

## Moray FLOW-Park

## EIA Screening Report

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## Glossary

Term	Definition
Applicant	Offshore Solutions Group Limited.
Cumulative Effects	The combined potential effect of the project in combination with the potential effects from consented and future projects, on the same single receptor/resource.
Cumulative Effects Assessment (CEA)	A CEA is a quantification and evaluation of potential significant effects by taking into consideration any other plans or projects proposed or existing, and where sufficient information is available, which, together with the Project have a likely significant effect on a receptor due to a common impact pathway and/or temporal or spatial overlap.
Design Envelope	Project parameters that are used in the Environmental Impact Assessment (EIA) for the Moray FLOW-Park. This comprises a description of the range of possible elements that make up the project design options under consideration, as set out in detail in the project description when the exact engineering parameters are not yet known. Often also referred to as a ‘Rochdale Envelope’ approach.
Developer	Organisation or consortium responsible for planning, constructing and operating a project under the terms of a lease or agreement with Crown Estate Scotland.
Effect	Term used to express the consequences of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
Environmental Impact Assessment (EIA)	A statutory process whereby planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements on the EIA Directive and Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017, including the publication of an EIA Report.
FLOW Floating Foundation	Floating substructure, moored to the seabed by anchoring systems, designed to support the Wind Turbine Generator (WTG).
Foundation Anchor	The structure which anchors the moorings to the seabed.
Foundation Mooring	The chains/synthetics that connect the Floating Foundation to the Foundation Anchor to maintain floater station.
Habitats Regulations	A term commonly used to refer to the Conservation (Natural Habitats, &c,) Regulations 1994 (as amended), the Conservation of Habitats and Species Regulations 2017; and the Conservation of Offshore Marine Habitats and Species Regulations 2017, which transpose the EU Habitats and Birds Directives into Scots law.

Term	Definition
	These Regulations provide the legal framework for the protection of European sites, including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and underpin the Habitats Regulations Appraisal (HRA) process. The Regulations apply to both terrestrial and inshore areas under Scottish jurisdiction and are particularly relevant to assessing the impacts of developments such as offshore wind farms.
Habitats Regulations Appraisal (HRA)	A process required under the Conservation (Natural Habitats, &c,) Regulations 1994 (as amended), the Conservation of Habitats and Species Regulations 2017; and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (commonly known as the Habitat Regulations), which helps determine likely significant effects and (where appropriate) assesses adverse impacts on the integrity of European conservation sites and Ramsar sites. The process consists of up to four stages of assessment: screening, appropriate assessment, assessment of alternative solutions and assessment of Imperative Reasons of Overriding Public Interest (IROPI).
Inshore	Inshore is defined as waters extending out to 12 nautical miles (22.2km) within Scotland's National Marine Plan, and out to 6 nautical miles (11.1km) in the Fishing (Scotland) Act 1984.
Marine Directorate – Licensing Operations Team (MD-LOT)	The Marine Directorate is responsible for Section 36 Consents, and marine licensing within the Scottish inshore region (between 0 and 12 nautical miles (nm)) and in the Scottish offshore region (between 12 and 200 nm). MD-LOT acts on behalf of the Scottish Ministers.
Marine Licence	Licence granted under the Marine (Scotland) Act 2010 and/or the Marine and Coastal Access Act 2009 where relevant.
Maximum Design Scenario	The maximum design parameters for each inshore project design asset considered to be a worst case for any given assessment.
Moray FLOW-Park Area	The area in which the floating FLOW Foundations for Moray FLOW-Park will be temporarily anchored.
Operations and Maintenance (O&M)	The term used regards operation of the Moray FLOW-Park and the maintenance of the permanently installed infrastructure at the Moray FLOW-Park, this specifically excludes any maintenance activities on FLOW Foundations.
Project	The Moray FLOW-Park - comprising all associated permanently installed infrastructure, and the operation of the site.
Scour Protection	Protection installed in order to prevent seabed scour around foundation anchors
Safety and Security Buoys	Safety buoys equipped with high-definition Global Positioning Systems (GPS) and monitoring sensors that will be located around the site. These systems monitor metocean conditions to ensure

Term	Definition
	the integrity of the moorings, and security systems to manage risks from other users (monitored live).
Safety Zone	An area around an offshore structure where entry is prohibited to other sea users. Safety Zone requirements for the Moray FLOW Park to be defined and agreed with the Maritime and Coastal Agency and other sea users through consultation.
Wind Turbine Generator (WTG)	The wind turbines used to generate electricity, comprised of tubular towers with blades attached to a nacelle, which houses the mechanical and electrical generating equipment There will be no WTG's stored in the Moray FLOW-Park.

## Acronyms and Abbreviations

Term	Definition
BAP	Biodiversity Action Plan
CAA	Civil Aviation Authority
CCUS	Carbon Capture, Utilisation and Storage
CMS	Construction Method Statement
DDM	Degrees and Decimal Minutes
DE	Design Envelope
DP	Decommissioning Programme
DS	Design Statement
DSLIP	Development Specification and Layout Plan
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMP	Environmental Management Plan
ERCoP	Emergency Response Cooperation Plan
EU	European Union
FLO	Fisheries Liaison Officer
FLOW	Floating Offshore Wind
FMMCP	Fisheries Mitigation Monitoring & Communication Plan
GCR	Geological Conservation Review
GHG	Greenhouse Gas
GPS	Global Positioning System
GVA	Gross Value Added
INNS	Invasive Non-Native Species
INTOG	Innovation & Targeted Oil & Gas
IOU	Infrastructure & Other Users
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
LAT	Lowest Astronomical Tide
LMP	Lighting & Marking Plan
MACH	Marine Archaeology & Cultural Heritage
MCA	Maritime & Coastguard Agency
MCP	Marine and Coastal Processes
MCS	Management and Control System
MD-LOT	Marine Directorate – Licensing Operations Team
MDS	Maximum Design Scenario
MHWS	Mean High Water Spring
MMO	Marine Mammal Observer
MPA	Marine Protected Area
MPCP	Marine Pollution Contingency Plan
MSL	Mean Sea Level
MU	Management Unit
MWSQ	Marine Water & Sediment Quality
NRA	Navigational Risk Assessment

Term	Definition
NCMPA	Nature Conservation Marine Protected Area
NLB	Northern Lighthouse Board
Nm	Nautical Miles
NSP	Navigational Safety Plan
NVZ	Nitrate Vulnerable Zone
OASIS	Archaeology Data Reporting/Archiving System
OMP	Operation & Maintenance Plan
OREI	Offshore Renewable Energy Installation
OSG	Offshore Solutions Group Ltd
OSPAR	Oslo-Paris Convention on Marine Protection
OWF	Offshore Wind Farm
PEMP	Project Environmental Monitoring Plan
PEXA	Practice & Exercise Areas (Defence)
PMF	Priority Marine Feature
RAMSAR	Wetlands of International Importance Convention
RNLI	Royal National Lifeboat Institution
ROV	Remotely Operated Vehicle
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SAR	Search and Rescue
SLVIA	Seascape, Landscape and Visual Impact Assessment
SMA	Seal Management Area
SPA	Special Protection Area
SPM	Suspended Particulate Matter
SSC	Suspended Sediment Concentration
SSSI	Site of Special Scientific Interest
SWPA	Shellfish Water Protected Area
UK	United Kingdom
UKHO	UK Hydrographic Office
UWN	Underwater Noise
UWWTD	Urban Waste Water Treatment Directive
UXO	Unexploded Ordnance
VMP	Vessel Management Plan
WFD	Water Framework Directive
WSI	Written Scheme of Investigation
WTG	Wind Turbine Generator

# 1 Introduction

1.1.1.1 Offshore Solutions Group Ltd (OSG), working on behalf of FLOW Park Investment Ltd, are developing the Moray FLOW-Park (Figure 1-1), hereby termed ‘the Project’. This facility will provide safe temporary wet storage of Floating Offshore Wind (FLOW) turbine foundations, to support the ongoing development of the Offshore Wind Farm (OWF) industry in Scotland.

1.1.1.2 The Project is to be located within the inner Moray Firth (within 12 nm), covering an approximate area of 18 km<sup>2</sup>. Storage capacity allows anchoring for a maximum of 47 FLOW foundations. A summary of the key project components and its setting is provided in Section 2 (Project Location) and Section 3 (Project Description).

## 1.2 Purpose of This Document

1.2.1.1 This EIA Screening Report has been prepared to support a pre-application request for an Environmental Impact Assessment (EIA) screening opinion from the Scottish Ministers (determined by Marine Directorate – Licensing Operations Team (MD-LOT) on their behalf) in respect of the Moray FLOW-Park.

1.2.1.2 The purpose of this report is:

- To provide sufficient information to enable the Scottish Ministers to determine classification of the Project within the context of the categories listed within Schedule 1 or Schedule 2 of the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (Marine EIA Regulations) and whether the Project is considered an EIA Project; and
- If the Scottish Ministers do consider the Project to be classified under Schedule 2, this Screening Report provides sufficient information to determine whether the Project will result in likely significant effects on the environment. This will be in accordance with Schedule 3 criteria of the Marine EIA Regulations.

1.2.1.3 Regulation 9 of the Marine EIA Regulations sets out the general provisions relating to Screening. It sets out the considerations the Scottish Ministers must take into account when providing a determination.

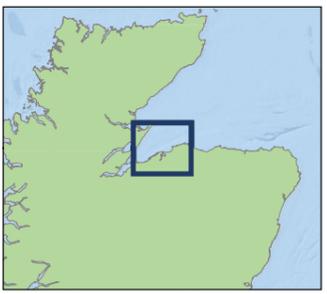


**Moray FLOW-Park**  
Environmental Screening Report

**Moray FLOW-Park Site Location**

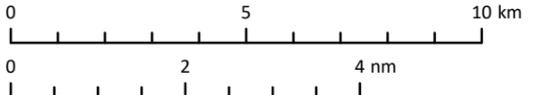
**Legend**

Moray FLOW-Park



**Notes**  
Contains OS data © Crown Copyright and database right 2020  
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Contains Ordnance Survey data © Crown copyright and database rights (2025). OS OpenData.

Coordinate System:  
WGS 1984 UTM Zone 30N



Scale	Date	Drawn by	Checked by	Approved by
1:150,000 @A3	14/01/2026	EV	BPHB	CC

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**Figure 1.1**

Figure Reference: MFP\_INT\_Fig1.1\_SiteLocation\_v2

- 1.2.1.4 Regulation 10 of the Marine EIA Regulations makes provision for an applicant to request the Scottish Ministers to adopt a screening opinion and sets out the information that needs to be provided. It then provides for the licensing authority to issue a screening opinion, to determine whether a proposed marine project is likely to have significant effects on the environment and therefore requires an EIA.
- 1.2.1.5 This report provides all information requested under Regulation 10 of the Marine EIA Regulations to inform the requested screening opinion. Table 1-1 outlines the required information and where this can be found within the following report.

