to be considered in the SEA which relate to Fáilte Ireland's remit and area of expertise i.e. The sustainable development of tourism. These included:</p> <p>Sustainability: it is imperative that alignment with international and national government policy on sustainable development forms the basis for environmental assessment of the Draft Plan for Sceilg Mhichíl World Heritage Site. The United Nations Sustainable Development Goals (SDG's) and "The Sustainable Development Goals National Implementation Plan 2018-2020" should be consulted as part of the assessment process.</p> <p>Consideration of the VICE (Visitor, Industry, Community &amp; Environment) Model for Sustainable Tourism when assessing the impacts on tourism;</p> <p>Consideration of the <i>"Operational Guidelines for the Implementation of the World Heritage Convention"</i> in the assessment;</p> <p>Ensuring a firm commitment to monitor and analyse the information resulting from review of sustainable visitor numbers be included in the proposed SEA monitoring programme,</p> <p>The consideration of People, Place &amp; Policy: Growing Tourism to 2025 (DDTAS), Tourism Action Plan (DDTAS) and the Skelligs Coast Visitor Experience Development Plan in the assessment process;</p> <p>The consideration of sustainable tourism as a fundamental and important aspect of the environment both of Sceilg Mhichíl itself and the wider geographical area; and</p> <p>The SEA monitoring programme that will result from the assessment process should be clear with respect to sources of information to be used and frequency of monitoring various indicators. It is important that the proposed monitoring is linked directly to the Management Plan and to its commitments to monitor and report in its own right. Fáilte Ireland would particularly welcome monitoring of visitor numbers, patterns of movement across the site, visitor behaviours and visitor management relative to the ongoing protection of the natural environment and enhancement of the visitor experience.</p>	<p>Tourism has been assessed under the SEA topic Population and Human Health.</p> <p>The sustainability of visitors to Sceilg Mhichíl is considered under Objective 6 of the Proposed Plan and its associated Actions. These Actions have been assessed in Appendix C, Table C-7 of this report.</p> <p>Appendix A lists all policies, plans and guidelines which are relevant to the Proposed Plan with descriptions of each provided. This list includes the VICE Model for Sustainable Tourism.</p> <p>Issues relating to sustainable tourism which have been assessed in the SEA include:</p> <ul style="list-style-type: none"> <li>▪ Visitor numbers and duration of visitor season (Appendix C, Table C-7);</li> <li>▪ Enhancement of the lighthouse complex for an enhanced visitor experience and future research which will help to conserve the cultural and natural heritage of the island (Appendix C, Table C-10);</li> <li>▪ Increased tours around the island to reduce pressure on the island (Section 4.4, Table 4-3); and</li> <li>▪ Use of the Skellig Experience Visitor Centre to support tourism to the local area whilst potentially helping to remove direct pressure from Sceilg Mhichíl (Appendix C, Table C-7 and C-9).</li> </ul> <p>The Monitoring Framework in the SEA ER (Section 5.2) presents clear targets and indicators for Actions in the Proposed Plan which require monitoring.</p> <p>The commitment to the monitoring of visitor numbers, patterns of movement across the site, visitor behaviours and visitor management relative to the ongoing protection of the natural environment and enhancement of the visitor experience been included in mitigation measures M8, M10, M11, M15, M21 and M22 proposed by the NIS that accompanies this report. For convenience, these measures are also detailed in Appendix E of this report.</p>

# APPENDIX E

## NIS Mitigation Measures

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**Table E-1 Summary of mitigation measures**

Mitigation Code	Definition
<b>M1</b>	Review lighting arrangements for the operation of the Lower lighthouse complex and where practicable implement lighting options which will minimise the risk of bird strikes.
<b>M2</b>	Implementation of Action 4.4 of the Proposed Plan, ' <i>Ensure an Ecological Assessment is undertaken for any project or activity which might significantly impact on the biodiversity of the island (including Appropriate Assessment or screening for any plan or project likely to have a significant effect on the species and their habitats for which the SPA has been designated)</i> ', will ensure any works programme is assessed prior to it commencing. This will be conducted in consultation with NPWS so that nature conservation issues are considered prior to the Minister for Housing, Local Government and Heritage deciding if assessment is required.
<b>M3</b>	Works/research programmes will be subject to site-specific mitigation measures. This may include, for example, conducting pre-works surveys to establish the location of any burrows utilised for nesting in the works area, the marking if such burrows so they may be avoided, and avoiding certain time-periods where birds may be more susceptible to disturbance.
<b>M4</b>	Continued supervision of wall maintenance by an ornithologist to ensure that burrow entrances remain accessible to breeding birds, (in particular storm petrel), with the objective of maintaining/increasing the net amount of potential breeding chambers in the walls overall, which are subjected to maintenance works.
<b>M5</b>	Carry out regular spot checks on points along the access pathways to ensure visitor compliance with adhering to the designated pathways on the site.
<b>M6</b>	Continue to explore the staggering of the arrival times of boats over the course of the day to reduce overcrowding on the site and reduce the potential for visitors to venture from the designated pathways.
<b>M7</b>	Continue to provide clear, concise and effective messaging to individuals visiting the island on the need to remain on the designated pathways. This should be done both before boarding a vessel through displaying appropriate signage at the departure points, and after disembarking on the island through talks from accredited guides. This will reinforce its importance to visitors.
<b>M8</b>	Objective 8 of the Proposed Plan, through its Actions, aims to help further promote visitor activities on the mainland of Ireland. The improvement and promotion of such activities may help to reduce the number of visitors travelling to Sceilg Mhichíl, reducing the potential for disturbance to occur.
<b>M9</b>	Ensure all boat operators landing visitors on Sceilg Mhichíl or taking visitors on tours around the island, are informed of potential adverse effects from visual and physical disturbance on wildlife (e.g. rafting seabirds and seals) and are requested to avoid disturbance. NPWS in collaboration with OPW, will develop guidance for boat operators taking tourists around the Skelligs islands for vessel speeds and separation distances from wildlife.
<b>M10</b>	Action 4.10 of the Proposed Plan ' <i>Exclude recreational and other non-essential helicopter flights from an exclusion zone of 1km surrounding Skelligs SPA</i> ' will limit the potential for disturbance from helicopters on the SCIs of Skelligs SPA.

Mitigation Code	Definition
	This is with the exemption of the following essential activities (access for medical emergencies, material drops and visits from the Commissioners of Irish Lights.
<b>M11</b>	Put in place measures to prevent unauthorised drone flying. These shall include the continued dissemination of information (e.g. at booking, at the piers, on the boats) to explain why unauthorised drones are banned on the site, along with the creation of a process for the authorisation of legitimate drone usage on-site.
<b>M12</b>	Research programmes will be staggered to prevent programmes from occurring simultaneously within the same location on Sceilg Mhichíl.
<b>M13</b>	Options to limit access to the site outside of the visitor season will be explored, such as the construction of a physical barrier at the site entrance and/or use of CCTV cameras to monitor the pier area.
<b>M14</b>	Actions 4.9 and 4.13 of the Proposed Plan, <i>'Implement the biosecurity action plan to deal with accidental or deliberate introductions to predator species'</i> & <i>'Research the impacts of mice and rabbit on the biodiversity and archaeological heritage of the islands. Consider if eradication necessary'</i> , must be implemented at the earliest possible opportunity.
<b>M15</b>	Objective 10 of the Proposed Plan and its associated Actions prescribe for a framework for monitoring climate change and its associated impacts to be monitored on Sceilg Mhichíl. With the potential for increasing frequency and intensity of storm events likely to continue, implementation of these Actions should be a priority.