*Table 1-1 EIA Screening Checklist Compliance with Regulation 10(2) of the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017*

<b>Information required under Regulation 10(2) of the Marine EIA Regulations</b>	<b>Covered within the following Section of this Screening Report</b>
A description of the location of the Project, including a plan sufficient to identify the area in which the works are proposed to be sited.	Section 2.
A description of the proposed works.	Section 3.
A description of the aspects of the environment likely to be significantly affected by the proposed works.	Section 4 and Section 5.
A description of any features of the proposed works or proposed measures envisaged to avoid or prevent significant adverse effects on the environment (mitigation measures).	Section 5, Table 5-1.
The information referred to above is to be compiled taking into account, where relevant: <ul style="list-style-type: none"> <li>• The selection criteria set out in Schedule 3; and</li> <li>• The available results of any relevant assessment.</li> </ul>	This Screening Report has been prepared taking into account the selection criteria within Schedule 3 of the Marine EIA Regulations (Section 5.2).

## 1.3 Legislative Context

1.3.1.1 This request for a screening opinion is made in respect of the Moray FLOW-Park project (the Project) located within Scottish inshore waters (within 12 nautical miles). Under the Marine EIA Regulations, certain project classifications and associated likely effects will trigger the requirement for an EIA, summarised as:

- Schedule 1 developments always require EIA;
- Schedule 2 developments require EIA only where they are likely to have significant effects on the environment, having regard to the selection criteria set out in Schedule 3; and
- Developments which do not fall within Schedule 1 or Schedule 2 do not require EIA.

1.3.1.2 This Screening Report therefore includes initial discussion of the Project with respect to Schedule 1 and 2 classifications (see Section 1.4). If the Project is to be classed under Schedule 2 as an EIA Project, the report then aims to provide sufficient information to enable MD-LOT to determine whether the Project is likely to have significant effects on the environment; in compliance with Regulation 10 of the Marine EIA Regulations.

## 1.4 EIA Schedule Classification

### 1.4.1 Schedule 1: Descriptions of Projects For The Purposes Of The Definition of 'Schedule 1 Works'

1.4.1.1 The Moray FLOW-Park is not considered to fall within any category of Schedule 1 development under the Marine EIA Regulations.

1.4.1.2 Schedule 1 criteria address projects that are major industrial, energy or extractive industry installations, and/or major infrastructure developments, with the potential for significant environmental impacts. Examples include large-scale offshore wind farms, ports, and marine energy generation facilities that exceed specific thresholds.

1.4.1.3 The Project, by contrast, is an inshore wet storage facility designed solely for the temporary storage and logistical handling of FLOW foundation units. Construction works are considered small-scale, localised, and temporary in nature, with a minor seabed footprint. The development does not include turbine installation, electricity generation or transmission infrastructure, with no planned dredging. Its operational characteristics are temporary and reversible, with no permanent alteration of the seabed or long-term effects on the surrounding environment.

1.4.1.4 Accordingly, when assessed against the Schedule 1 criteria, the proposed works do not meet the thresholds or types of development to classify the project as Schedule 1 development.

## 1.4.2 Schedule 2: Descriptions Of Projects And Applicable Thresholds And Criteria For The Purposes Of The Definition of ‘Schedule 2 Works’

1.4.2.1 As the Project is not considered as a Schedule 1 development, the need for an EIA is then determined by its classification under categories as defined by Schedule 2 of the Marine EIA Regulations.

1.4.2.2 On review, the Project could potentially fall within a single category:

- 3) Energy industry (j) Installations for the harnessing of wind power for energy production (including offshore wind farms).
  - (i) the works involves the installation of more than 2 turbines; or
  - (ii) the hub height of any turbine or height of any other structure exceeds 15 metres.

1.4.2.3 The Moray FLOW-Park will not to be used for harnessing wind power, it will not comprise any connection to the grid or electricity cables and will not harness wind power. The Project is for the storage of FLOW foundation units only, with no assembled Wind Turbine Generators (WTG) being stored. It should also be noted there will be no construction or commissioning activities at the site in relation to the FLOW units themselves, the Moray FLOW-Park is for anchoring and storage of FLOW foundation units only.

1.4.2.4 The assumption is therefore that the Project may not be classified under category 3(j) for the following reasons:

- The Project does not constitute an offshore energy generating installation or infrastructure associated with electricity production;
- The Project does not involve the construction or operation of offshore WTG;
- The Project does not involve transmission infrastructure, export cables, substations or grid connections;
- The function of the development is limited exclusively to storage and logistics, comparable to a temporary floating storage or mooring facility;
- The scale and nature of the works do not align with 3(j) when considered in terms of purpose, function, or environmental risk; and

- Although the storage park supports offshore wind developments elsewhere, it is not in itself an offshore wind project and should not be classified as such for the purposes of EIA screening.

1.4.2.5 This Screening Report is provided to support MD-LOT in issuing a formal Screening Opinion confirming this position, or otherwise.

### 1.4.3 Marine License

1.4.3.1 The Marine (Scotland) Act 2010 provides the legislative and management framework for the marine environment within Scottish Territorial Waters (from MHWS out to 12 nm). Part 4 (Marine Licensing) of the Marine (Scotland) Act 2010 includes licensable marine activities (Section 21) for which the following would apply to the Project (noting other licensable activities may be identified as the project description is defined during the EIA):

(1) To deposit any substance or object within the Scottish marine area, either in the sea or on or under the seabed, from any of the following:

- (a) a vehicle, vessel, aircraft or marine structure,
- (b) a container floating in the sea, or
- (c) a structure on land constructed or adapted wholly or mainly for the purpose of depositing solids in the sea.

(2) To deposit any substance or object anywhere in the sea or on or under the seabed from a vehicle, vessel, aircraft, marine structure or floating container which was loaded with the substance or object either:

- (a) in Scotland, or
- (b) in the Scottish marine area.

(5) To construct, alter or improve any works within the Scottish marine area either:

- (a) in or over the sea, or
- (b) on or under the seabed.

(6) To use a vehicle, vessel, aircraft, marine structure, or floating container to remove any substance or object from the seabed within the Scottish marine area.

(7) To carry out any form of dredging within the Scottish marine area (whether or not involving the removal of any material from the sea or seabed).

1.4.3.2 Under Section 21 of the Marine (Scotland) Act 2010, it is considered the Project requires a Marine Licence for the construction and deposit of structures below MHWS (UK Parliament, 2010).

#### 1.4.4 Other Legislative / Consent Requirements

1.4.4.1 Due to its location in the Moray Firth, the Project will be subject to consideration under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). This will include screening by the competent authority to determine whether the Project is likely to have a significant effect on applicable designated sites such as the Moray Firth Special Area of Conservation (SAC), either alone or in combination with other plans or projects.

1.4.4.2 In addition to consideration under the Habitats Regulations, the Project may require screening under the Water Framework Directive (WFD) to confirm that no deterioration in coastal water body status would occur.

#### 1.4.5 Section 36 Consent – Justification for Non-Applicability

1.4.5.1 The Project does not require consent under Section 36 of the Electricity Act 1989. Section 36 consent applies only to electricity generating stations, including offshore wind farms and other installations which generate electricity for export to the transmission or distribution network. The Project is a nearshore floating storage facility only. It does not involve the installation or operation of electricity generating equipment, the production of electricity, or any form of transmission or grid connection. No turbines, substations, export cables, or other electrical infrastructure are proposed.

1.4.5.2 It is our understanding that no other statutory environmental consent requirements are automatically triggered by the Project's characteristics and location within the Moray Firth (see Section 2 and Section 3).

## 2 Project Location

- 2.1.1.1 The Moray FLOW-Park is to be located within the inner Moray Firth off of Findhorn Bay (within 12 nm), covering an approximate area of 18 km<sup>2</sup> (Figure 1-1).
- 2.1.1.2 The boundary co-ordinates of the Moray FLOW Park area are provided in Table 2-1. It is 1.06 km from shore at its nearest point, with water depths ranging from 8 m Lowest Astronomical Tide (LAT) to 48 m LAT.

Table 2-1 Co-ordinates of the Moray Park FLOW Area Boundary

Point	Long_DD	Lat_DD	Long_DDM	Lat_DDM
1	-3.712522	57.682303	3° 42.751' W	57° 40.938' N
2	-3.638564	57.700145	3° 38.314' W	57° 42.009' N
3	-3.563894	57.718044	3° 33.834' W	57° 43.082' N
4	-3.557211	57.710869	3° 33.433' W	57° 42.652' N
5	-3.550544	57.703828	3° 33.033' W	57° 42.230' N
6	-3.624494	57.685806	3° 37.470' W	57° 41.148' N
7	-3.698733	57.667619	3° 41.924' W	57° 40.057' N
8	-3.705674	57.674995	3° 42.340' W	57° 40.500' N

- 2.1.1.3 A further description of the Project's design and infrastructure is provided in Section 3.

## 3 Project Description

### 3.1 Introduction

- 3.1.1.1 This section provides a high-level description of the Project, including the Design Envelope (DE), Project boundary, infrastructure, mooring and anchoring process, and indicative programme. The DE is designed for flexibility, presenting a Maximum Design Scenario (MDS) to enable meaningful assessment while allowing for future refinement.
- 3.1.1.2 The site will be used for the temporary and seasonal mooring of varying FLOW foundation unit designs, for multiple developers. This will result in a degree of difference in the dimensions of foundation units being stored, and type of mooring anchors required. A standard layout is anticipated for the first phase of installed moorings. Final designs will depend on site conditions, environmental and economic assessments.
- 3.1.1.3 Innovations within the DE include standardised moorings, Safety and Security Buoys (S&SB), integrated environmental monitoring, and knowledge sharing partnerships.

### 3.2 Project Boundary

- 3.2.1.1 The Project Boundary (Figure 1-1) represents the maximum area for the Project where mooring of FLOW foundation units and S&SB will occur. It is subject to potential refinement as the Project progresses.
- 3.2.1.2 When determining the Project location, multiple sites were assessed via desktop screening. The key objective is to maximise support for FLOW developments in the northern UK, including ScotWind and Innovation and Targeted Oil & Gas (INTOG) projects. The current boundary was selected through a robust site evaluation process, considering aspects such as storage locations near licensed floating OWFs, future fabrication yards, and assembly and integration ports. A seabed exclusivity agreement is in place with the Crown Estate Scotland.

## 3.3 Key Design Components

### 3.3.1.1 The DE includes:

- Permanently installed infrastructure:
  - Mooring lines and anchoring systems to connect the floating substructures to the seabed; and
  - S&SBs.
- Temporarily stored infrastructure:
  - FLOW foundation units.

### 3.3.2 Moray FLOW Park Area

3.3.2.1 The Project will provide safe anchorage for a maximum of 47 FLOW foundation units, spaced approximately 600 m apart for access, security, and towing, likely arranged in a grid formation. Spacing may change however, following Maritime and Coastguard Agency (MCA) consultation, considering key issues such as emergency access requirements.

3.3.2.2 A summary of key MDS parameters is presented in Table 3-1.

*Table 3-1 Key MDS Parameters for the Moray FLOW-Park.*

Description	Moray FLOW-Park
Area	18 km <sup>2</sup>
Minimum distance to shore	1.06 km
Maximum number of FLOW Foundation units stored	Up to 47*
Typical distance between FLOW Units	600 m
* Some of these locations may not be installed to account for the installation of the specific anchoring requirements of a FLOW developer’s foundation unit design.	

### 3.3.3 FLOW Units

3.3.3.1 WTGs convert wind energy into electricity and comprise three main components: rotor assembly (three blades and a hub), nacelle (generator, shaft, gearbox, power electronics, transformer) and tower (lifting equipment and switchgear).

3.3.3.2 The Project will **not** be used for storage of FLOW units with any part of the above components installed on the foundation. The Project will only be storing the foundation configuration, considered as temporarily installed infrastructure, prior to full WTG integration at a separate location.

3.3.3.3 The foundation configuration involves mooring only the FLOW unit substructure and foundation (Figure 3-1). MDS parameters for these components are provided in Table 3-2.

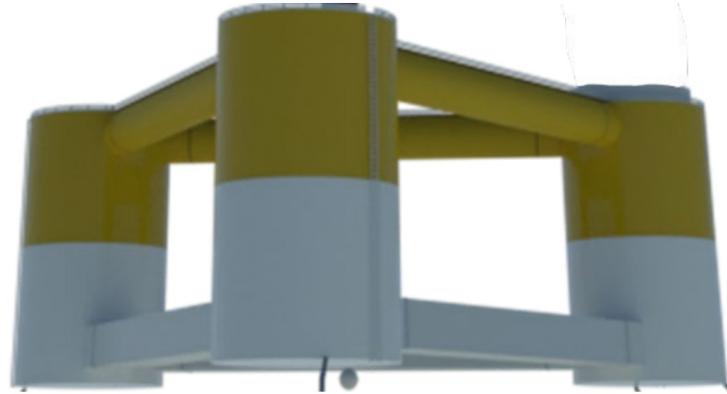


Figure 3-1: Visual representation of a FLOW Unit substructure / foundation

Table 3-2: The Maximum Design Scenario for a FLOW Unit Substructure and Foundation

Description	Moray Firth FLOW-Park
FLOW Foundation dimension	130 m x 130 m
FLOW Foundation height	45 m
FLOW Foundation height (typical above Mean Sea Level [MSL])	30 m

## 3.4 Mooring

- 3.4.1.1 Mooring and anchoring systems will maintain the position of FLOW units under varying metocean conditions and will be permanent infrastructure within the Moray FLOW-Park.
- 3.4.1.2 Each FLOW unit will be moored to the anchoring systems by a maximum of six mooring lines arranged in multiple directions, with additional lines possible for prevailing conditions.
- 3.4.1.3 Three mooring line types are being considered for the Project: taut, catenary and semi-taut; or a hybrid combination, depending on the final design and the specific floating foundation selected by each developer.
- 3.4.1.4 A catenary mooring consists of steel chains and/or wires, and in some cases synthetic elements, with stability provided by their weight and curved profile. The lower section of the mooring rests on the seabed, with restoring forces generated by the suspended weight of the line, and loads at the anchor are predominantly horizontal.

- 3.4.1.5 Taut moorings consist primarily of synthetic fibres and rely on the buoyancy of the floating platform and firm seabed anchoring to maintain high tension. These systems require tensioning, may terminate at an angle to the seabed, and can transfer both horizontal and vertical loads, potentially requiring a seabed-positioned tensioning system.
- 3.4.1.6 Semi-taut moorings combine elements of catenary and taut systems, potentially incorporating buoyancy modules, clump weights, and/or seabed-positioned tensioning systems. This configuration decouples the motion of the floating platform from the lower mooring sections, allowing line tension to be optimised along the mooring length.

## 3.5 Anchoring

- 3.5.1.1 Each mooring line connects to a permanently installed anchor attached to the seabed. Solutions under consideration include piled anchors (including helical piles and drilled micro-piles, in addition to conventional impact piling), suction anchors or gravity anchors. Drag embedded anchors will not be used.
- 3.5.1.2 The type of anchor will be selected based on seabed conditions, potential impacts from underwater noise and vibration, mooring configuration, and required holding capacity. Discussion of the potential anchor types and considerations for each is given below.

### 3.5.2 Piled Anchors

- 3.5.2.1 Piled anchors consist of one or more cylindrical piles installed by driving, drilling, or screwing. They have a high holding capacity for vertical and horizontal loads. Acknowledging its location within the Moray Firth SAC, the Applicant is committed to minimising underwater noise impacts during construction as far as technically feasible. If piling is considered, the Project will work to adopt low noise installation methods such as helical or micro piling over conventional impact piling.
- 3.5.2.2 The use of alternative foundation installation methods such as helical piles and micro-piles or similar low-impact designs would introduce significantly less underwater noise compared to impact driven piling, notably reducing impacts on marine mammals and fish. Helical piles are rotated into the seabed, and micro-piles or similar low-impact designs are installed using rotary drilling techniques. These methods avoid repeated hammer strikes, producing minimal impulsive noise.

3.5.2.3 In the inshore environment of the Moray Firth, lower wave, wind, and current forces mean anchors require less holding capacity than a FLOW unit anchor would in a fully offshore location. This makes helical, micro-piles or similar low-impact designs a more technically feasible option for the Project compared to an OWF, as they can achieve sufficient seabed fixation without impact driving.

3.5.2.4 It also should be noted that anchor installation will be phased, potentially over two seasons, as usage of the FLOW Park increases to maximum capacity over time (see Section 3.7.3) and is correlated with market demand/required usage. The first phase will cover approximately 25 mooring locations only. The Applicant wishes to retain as much flexibility in the works programme as possible (in addition to seasonal works restrictions), to ensure impacts such as underwater noise are kept to acceptable levels.

### 3.5.3 Suction and Gravity Anchors

3.5.3.1 Suction anchors use an upside-down bucket from which the seawater is pumped out, creating a pressure differential that drives the structure into the seabed. Suction anchors minimise disturbance during installation but are only feasible in specific seabed conditions, such as sands and clays.

3.5.3.2 Gravity anchors are buried to a depth depending on their weight and geometry and the soil characteristics of the site. Their holding potential is proportional to their weight, and they can resist both vertical and horizontal loads. Gravity anchors require medium to hard soil conditions.

3.5.3.3 There may be a requirement to install scour protection to prevent the structure being undermined by sediment processes and seabed erosion. The requirement for scour protection will be refined when the results of the geophysical and geotechnical surveys, and coastal processes modelling are available and have been analysed.

3.5.3.4 The MDS for mooring lines and anchors are presented in Table 3-3.

Table 3-3: The Maximum Design Scenario for mooring lines and anchors.

Description	Moray Firth FLOW-Park
Maximum number of mooring lines	6
Mooring line types	Catenary Taut Semi-taut Hybrid
Maximum mooring line radius	300m
Maximum number of anchors	6 <sup>1</sup>
Anchor types	Pile Suction Gravity Micropile Helical pile

## 3.6 Safety & Security Buoys

- 3.6.1.1 The temporarily moored FLOW units will be unmanned, lack marine propulsion, and may be located remotely beyond visual range of the operational base. As such, S&SB will be installed as part of an integrated Management and Control System (MCS) to monitor the position of all FLOW units and provide oversight of the wider FLOW-Park areas (See Section 5.2.5 for further info on the MCS).
- 3.6.1.2 The S&SB will be unmanned and equipped with flow monitoring systems, including high-definition GPS, and multi-sensor capability. This will comprise a series of safety buoys incorporating sensors such as sonar and radar to manage risks from other marine users, with outputs live-monitored.
- 3.6.1.3 The S&SB are considered permanent infrastructure, with minimal reconfiguration required between storage by different developers. The MDS includes four S&SB within the Project boundary, positioned at the outer corners of the area. Final locations are subject to refinement following further coverage studies.
- 3.6.1.4 Each S&SB will be moored using a three-point spread mooring system, with mooring lines connected to piled anchors. The mooring configuration may be further refined as the buoy design is developed.

<sup>1</sup> Up to 8 at each anchor location if Micropile technology is selected

3.6.1.5 The MDS for the S&SB, including mooring lines and anchors, is presented in Table 3-4.

Table 3-4 The Maximum Design Scenario for the Security Monitoring Buoy

Description	Moray Firth FLOW-Park
Maximum number of security buoys	4
Buoy dimensions (length x width)	5.2 m x 2.2 m
Maximum Buoy height	15 m
Mooring type	3 point spread mooring
Anchor type	Pile

## 3.7 Programme

3.7.1.1 This section summarises the key project activities across all phases of the Project’s lifecycle. An indicative schedule of the current Project phases is presented in Table 3-5.

Table 3-5: Indicative project schedule

Phase	2026	2027	2028	2029
Development/Consenting				
Detailed Design				
Construction				
Operation				

### 3.7.2 Development Phase

3.7.2.1 The development phase is currently ongoing, focused on planning, consents, design and engineering. To date, key stakeholder consultation and inshore activities through surveys have supported this phase, as well as contributing to engineering refinement and detailed design.

### 3.7.3 Construction Phase

3.7.3.1 Pre-construction surveys within the Moray FLOW-Park may include geophysical, geotechnical, and UXO surveys. Based on survey results, boulder clearance and UXO removal may be undertaken if necessary.

3.7.3.2 Moorings will be installed sequentially, beginning with anchor installation followed by ground anchoring chains. Installation will be phased as the Moray FLOW-Park usage increases to maximum capacity. The first phase will cover approximately 25 mooring locations.

- 3.7.3.3 Inshore installation is anticipated to start in 2028/2029, taking around 4 months, with works carried out undertaken 24 hours a day, 7 days a week dependent on weather conditions.
- 3.7.3.4 Construction will use a combination of vessels, most likely including a small jack-up barge, small spread-moored barge, an offshore construction vessel and an anchor handling tug. Only one vessel is expected in-field at a time, either installing mooring piles and ground chains separately, or using the same vessel for both tasks. Additional potential vessels may include a small workboat and a crew transfer vessel.
- 3.7.3.5 During construction, safety zones will be established around vessels and active work areas. The Applicant is to apply for standard safety zones for construction and major maintenance, with distances to be confirmed. These zones will be maintained around any structure where construction is complete, but commissioning is still pending. As part of the Marine License application, the Applicant will confirm if operational safety zones apply during routine operations around inshore structures such as FLOW Units and S&SB.

## 3.8 Operation and Maintenance Phase

- 3.8.1.1 The final Operation and Maintenance (O&M) strategy will be confirmed once the onshore base location and technical specifications are agreed. It is anticipated the Project will be operated from a local onshore facility throughout its lifecycle.
- 3.8.1.2 The FLOW Units will be stored during the off-season when weather conditions prevent safe towing. When suitable weather windows occur, they will be disconnected and towed to the integration port for WTG installation, after which they will be towed directly to the offshore location without returning to the FLOW-Park.
- 3.8.1.3 The transit routes to and from the Moray FLOW-Park are excluded from this Screening Report.
- 3.8.1.4 Maintenance during the O&M phase will include annual inspections of mooring lines/piles and associated equipment (buoys, clump weights, seabed tensioners etc.), as well as annual checks of S&SB. This will likely take place during summer months when the Project is not being used by developers. A maintenance period for S&SB is expected every 3-5 years, potentially requiring offsite towing. These measures will be refined as the DE develops.

3.8.1.5 All inshore infrastructure, including FLOW Units and S&SB, will be covered by monitoring and maintenance programmes. This report considers the likelihood of significant effects of maintenance activities, drawing on industry experience and best practice. Additional consents or licences will be sought if required.

## 3.8.2 Decommissioning

3.8.2.1 It is anticipated that mooring lines and S&SB will be removed in reverse order of installation. All infrastructure above the seabed will be removed, and if technically possible, anchors will be taken out entirely or to a depth of 2 m below the mudline, in accordance with standard good practice on the decommissioning of inshore infrastructure. The seabed will then be returned to a condition to allow the continuance of all commercial and leisure activities previously undertaken at the site.

3.8.2.2 The Energy Act 2004 and Scotland Act 2016 require a Decommissioning Programme (DP) for Offshore Renewable Energy Installations (OREI) prior to construction. Although the development is not an OREI and not bound by the Energy Act, the Project will follow best practice in developing a DP. The DP will be updated throughout the operational phase to reflect evolving best practice and technologies, and the decommissioning approach will comply with applicable legislation and policy at the time.

## 4 Known Sensitivities

4.1.1.1 Table 4-1 provides a summary of baseline conditions and known sensitivities within the Project area, covering the following key receptors:

- Marine and Coastal Processes;
- Marine Sediment and Water Quality;
- Biodiversity;
  - Designated Sites;
  - Protected Species;
  - Benthic, Subtidal and Intertidal Ecology;
  - Fish and Shellfish Ecology;
  - Marine Mammals;
  - Ornithology;
- Commercial Fisheries;
- Shipping and Navigation
- Military & Civil Aviation (see paragraph 4.1.1.3);
- Seascape / Visual Environment;
- MACH;
- Socio-economic, Tourism and Recreation; and
- Infrastructure and Other Users (IOU).

4.1.1.2 Associated potential impact pathways related to the Project's construction, O&M and decommissioning are also given in Table 4-1. Section 5 then provides an initial assessment of the likelihood of any significant effects for each receptor, and with respect to Schedule 3 criteria (Section 5.2).

4.1.1.3 Note: The proposed FLOW-Park foundation units have an approximate maximum height of 30 m above water level, which is significantly below the threshold at which marine structures pose a constraint to civil or military aviation activity. At this height, the structures do not present a collision risk, do not infringe safeguarded airspace, and are not of a scale that would give rise to material interference with aviation radar or navigation systems. On this basis, no assessment of potential impacts to aviation is considered further.

Table 4-1 Known Sensitivities within the Project area

Receptor	Key Sensitivities	Potential Impact Pathways
<i>Physical Environment</i>		
<b>Marine and Coastal Processes (MCP)</b>	<p>Designated sites within the study area, which are designated for the protection and conservation of marine habitats of relevance to marine and coastal processes are the following:</p> <ul style="list-style-type: none"> <li>• Moray Firth Special Area of Conservation (SAC);</li> <li>• Culbin Sands, Culbin Forest and Findhorn Bay Site of Special Scientific Interest (SSSI);</li> <li>• Moray and Nairn Coast RAMSAR;</li> <li>• Culbin GCR; and</li> <li>• Whiteness Head SSSI.</li> </ul>	<p>The following Impact Pathways may exist for MCP during the construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Mooring anchor installation and/or removal may result in temporary elevations in Suspended Sediment Concentrations (SSC);</li> <li>• Direct impacts to seabed morphology during mooring anchor installation/removal.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Potential for the introduction of localised seabed abrasion associated with Project infrastructure that moves, for example anchor or mooring chains under the influence of waves, currents, and movement of the FLOW foundation units;</li> <li>• Interaction between FLOW foundation units and the baseline metocean regime (waves and tides) may result in highly localised changes around the foundations to current speeds, wave energy and turbulence. This may affect morphological features and littoral transport.</li> </ul>
<b>Marine Sediment and Water Quality (MWSQ)</b>	<p>All sites designated in accordance with the Water Framework Directive Legislation that fall within the study area are considered potential receptors, these include:</p> <ul style="list-style-type: none"> <li>• Four coastal waterbodies;</li> <li>• One Bathing Water; and</li> <li>• One Nitrate Vulnerable Zone (NVZ).</li> </ul> <p>Note: There are no transitional waterbodies, Shellfish Water Protected Areas (SWPA) or Urban Waste Water Treatment Directive (UWWTD) Sensitive Areas within the study area.</p> <p>Other key MW&amp;SQ receptors include</p> <ul style="list-style-type: none"> <li>• Water Quality; <ul style="list-style-type: none"> <li>○ Temperature and salinity</li> <li>○ Suspended Particulate Matter (SPM)</li> </ul> </li> <li>• Sediment Quality; <ul style="list-style-type: none"> <li>○ Surficial sediment characterisation; and</li> <li>○ Sediment contamination.</li> </ul> </li> <li>• Blue Carbon Storage.</li> </ul>	<p>The following Impact Pathway may exist for MWSQ during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Anchor installation or removal may disturb consolidated sediments leading to resuspension and increased turbidity. This may temporarily reduce water clarity and light penetration, which can influence bacterial mortality rates and affect sensitive receptors, including designated Bathing Waters.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Some O&amp;M activities, such as the connection and disconnection of FLOW foundation units to moorings or the inspection and maintenance of seabed infrastructure, have the potential to disturb consolidated sediments in a highly localised but repeated manner. This resuspension may lead to temporary reductions in water clarity and light penetration, which can influence bacterial mortality rates and affect sensitive receptors, including designated Bathing Waters.</li> </ul>
<i>Biodiversity</i>		
<b>Designated Sites</b>	<p>The following designated sites are within the various Project biodiversity study areas (Note: potential impact pathways for designated sites and protected species are discussed in the table rows for each receptor where relevant):</p> <p><b>SAC</b></p> <ul style="list-style-type: none"> <li>• Moray Firth</li> <li>• Culbin Bar</li> <li>• Dornoch Firth and Morrich More</li> <li>• River Oykel</li> <li>• River Evelix</li> <li>• River Spey</li> <li>• River Moriston</li> <li>• Southern North Sea</li> </ul>	Discussed for each receptor.

Receptor	Key Sensitivities	Potential Impact Pathways
	<p><b>Special Protected Areas(SPA)</b></p> <ul style="list-style-type: none"> <li>• Dornoch Firth and Loch Fleet</li> <li>• Moray Firth</li> <li>• Inner Moray Firth</li> <li>• Cromarty Firth</li> <li>• Moray and Nairn Coast</li> <li>• East Caithness Cliffs</li> <li>• Troup, Pennan and Lion’s Head</li> <li>• North Caithness Cliffs</li> </ul> <p><b>Marine Protected Areas (MPA)</b></p> <ul style="list-style-type: none"> <li>• Southern Trench</li> <li>• North-east Lewis</li> <li>• Sea of the Hebrides</li> </ul> <p><b>SSSI</b></p> <ul style="list-style-type: none"> <li>• Culbin Sands</li> <li>• Culbin Forest</li> <li>• Findhorn Bay</li> <li>• Whiteness Head</li> <li>• Masonshaugh SSSI</li> <li>• Cromarty Firth</li> </ul> <p><b>RAMSAR</b></p> <ul style="list-style-type: none"> <li>• Dornoch Firth and Loch Fleet</li> <li>• Moray and Nairn Coast</li> <li>• Cromarty Firth</li> <li>• Inner Moray Firth</li> </ul> <p><b>Nature Conservation Marine Protected Area (NCMPA)</b></p> <ul style="list-style-type: none"> <li>• Southern Trench</li> <li>• East Caithness Cliffs</li> </ul> <p><b>Others</b></p> <ul style="list-style-type: none"> <li>• Culbin Geological Conservation Review site (GCR)</li> <li>• Seal Haul out sites (see Marine Mammals below)</li> </ul>	

Receptor	Key Sensitivities	Potential Impact Pathways
<p><b>Benthic, Subtidal and Intertidal Ecology</b></p>	<p>The Moray Firth SAC directly overlaps with the Project, extending across much of the inner firth and has been designated for the Annex I habitat “<i>Sandbanks which are slightly covered by seawater all the time</i>” and the Annex II species Bottlenose dolphin (<i>Tursiops truncatus</i>). The sandbank feature comprises subtidal sandy and gravelly sediment that support diverse benthic communities, including polychaete worms, bivalves and amphipods.</p> <p>Culbin Bar SAC, Whiteness Head SSSI, Culbin Sands, Culbin Forest and Findhorn Bay SSSI, and Masonshaugh SSSI are all located within the Benthic Subtidal and Intertidal Ecology study area. These sites encompass a range of designated benthic and coastal features, including intertidal sand and mud flats, coastal saltmarsh, sand dunes, shingle spits, and coastal shingle and dune systems.</p> <p>Scottish Ministers identified a list of 81 Priority Marine Features (PMF) in 2014, in recognition of their significant ecological importance within Scottish marine ecosystems. ‘Burrowed mud habitat’ has been recorded within the Moray Firth-South area, as well as across the wider Benthic Subtidal and Intertidal Ecology study area. Burrowed mud habitat supports diverse and characteristic species, including the tall seapen (<i>Funiculina quadrangularis</i>) and the fireworks anemone (<i>Pachycerianthus multiplicatus</i>), both of which are associated with stable, fine sediment environments in deeper or sheltered waters. The burrowed mud community “Seapens and burrowing megafauna in circalittoral fine mud” has also been recorded across the nearby Moray West OWF and Moray East OWF.</p>	<p>The following Impact Pathways may exist for Benthic, Subtidal and Intertidal Ecology during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Temporary, direct habitat disturbance due to seabed preparation and installation of anchoring systems / buoys and construction vessel presence / anchoring. Direct impacts to seabed morphology during mooring anchor installation/removal;</li> <li>• Temporary elevations in SSC could in turn result in changes to the underlying seabed/coastal bed levels through deposition of suspended material and changes to the surficial sediment type;</li> <li>• Seabed disturbance could lead to mobilisation of existing sediment contaminants that could have an impact on the benthos; and</li> <li>• Potential introduction of Invasive Non-Native Species (INNS) via vessel movements and the movement of equipment and infrastructure during construction and decommissioning.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Potential for direct habitat disturbance of the seabed through movement of floating foundations, or maintenance of mooring / anchoring systems;</li> <li>• Long-term habitat loss or alteration directly associated with the regular movement and anchoring of floating foundations and associated disturbance to moorings and anchoring;</li> <li>• Introduction of manufactured substructures such as mooring and anchoring systems likely to result in colonisation by marine organisms. This can result in alterations to the near field benthic ecology of the area;</li> <li>• The presence of subsea infrastructure (floating foundations, the mooring system and anchors along with buoys) can result in potential effects on benthic communities arising from scour effects, changes in sediment transport and wave regimes; and</li> <li>• Increased risk of introduction and/or spread of INNS from vessel traffic and foundation units, and colonisation of hard structures (e.g. mooring anchors).</li> </ul>
<p><b>Fish and Shellfish Ecology</b></p>	<p>Several designated sites exist within the study area and within the wider vicinity of the study area, for the protection and conservation of marine habitats of relevance to Fish and Shellfish Ecology. The majority of the designated sites have qualifying features (such as bird or marine mammal qualifying features) that are dependent on fish or shellfish receptors, for example:</p> <ul style="list-style-type: none"> <li>• <b>Moray Firth SPA</b> (Overlaps Project area) - Forage fish (e.g., herring, sandeel, and sprat) and/or shellfish species (e.g., mussels, clams, and crustaceans);</li> <li>• <b>Moray Firth SAC</b> (Overlaps Project area) - Forage fish species (e.g., Atlantic salmon, sea trout, flatfish (Pleuronectiformes), mackerel, cod, saithe, whiting, haddock, and squid and octopi) are essential for supporting the qualifying feature of Bottlenose dolphin <i>Tursiops truncatus</i>;</li> <li>• <b>Southern Trench NCMPA</b> (32.5 km from Project area) - Forage fish species (e.g., herring, mackerel, sandeel and sprat) are essential for supporting the qualifying feature of minke whale <i>Balaenoptera acutorostrata</i>. The qualifying feature of burrowed mud provides key habitat for nephrops, angular crab, squat lobsters, burrowing shrimp and ghost shrimp;</li> </ul> <p>Others include</p> <ul style="list-style-type: none"> <li>• East Caithness Cliffs NCMPA and SPA (43.7 km distance from Project area);</li> <li>• Dornoch Firth and Loch Fleet SPA and Ramsar site (18.1 km distance);</li> <li>• Dornoch Firth and Morrich More SAC (18.1 km distance);</li> <li>• Cromarty Firth SPA (also an SSSI and Ramsar) (8.5 km distance);</li> </ul>	<p>The following Impact Pathways may exist for Fish and Shellfish Ecology during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Mortality, injury, behavioural impacts and auditory masking arising from noise and vibration;</li> <li>• Temporary, localised increases in SSC and associated sediment deposition and smothering can occur during boulder clearance, seabed levelling and foundation anchor and mooring installation works;</li> <li>• Construction works can lead to the mobilisation of sediments; whilst in suspension, there is the potential for sediment-bound contaminants such as metals, hydrocarbons and organic pollutants, to be released into the water column, which can lead to a negative effect on fish and shellfish receptors;</li> <li>• Temporary habitat loss and disturbance from installation of foundation anchors, and the anchoring of vessels such as a small spread-moored barge;</li> <li>• Increased risk of introduction and/or spread of INNS from vessel traffic and foundation units, and colonisation of hard structures (e.g. mooring anchors);</li> <li>• Direct damage (for example crushing) and disturbance to mobile demersal and pelagic fish and shellfish species arising from construction activities; and</li> <li>• Accidental pollution events.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Long-term habitat loss associated with the presence of foundation anchor systems, foundation moorings and scour protection, and the strimming effect of mooring lines, degrading spawning, nursery and feeding habitats;</li> </ul>

Receptor	Key Sensitivities	Potential Impact Pathways
	<ul style="list-style-type: none"> <li>• Inner Moray Firth SPA (also a Ramsar, and overlaps with Beaully Firth SSSI) (1.3 km distance);</li> <li>• Moray and Nairn Coast SPA and Ramsar site (0.6 km distance); and</li> <li>• River Oykel, River Evelix, River Spey SAC (26 to 38 km distance) - The protected features are salmon, freshwater pearl mussel and sea lamprey. Additionally, forage fish species are essential for supporting otter.</li> </ul> <p>Various fish and shellfish species of conservation importance are found within the Project study area, and protected under national, European, and international legislation. Designations include the following:</p> <ul style="list-style-type: none"> <li>• OSPAR threatened and/or declining species (OSPAR, 2025) e.g. Orange roughy;</li> <li>• Scottish Priority Marine Features (PMFs) (NatureScot, 2020a) e.g. Blue whiting and Herring;</li> <li>• Species of Principal Importance in Scotland (NatureScot, 2020b) and England (Defra, 2022) e.g. Atlantic Halibut, Cod, Dover Sole;</li> <li>• EU Habitats Directive (92/43/EEC) – Annex II species e.g. Atlantic salmon, River Lamprey; and</li> <li>• Wildlife and Countryside Act 1981, as amended in Scotland (including the Nature Conservation (Scotland) Act 2004) – Schedule 5 species e.g. Basking shark.</li> </ul>	<ul style="list-style-type: none"> <li>• The introduction of subsea infrastructure, including foundation anchors, foundation moorings, safety and security buoys, and scour protection, and floating foundations can provide potential novel hard substrate for colonisation by species within the study area. The introduction of hard infrastructure may alter previously soft sediment habitat areas, attract new species with a preference for hard substrate, and increase the habitat complexity biodiversity of the area; and</li> <li>• Accidental pollution events</li> </ul>
<p><b>Marine Mammals</b></p>	<p><b>Cetaceans</b></p> <p>The cetacean species most commonly expected within the Project area include harbour porpoise, bottlenose dolphin, white-beaked dolphin, Risso’s dolphin and minke whale (Hammond <i>et al.</i>, 2021; Gilles <i>et al.</i>, 2023).</p> <p>Under the European Union (EU) Habitats Directive (Council Directive 92/43/EEC) and its transposition into UK domestic legislation, a network of European sites (primarily SACs) have been established to protect habitats and species of European importance. These sites are designated to conserve species listed in Annex II of the Directive, which includes those considered to be of interest and requiring the designation of protected areas.</p> <p>In UK waters, two cetacean species are listed under Annex II: the harbour porpoise and the bottlenose dolphin. These species are afforded enhanced protection through the designation of SACs specifically aimed at protecting critical habitats, such as breeding, foraging, and transit areas. The Moray Firth SAC designated for bottlenose dolphins overlaps with the Project area.</p> <p>Under the Marine (Scotland) Act and the UK Marine and Coastal Access Act, MPAs can be designated to protect features of importance in Scotland. There are no MPAs designated for cetaceans that overlap with the Project. The closest domestic MPA for cetaceans to the Project is the Southern Trench MPA, which is designated for minke whales and is located 33.16 km (at the closest point) from the Project</p> <p><b>Pinnipeds</b></p> <p>Both harbour seals and grey seals are Annex II species for which SACs can be designated for their protection. There are no designated SACs for either grey seal or harbour seal that overlap with the Project. The closest SAC to the Project for seals is the Dornoch Firth and Morrich More SAC designated for harbour seals, which is located</p>	<p>The following Impact Pathways may exist for Marine Mammals during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Increased underwater noise from piling, potentially UXO clearance and other construction activities;</li> <li>• Increased vessel activity resulting in greater levels of disturbance, and increased risk of collision; and</li> <li>• Indirect effects of underwater noise on marine mammal prey species.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Increased vessel activity resulting in greater levels of disturbance, and increased risk of collision;</li> <li>• Indirect effects of underwater noise on marine mammal prey species;</li> <li>• Entanglement risk with mooring and anchoring lines;</li> <li>• Collision risk with floating structures; and</li> <li>• Presence of floating infrastructure and mooring lines may act as physical or behavioural barriers, potentially disrupting movement patterns or migratory routes.</li> </ul>

Receptor	Key Sensitivities	Potential Impact Pathways
	<p>28.23 km (at the closest point) from the Project, and within the Moray Firth Seal Management Area (SMA). The closest SAC to the Project for grey seals is the Faray and Holm of Faray SAC (179 km from the Project), and is outside of the Moray Firth SMA, hence is not considered further.</p> <p>Under the Marine (Scotland) Act, designated seal haul-out sites have been selected to protect seals when they are hauled out. As designated seal haul-outs only cover onshore areas, there are none that overlap with the Project. The closest designated seal haul out is Findhorn located 0.71 km (at the closest point) from the Project.</p>	
<p><b>Ornithology</b></p>	<p>The Moray Firth is a nationally and internationally important estuarine system, characterised primarily by shallow, sandy marine benthic habitats that in turn support important numbers of finfish species such as sandeel <i>Ammodytes</i> species for seabirds. A range of habitats relevant for birds are present in the Moray Firth, including smaller bays and inlets, saltmarsh communities and cliff habitats that birds utilise for foraging, roosting and breeding (Marine Scotland, 2020).</p> <p>This area plays a vital role in supporting populations of non-breeding and migratory bird species. It regularly hosts non-breeding and migratory species of European importance, such as seaducks, divers and grebes. Additionally, it sustains internationally significant numbers of wintering waders in intertidal areas, many of which travel thousands of miles from breeding grounds in northern Europe and western Siberia (Marine Scotland, 2020). The Moray Firth coastline provides essential nesting habitat for seabirds during the breeding season, with species such as northern gannet, common guillemot, and black-legged kittiwake returning annually in spring and summer (RSPB, 2014). Reflecting these ornithological values, several designated conservation sites are located around the Moray Firth, including the Moray Firth SPA, which overlaps the Study Area.</p>	<p>The following Impact Pathways may exist for Ornithology during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Accidental pollution events such as spills or leakages from vessels or equipment, could potentially result in injury or mortality of birds, or affect prey availability and quality;</li> <li>• Increased vessel activity from construction activities may result in direct displacement of roosting or foraging birds from the Inshore Project Boundary;</li> <li>• Vessel activity may result in direct displacement of birds that are using the area for foraging, roosting, or loafing; and</li> <li>• Indirect impacts via effects on prey species (see Fish and Shellfish ecology)</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Disturbance and displacement (physical presence of FLOW Foundation units and Project related O&amp;M vessel activity); and</li> <li>• Potential entanglement in mooring/anchoring lines and other equipment in the development footprint.</li> </ul>
<p><b>Commercial Fisheries</b></p>	<p>The key fleets operating across the study area include:</p> <ul style="list-style-type: none"> <li>• Local inshore Scottish creel fleet (vessels typically &lt;15 m) targeting brown crab, lobster, velvet crab and whelk operating year-round;</li> <li>• Local inshore Scottish otter trawl fleet (vessels typically &lt;15 m) targeting Nephrops focused on muddy substrates with seasonal peaks in spring and autumn;</li> <li>• Local inshore Scottish dredge fleet (vessels typically &lt;15 m) targeting demersal species, operating year-round; and</li> <li>• Local inshore Scottish demersal trawl fleet (vessels typically &lt;15 m) targeting finfish and other demersal species operating year-round across mixed grounds.</li> </ul> <p>The key species landed within the study area include nephrops, ballan wrasse <i>Labrus bergylta</i>, brown crab <i>Cancer pagurus</i>, scallop, velvet crab, whelk, lobster, squid (mainly the veined squid) and octopi, mackerel, monkfish, cod, whiting.</p>	<p>The following Impact Pathways may exist for Commercial Fisheries during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Reduction in access to, or exclusion from, established fishing grounds;</li> <li>• Displacement of fishing activity leading to gear conflict and increased fishing pressure on adjacent grounds;</li> <li>• Disturbance of commercially important fish and shellfish resources leading to displacement or disruption of fishing activity;</li> <li>• Increased vessel traffic associated with the Project within fishing grounds leading to interference with fishing activity;</li> <li>• Additional steaming to alternative fishing grounds for vessels that would otherwise fish within the Project;</li> <li>• Physical presence of infrastructure leading to gear snagging; and</li> <li>• Disruption to seasonal fishing patterns.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Long-term exclusion from established fishing grounds;</li> <li>• Gear snagging and entanglement risk;</li> <li>• Displacement of fishing effort; and</li> <li>• Interference with fishing activity from maintenance vessel traffic.</li> </ul>

Receptor	Key Sensitivities	Potential Impact Pathways
<p><b>Shipping and Navigation</b></p>	<p>The Project lies close to existing navigational features, situated about 1.5 nm north of Findhorn and 1.7 nm west of Burghead. Burghead Harbour is primarily a fishing harbour with increasing leisure use, and a preferred anchorage lies roughly 0.7 nm southeast of the site. A spoil ground is located 1 nm to the east, and several wrecks and obstructions occur in the wider area, including two within the FLOW-Park boundary.</p> <p>Guillam Bank, 3 nm to the northwest with shallow depths of around 12 m, influences commercial vessel routing. To the west, the Cromarty Firth, home to the Ports of Invergordon, Nigg and Cromarty Harbour is a major offshore hub and provides sheltered deep-water anchorage, with its harbour limits extending to within 5.2 nm of the site. Although not adjacent, the operational Moray West, Moray East and Beatrice wind farms further shape navigation patterns in the wider Firth. The nearest military Practice and Exercise Areas (PEXA) lie approximately 8.9 nm to the north, with another located to the west.</p>	<p>The following Impact Pathways may exist for Shipping and Navigation during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Vessel displacement (i.e., vessels choosing to avoid the ongoing construction works) leading to increased vessel to vessel collision risk between third-party vessels;</li> <li>• Vessel to vessel collision risk between third-party vessels and Project vessels;</li> <li>• Reduced access to harbours and facilities as a result of the construction works and associated vessels; and</li> <li>• Reduced under keel clearance and vessel interaction with subsea infrastructure stored during construction.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Vessel displacement (i.e., vessels choosing to avoid the Moray FLOW-Park area) leading to increased vessel to vessel collision risk between third-party vessels;</li> <li>• Vessel to vessel collision risk between third-party vessels and Project vessels;</li> <li>• Reduced access to local ports, harbours, and facilities from the infrastructure within the Moray FLOW-Park area or associated project vessels;</li> <li>• Vessel to structure collision risk i.e., risk of a vessel making contact with a FLOW unit;</li> <li>• Loss of station of a FLOW unit; and</li> <li>• Reduced under keel clearance and vessel interaction with subsea infrastructure.</li> </ul>
<p><b>Seascape / Visual Environment</b></p>	<p>The key coastal, landscape and visual receptors with higher sensitivity within the 20 km Study Area are:</p> <ul style="list-style-type: none"> <li>• Coastal character along the Moray and Highland coastlines;</li> <li>• Visual receptors - in particular limited parts of the coastal settlements of Burghead and Findhorn, visitors to specific viewpoints and areas of amenity with views out to sea and recreational users of some sections of coastal Core Paths and the Moray Coastal Trail; and</li> <li>• Locally designated Special Landscape Areas which define sections of the Moray and Highland coastlines in the Study Area and thereby increase the value attributed to coastal, landscape and visual receptors therein.</li> </ul> <p>Within Moray visibility inland from the immediate coast is likely to reduce in extent, with screening from subtle undulations in landform and large blocks of coniferous forestry characteristic of the Moray agricultural plain.</p>	<p>The following Impact Pathways may exist for coastal, landscape and visual receptors during construction, operation and decommissioning:</p> <ul style="list-style-type: none"> <li>• Impacts on the appreciation of coastal character from the introduction of new structures inshore in coastal waters;</li> <li>• Visibility of new structures within sea views from coastal settlements, routes and areas used for recreation;</li> <li>• Impacts on the designated special qualities of locally designated special landscape qualities in particular where they have a strong association with sea views and are reliant on views of open sea in the expression of those coastal qualities; and</li> <li>• Cumulative effects with other offshore marine activities, and offshore, inshore or coastal renewables development within the Study Area.</li> </ul>
<p><b>Marine Archaeology and Cultural heritage (MACH)</b></p>	<p><b>Designated Sites</b> - Maritime or aviation wrecks can be protected under various legislation, including the Marine (Scotland) Act 2010, the Protection of Military Remains Act 1986 or the Ancient Monuments and Archaeological Areas Act 1979 and interference or damage to these sites is considered a criminal offence. There are currently no known maritime or aviation sites within the study area that are subject to statutory protection from these acts.</p> <p><b>Submerged Prehistory and Palaeolandscapes</b> - There are currently no known submerged <i>prehistoric</i> assets within the study area, however there is potential for the discovery of previously unrecorded wreck sites, particularly of wooden wrecks, broken up wrecks or partially buried wrecks that are more difficult to detect through geophysical survey. There is high potential for 20th century aircraft, particularly in relation to the Second World War (Wessex Archaeology, 2008).</p>	<p>The following Impact Pathways may exist for MACH during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>• Direct impacts can occur through pre-construction intrusive seabed and intertidal surveys (such as geotechnical coring) and seabed preparation (such as seabed levelling or ground reinforcement) and clearance (such as UXO clearance), and installation of mooring anchors and their scour protection (if required); and</li> <li>• Indirect impact through the use of vessels such as jack-up barges, workboats or specialist foundation anchor installation vessels through sediment disturbance and deposition.</li> </ul> <p>Note: direct and indirect impacts are mitigated through the use of primary survey data. The geophysical survey for the FLOW Park was completed in October 2025.</p> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>• Direct damage may occur where O&amp;M activities contact with the seabed beyond the area already impacted during the construction phase; and</li> </ul>

Receptor	Key Sensitivities	Potential Impact Pathways
	<p><b>Known Seabed Assets</b> - There are eight records within the Study Area for known seabed assets which could relate to maritime or aviation archaeological sites and/or associated material or find spots: three within the Project area; and five within the 1 km buffer around the Project Area.</p>	<ul style="list-style-type: none"> <li>Indirect impacts may occur through sediment deposition caused by O&amp;M vessel activity and/or foundation anchor maintenance and repair.</li> </ul>
<p><b>Socio-economic, Tourism and Recreation</b></p>	<p>The key socio-economic, tourism and recreation receptors potentially subject to impact include</p> <ul style="list-style-type: none"> <li>Economic receptors: Jobs and Gross Value Added (GVA);</li> <li>Recreation receptors: Such users of coastal paths and users of the Moray FLOW-Park Area and surrounding inshore areas for recreational activities; and</li> <li>Tourism receptors: Visitor economy.</li> </ul> <p>Impacts on the local labour market, GVA and supply chain within the local and national socio-economic study areas are likely to be experienced. The inshore coastal nature of the Project creates a significant local value opportunity, during construction particularly.</p> <p>Tourism is a significant contributor to the Moray economy. Any reduction in visitor numbers or satisfaction due to accommodation constraints could affect local businesses, including hospitality, retail, and attractions. Local residents and businesses may experience both positive effects (increased occupancy and spending during construction) and negative effects (reduced availability and price increases for regular customers). Note: construction is only expected to take up to a maximum of six months.</p> <p>There is a potential impact on inshore recreation and inshore visitor activities due to access restrictions, visual and noise disturbance, safety concerns and perception effects during construction. There is also potential for changes in social and economic conditions experienced by individuals, communities, and industries that rely on commercial fishing.</p>	<p>The following Impact Pathways may exist for Socio-economics, Tourism and Recreation during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>Impact on economy and jobs;</li> <li>Impact on accommodation availability;</li> <li>Impact on the enjoyment of inshore recreation and visitor activities and businesses operating in the Moray FLOW-Park Area; and</li> <li>Effects on commercial fishing.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>Impact on economy and jobs;</li> <li>Long term impact on tourism receptors and tourism;</li> <li>Impact on inshore recreation and inshore visitor activities; and</li> <li>Effects on commercial fishing.</li> </ul>
<p><b>Infrastructure and Other Users (IOU).</b></p>	<p>A review of offshore renewable energy activity found no existing or proposed wind, tidal, or wave developments within the IOU study areas. Three subsea cables are present: two undefined and apparently not in use, and one active power cable in the wider vessel displacement study area. The nearest cables lie outside the buffer for direct impacts, and their inactive status means they pose no constraint to the Project.</p> <p>Wastewater and marine maintenance activities are also present but pose no relevant constraints. Although 57 wastewater outfalls occur across the Vessel Displacement Study Area, none lie within the direct impact buffer. Dredging and disposal activity occurs only intermittently and is linked to port and harbour operations, with several disposal sites located within the wider study buffer. None of these activities overlap with areas where the Project could generate direct impact.</p> <p>Most oil and gas activity in the UK Continental Shelf lies in the North Sea, with the nearest field, Beatrice, located outside the IOU Study Areas. Within these areas there are no active licence blocks, relevant wells or structures, and only two unused pipelines, both situated beyond buffers for potential direct or indirect impacts. The nearest major facility, the Nigg Bay Terminal, is inactive and undergoing decommissioning, with redevelopment planned for renewable-energy manufacturing.</p>	<p>The following Impact Pathways may exist for IOU during construction and decommissioning phases:</p> <ul style="list-style-type: none"> <li>Displacement or access impacts associated with construction activities and use of advisory safety zones during construction phase;</li> <li>Indirect displacement or disturbance caused by temporary increases to suspended sediment concentrations / deposition during construction phase; and</li> <li>Indirect displacement or disturbance caused by increased Project vessel movements during construction phase causing an impediment to other users.</li> </ul> <p>O&amp;M phase Impact Pathways may include:</p> <ul style="list-style-type: none"> <li>Displacement or access impacts associated with O&amp;M activities and use of advisory safety zones during the O&amp;M phase;</li> <li>Indirect displacement or disturbance caused by temporary increases to SSC / deposition during O&amp;M phase; and</li> <li>Indirect displacement or disturbance caused by increased Project vessel movements during O&amp;M phase causing an impediment to other users.</li> </ul>

Receptor	Key Sensitivities	Potential Impact Pathways
	<p>Carbon Capture, Utilisation and Storage (CCUS) activity is limited in this region; the closest project is Acorn in the outer Moray Firth, and no CCUS development is planned within the Study Areas.</p> <p>Other marine infrastructure includes two PEXA defence training areas at Fort George and Tain, used for firing, demolition and aerial military activities. Two aquaculture sites lie within the study areas but are far enough away that only indirect impacts from vessel displacement are possible.</p> <p>Recreational use is significant, especially in summer, with activities such as sea angling, sailing, canoeing, water sports (including windsurfing, kitesurfing and e-foiling), wildlife watching and scuba diving. Several local businesses support these activities, and nearby harbours contribute to wider vessel movements, though only recreational receptors are assessed within the IOU context.</p>	

## 5 Assessment of Likely Significant Effects

### 5.1 Introduction

- 5.1.1.1 Notwithstanding the potential for the Project to not be classed as a Schedule 2 EIA Project, a high-level assessment of the likelihood of significant effects has been undertaken for each phase of the Project (see Table 5-1).
- 5.1.1.2 This outlines the potential impacts per receptor (in line with Section 3.5.3.3), the proposed mitigation measures to be applied and then determines the likelihood of significant post mitigation (residual) effects.
- 5.1.1.3 A summary of potential effects in line with Schedule 3 criteria is then provided in Section 5.2.

Table 5-1 Assessment of Potential Environmental Effects

Receptor	Potential Impacts	Mitigation	Likelihood of Significant Effects
<b>Marine and Coastal Processes</b>	<p><b>Construction and Decommissioning</b> Construction and decommissioning activities have the potential to interact with sensitive coastal and marine features. The installation and/or removal of mooring anchors may cause temporary increases in SSC and localised disturbance to seabed morphology. These effects could influence sediment-dependent habitats within the designated sites.</p> <p><b>Operation and Maintenance</b> During O&amp;M, movement of mooring lines and foundations may cause localised seabed abrasion, with the potential to affect nearby sediment habitats associated with designated sites. The interaction of the FLOW units with waves, tides and currents could also lead to minor, local changes in current speeds, wave energy or turbulence, with knock-on effects for littoral transport or small-scale morphological features.</p>	<p>The following Proposed Mitigation can be applied:</p> <ul style="list-style-type: none"> <li>• Use of a Construction Method Statement (CMS) to minimise seabed disturbance and manage sediment release.</li> <li>• Implementation of an Environmental Management Plan (EMP) and Construction Programme (CoP) to ensure environmentally responsible practices.</li> <li>• Scour protection applied where needed to prevent localised erosion.</li> <li>• Seabed restored as far as practicable after construction and decommissioning.</li> <li>• Hydrographic surveys undertaken to monitor seabed and morphological conditions.</li> <li>• Typical 600 m spacing between units to limit hydrodynamic interactions.</li> <li>• O&amp;M and Decommissioning Programmes (DP) to manage ongoing environmental risks and restore the site at end of life.</li> <li>• Project Environmental Monitoring Plan (PEMP) to track effects and ensure mitigation is effective.</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>
<b>Marine Sediment and Water Quality</b>	<p><b>Construction and Decommissioning</b> Anchor installation and/or removal has the potential to disturb consolidated seabed sediments. This may lead to increased resuspension of fine material and a temporary rise in turbidity within the surrounding water column. This may affect key water quality parameters, including SPM and bacterial mortality rates. Disturbance of surficial sediments may also temporarily mobilise contaminants, influencing sediment quality.</p> <p><b>Operation and Maintenance</b> Activities such as the reconnection or disconnection of floating foundation units to moorings, or the inspection and maintenance of seabed infrastructure may disturb consolidated seabed sediments. Although of a lower magnitude than construction activities, these may result in short-term increases in local turbidity.</p>	<ul style="list-style-type: none"> <li>• CMS to manage sediment disturbing activities.</li> <li>• Implementation of an EMP and CoP to ensure environmentally responsible practices.</li> <li>• Vessel Management Plan (VMP) to minimise vessel-related water quality risks.</li> <li>• Marine Pollution Contingency Plan (MPCP) for spill prevention and response.</li> <li>• Scour protection installed where required.</li> <li>• Seabed reinstated as far as practicable after works.</li> <li>• O&amp;M Programme and DP to manage ongoing environmental risks and restore the site at end of life.</li> <li>• PEMP to track effects and ensure mitigation is effective.</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>

Receptor	Potential Impacts	Mitigation	Likelihood of Significant Effects
<b>Biodiversity</b>			
<b>Benthic, Subtidal and Intertidal Ecology</b>	<p><b>Construction and Decommissioning</b> Mooring anchor installation and/or removal and vessel operations have the potential to cause temporary disturbance to seabed habitats within the study area. This may result in temporary habitat disruption, sediment resuspension, changes to surficial sediment composition, and mobilisation of contaminants. Potential impacts are possible on PMF such as burrowed mud and circalittoral fine mud, supporting seapens, fireworks anemones, burrowing megafauna, and reef-associated encrusting algal communities. There is also a potential risk of the introduction or spread of INNS.</p> <p><b>Operation and Maintenance</b> During O&amp;M, activities such as movement and maintenance of floating foundation units, ongoing use of moorings, and the presence of subsea infrastructure may cause highly localised habitat alteration. These may include changes in sediment transport and scour patterns, colonisation of hard structures by fouling organisms, and minor, temporary disruption to seabed habitats. PMF and sensitive benthic communities within the Moray Firth SAC and other protected sites may experience localised disturbance. The ongoing presence of infrastructure and vessel activity also maintains a risk of the introduction or spread of INNS.</p>	<ul style="list-style-type: none"> <li>• Project layout and unit storage designed to minimise disturbance to SAC/SPA features and sensitive habitats.</li> <li>• Development Specification and Layout Plan (DSLPL) to confirm final layout and avoid sensitive seabed areas.</li> <li>• Implementation of an EMP and CoP to ensure environmentally responsible practices.</li> <li>• INNS Mitigation Plan and MPCP to prevent contamination and non-native species introduction.</li> <li>• Seabed reinstatement and provision of scour protection where required.</li> <li>• O&amp;M and DP to manage ongoing risks and restore the site at end-of-life.</li> <li>• PEMP to track effects and ensure mitigation is effective.</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>
<b>Fish and Shellfish Ecology</b>	<p><b>Construction and Decommissioning</b> Mooring anchor installation and/or removal and vessel operations may affect fish and shellfish through noise, vibration, temporary habitat loss, sediment resuspension, deposition of sediment-bound contaminants, accidental pollution, and direct physical disturbance. There is also potential for introduction or spread of INNS.</p> <p><b>Operation and Maintenance</b> Activities such as the movement and maintenance of floating foundation units, mooring and anchoring infrastructure, and scour protection, may cause long-term habitat alteration. These structures may also create novel hard substrate for colonising species. Sensitive receptors during O&amp;M are the same as for construction, including designated sites and their associated fish and shellfish species, important forage species, and protected or priority species listed under OSPAR, Scottish, EU, and UK legislation. The operational phase also maintains the potential for INNS.</p>	<ul style="list-style-type: none"> <li>• Piling Strategy to minimise underwater noise impacts during piling activities.</li> <li>• Project layout and unit storage designed to avoid or reduce disturbance to SAC/SPA features and sensitive habitats.</li> <li>• Implementation of an EMP and CoP to ensure environmentally responsible practices.</li> <li>• Environmental Clerk of Works (ECoW) appointed to monitor compliance with mitigation measures.</li> <li>• INNS Mitigation Plan and MPCP to prevent contamination and non-native species introduction.</li> <li>• O&amp;M and DP to manage ongoing risks and restore the site at end-of-life.</li> <li>• PEMP to track effects and ensure mitigation is effective.</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>

Receptor	Potential Impacts	Mitigation	Likelihood of Significant Effects
<b>Marine Mammals</b>	<p><b>Construction and Decommissioning</b> Construction and decommissioning activities, such as piling, vessel operations, and other seabed works, may affect marine mammals through underwater noise, increased vessel related disturbance, risk of collision, and indirect effects on prey species. Sensitive receptors in the study area include cetaceans such as harbour porpoise, bottlenose dolphin, white-beaked dolphin, Risso's dolphin, and minke whale. The Moray Firth SAC, designated for bottlenose dolphins, overlaps the Project. Harbour and grey seals, which are Annex II species, may also be affected.</p> <p><b>Operation and Maintenance</b> Activities such as vessel movements, mooring and floating foundation infrastructure, and subsea works may affect marine mammals through vessel disturbance, risk of collision, entanglement in moorings, and potential disruption of movement or migratory patterns.</p>	<ul style="list-style-type: none"> <li>• Use of low-noise anchor installation methods (avoidance of hammer piling) where technically viable to reduce underwater noise impacts.</li> <li>• Implementation of an EMP and CoP to ensure environmentally responsible practices.</li> <li>• VMP and adherence to the Scottish Marine Wildlife Watching Code to minimise disturbance and collision risk.</li> <li>• ECoW and Marine Mammal Observer (MMO) to monitor compliance, sightings, and implement protective actions.</li> <li>• PEMP to track impacts and effectiveness of mitigation</li> <li>• Preparation and adherence to an MPCP.</li> <li>• Sensitive project layout and storage to avoid SAC/SPA features.</li> <li>• Adherence to JNCC guidelines during anchor installation and surveys to minimise noise impacts.</li> <li>• O&amp;M and DP to manage ongoing risks and restore the site at end-of-life.</li> <li>• PEMP to track effects and ensure mitigation is effective.</li> </ul>	<p>Acknowledging the Project's location within the Moray Firth SAC, the Applicant is committed to minimising underwater noise impacts during construction as far as technically feasible. If piling is considered, the Project will work to adopt low noise installation methods such as helical or micro piling over conventional impact piling.</p> <p>Following mitigation, impact magnitude is expected to be low to medium, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>
<b>Ornithology</b>	<p><b>Construction and Decommissioning</b> Mooring anchor installation and/or removal, vessel operation, and accidental pollution (spills), may affect seabirds through displacement from foraging or roosting areas and indirect effects via changes to prey availability. The Moray Firth SPA overlaps the Project Study Area, reflecting the ornithological sensitivity of the site.</p> <p><b>Operation and Maintenance</b> The presence of floating foundations, vessels, and mooring infrastructure may affect seabirds through disturbance, displacement from foraging or roosting areas, and potential entanglement in moorings or anchoring lines.</p>	<ul style="list-style-type: none"> <li>• Sensitive project layout and unit positioning to avoid impacts on SPA/SAC features and other sensitive habitats.</li> <li>• VMP to minimise disturbance from construction and O&amp;M vessels.</li> <li>• ECoW to monitor compliance and effectiveness of mitigation.</li> <li>• Construction Programme to plan timing and sequence of works to reduce disturbance.</li> <li>• Lighting and Marking Plan (LMP) to ensure navigational safety and reduce light-related impacts.</li> <li>• MPCP to prevent accidental pollution affecting birds or prey species.</li> <li>• O&amp;M and DP to manage ongoing risks and restore the site at end-of-life.</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>

Receptor	Potential Impacts	Mitigation	Likelihood of Significant Effects
<b>Commercial Fisheries</b>	<p><b>Construction and Decommissioning</b> Vessel operations and mooring anchor installation or removal may affect commercial fisheries through temporary exclusion from fishing grounds, displacement of effort, interference from vessel traffic, gear snagging, disruption to seasonal patterns, and reduced safety for small inshore vessels. The study area supports a range of inshore fishing fleets (&lt;15 m vessels) including creel, otter trawl, dredge, and demersal trawl vessels. Fishing activity occurs year-round, with seasonal peaks, and represents a degree of socio-economic and cultural importance for local communities.</p> <p><b>Operation and Maintenance</b> Activities such as maintenance vessel operations, mooring and foundation infrastructure, and scour protection may affect commercial fisheries through short and long-term exclusion from fishing grounds, gear entanglement, displacement of fishing effort.</p>	<ul style="list-style-type: none"> <li>• Sensitive layout and unit positioning to minimise disturbance to fishing grounds and SAC/SPA features.</li> <li>• Navigational Safety Plan (NSP) to reduce risk to vessels and other legitimate sea users.</li> <li>• Fisheries Liaison Officer (FLO) to maintain communication with local fishing industry.</li> <li>• Construction Programme to plan timing and sequence of works to reduce disruption.</li> <li>• LMP and UKHO/CAA/MoD notification to ensure navigational safety.</li> <li>• PEMP to track impacts on fisheries.</li> <li>• Fisheries Mitigation Monitoring and Communication Plan (FMMCP) to manage fisheries interactions.</li> <li>• Emergency Response Cooperation Plan (ERCoP) to support emergency response.</li> <li>• Seabed restoration following construction to original profile as far as reasonably practicable.</li> <li>• Debris and waste management to prevent hazards to fishing activity.</li> <li>• PEMP to track effects and ensure mitigation is effective.</li> <li>• O&amp;M and DP to manage ongoing risks and restore the site at end-of-life.</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low to medium, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>
<b>Shipping and Navigation</b>	<p><b>Construction and Decommissioning</b> Construction and decommissioning activities would occur within an area containing nearby harbours, anchorages, a spoil ground, wrecks, and commercial vessel routes influenced by Guillam Bank and the Cromarty Firth. During these phases, potential impacts include vessel displacement around construction works, increased vessel-to-vessel interaction, interactions between third-party vessels and construction vessels, temporary changes in access to nearby ports or anchorages, interaction with temporary subsea infrastructure, and changes in emergency response arrangements, including SAR operations.</p> <p><b>Operation and Maintenance</b> During O&amp;M, the presence of floating units and moorings within an already active navigational area may influence vessel movements. Potential impacts include vessel displacement around the Moray FLOW-Park, vessel-to-vessel interaction involving project or third-party vessels, vessel-to-structure allision risk, loss of station of a floating unit, interaction with subsea infrastructure, changes in access to nearby ports or anchorages, and effects on emergency response arrangements, including SAR operations.</p>	<ul style="list-style-type: none"> <li>• Appointment of an FLO to maintain communication with the fishing industry.</li> <li>• Development and implementation of a Construction Programme (CoP) setting out construction timelines.</li> <li>• Advance notifications to mariners, Kingfisher Bulletins and local fisheries groups at least 14 days before works commence.</li> <li>• Preparation and adherence to a Lighting and Marking Plan (LMP) approved by the NLB/MCA, including reporting and rectifying any failures.</li> <li>• Development of an FMMCP.</li> <li>• Preparation and adherence to an MPCP.</li> <li>• Development of an ERCoP in line with MCA guidance.</li> <li>• Removal of all construction and O&amp;M debris/waste for disposal at an approved location above MHWS.</li> <li>• Typical 600 m spacing between FLOW units.</li> <li>• Clear marking of the Moray FLOW-Park on UKHO Admiralty charts, including unit and mooring positions</li> <li>• Application for temporary 500 m safety zones during installation, decommissioning, deployment and retrieval activities; or use of advisory passing distances if agreed.</li> <li>• Preparation of a Development Specification and Layout Plan (DSLPL), including navigation-safe layout agreed with MCA and NLB.</li> <li>• Development of a VMP and NSP.</li> <li>• Use of guard vessels, where identified as necessary through risk assessment.</li> </ul>	<p>Independent of the decision on requirement for an EIA, a Navigational Risk Assessment (NRA) will be conducted in support of the marine licence application.</p> <p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>

Receptor	Potential Impacts	Mitigation	Likelihood of Significant Effects
		<ul style="list-style-type: none"> <li>• Compliance with MCA/HSE Regulatory Expectations on Moorings for Floating Wind and Marine Devices.</li> <li>• Use of marine coordination to manage vessel movements during installation, decommissioning and unit transfer operations.</li> <li>• Project vessels to comply with COLREGs and SOLAS as adopted by their Flag State.</li> <li>• O&amp;M and DP to manage ongoing risks and restore the site at end-of-life.</li> </ul>	
<p><b>Seascape / Visual Environment</b></p>	<p><b>Construction, O&amp;M and Decommissioning</b></p> <p>During construction, operation and decommissioning, the Project has the potential to affect coastal, landscape and visual receptors through the introduction of new structures within inshore coastal waters. This may influence the appreciation of coastal character and alter sea views from nearby coastal settlements. Changes to the visual environment may be particularly relevant where landscape character and locally designated special landscape qualities are strongly associated with open or undeveloped sea views.</p> <p>The Project may also contribute to cumulative effects when considered alongside other existing or proposed offshore, inshore or coastal renewable energy developments, potentially influencing the wider seascape and coastal visual context.</p>	<ul style="list-style-type: none"> <li>• Sensitive layout and unit positioning to minimise horizontal extent of development within the Moray FLOW Park Area, to avoid introducing visibility further west and east beyond the Findhorn and Burghead headlands.</li> <li>• Consider the potential to prioritise deployment within areas that are assessed as having the least potential impact i.e. furthest from the coast.</li> <li>• Phasing of the operational use of the Moray FLOW Park, initial commission of between 20 and 25 FLOW foundations.</li> <li>• Seasonal operation of the Moray FLOW Park, where in the Summer season there will be no FLOW foundations deployed, and in the Winter season, deployment of a number of FLOW Foundations up to a maximum of between 20 and 25 for a peak period of time of 2-3 weeks.</li> <li>• Mitigation of marine navigational lighting where practical.</li> </ul>	<p>Impact magnitude will take into consideration the limited seasonal operation of the Project and its reversibility as well as the scale of the change proposed, which will be dynamic.</p> <p>Of importance when considering the scale of the change is the baseline that includes other large scale, transient features in the form of shipping.</p> <p>Significant effects on those higher sensitivity coastal, landscape and visual receptors may arise in locations closest to the Moray FLOW Park area, where the magnitude of change may be medium to medium-high. These significant effects are anticipated to be localised to coastal receptors (in particular along the Moray coast in Winter) who have a strong association with, and derive character and qualities based on, views of open seas and which are intervisible across the Firth between the Moray and Highland coastlines.</p> <p>There would be no effects during the Summer.</p>

Receptor	Potential Impacts	Mitigation	Likelihood of Significant Effects
<b>Marine Archaeology and Cultural Heritage</b>	<p><b>Construction and Decommissioning</b> Seabed surveys, seabed preparation, anchor installation, UXO clearance and scour protection may affect marine and aviation wrecks or other submerged archaeological assets through direct disturbance. Indirect effects may occur from sediment resuspension and deposition caused by vessels and equipment.</p> <p><b>Operation and Maintenance</b> During O&amp;M, potential impacts are limited to seabed contact and localized sediment deposition associated with vessel activity, anchor maintenance and floating foundation operations.</p>	<ul style="list-style-type: none"> <li>• DSLP to confirm final layout and avoid sensitive seabed areas.</li> <li>• Archaeological Written Scheme of Investigation (WSI) including a Protocol for Archaeological Discoveries, securing mitigation for the lifetime of the Project.</li> <li>• Avoidance of identified seabed heritage assets and geophysical anomalies using Archaeological Exclusion Zones (AEZs) or micro-siting where practicable.</li> <li>• Integration of survey data (geophysical, geotechnical, ROV/diver) for pre-consent and post-construction archaeological assessment.</li> <li>• Further investigation of palaeolandscape features to enhance archaeological record.</li> <li>• Provision of scour protection where required around infrastructure.</li> <li>• Operation and Decommissioning Programmes to safeguard heritage interests.</li> <li>• Reporting and archiving with Historic Environment Scotland, local archaeology services, and OASIS/Archaeology Data Service.</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>
<b>Socio-economic, Tourism and Recreation</b>	<p><b>Construction and Decommissioning</b> Construction and decommissioning activities may result in temporary changes in local employment and economic activity, short-term pressures on accommodation availability, and disturbance to inshore recreational and visitor activities within the Moray FLOW-Park Area. Temporary effects on commercial fisheries may also occur due to restricted access or increased vessel activity in the immediate area.</p> <p><b>Operation and Maintenance</b> Potential impacts may include longer-term effects on local employment, economic activity, and the visitor economy, as well as ongoing influence on inshore recreational activities. Effects on commercial fisheries may continue at a low level due to the presence of infrastructure and associated O&amp;M vessel activity.</p>	<ul style="list-style-type: none"> <li>• Adherence to the Scottish Marine Wildlife Watching Code to protect tourism and recreational users connected to wildlife.</li> <li>• Implementation of a CMS, Piling Strategy and Design Statement (DS) to minimise disturbance, visual impacts, and noise during construction.</li> <li>• Units located and stored sensitively to reduce environmental and visual impacts.</li> <li>• Development and adherence to an EMP, VMP, and NSP to minimise impacts on tourism, recreation, and commercial users of the sea.</li> <li>• Appointment of an FLO and implementation of a FMMCP to mitigate impacts on commercial fishing.</li> <li>• Local notification to mariners and fishers, adherence to LMP, and ERCoP to reduce wider socio-economic and navigation-related impacts.</li> <li>• Decommissioning Programme and restoration of site post-operation to original condition to limit long-term socio-economic, tourism, and recreation impacts</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>
<b>Infrastructure and Other Users</b>	<p><b>Construction and Decommissioning</b> Construction and decommissioning activities may affect IOU through temporary displacement or restricted access due to construction works and advisory safety zones. Indirect disturbance may also occur from short-term increases in SSC or sediment deposition, as well as from increased vessel movements.</p> <p><b>Operation and Maintenance</b> Potential impacts may arise from displacement or restricted access associated with O&amp;M activities and advisory safety zones. Indirect effects may occur from temporary increases in SSC or sediment deposition and vessel movements during maintenance operations.</p>	<ul style="list-style-type: none"> <li>• Adherence to CMS, DS and DSLP to ensure safe and compliant works.</li> <li>• Implementation of EMP, VMP, NSP, and LMP to protect other users.</li> <li>• Advance notifications to local mariners and fishermen's organisations; ERCoP in place.</li> <li>• Safety Zones applied as appropriate; typical separation distance of 600 m between units maintained.</li> <li>• All debris and waste removed to approved locations above tidal level.</li> <li>• Decommissioning Programme to restore site at end of operational life.</li> </ul>	<p>Following mitigation, impact magnitude is expected to be low, effects are likely to be localised, temporary, and reversible.</p> <p>Not likely to be significant.</p>

## 5.2 Schedule 3 Criteria

5.2.1.1 The Marine EIA Regulations require the competent authority to consider the selection criteria set out in Schedule 3 when determining whether a Schedule 2 EIA Project is likely to have significant environmental effects. Although the Project is potentially not classed as a Schedule 2 development, a high-level review has been undertaken to demonstrate that the characteristics of the Project do not give rise to effects of a scale or nature that would trigger EIA. The relevant Schedule 3 criteria and how they relate to the Project are summarised below, applying the assessment of potential effects in Table 5-1.

### 5.2.2 Use of Natural Resources

5.2.2.1 The Project has been assessed against the Schedule 3 criterion relating to the use of natural resources, including land, soil, water, and biodiversity, and their sustainable availability.

5.2.2.2 The Project is entirely marine, and does not involve the extraction, consumption, or permanent loss of land or soil. It is noted that construction, O&M, and decommissioning activities may cause temporary localised disturbance to seabed sediments. However these effects will be mitigated, through measures such as 600 m unit spacing, hydrographic monitoring of seabed conditions, potential scour protection and seabed restoration if required (see Table 5-1).

5.2.2.3 Regards use of water, it is not to be consumed or removed by the Project. Temporary increases in suspended sediments, turbidity, or mobilisation of sediment-bound contaminants may occur. Mitigation measures such as the Project EMP, VMP, and applied pollution prevention procedures ensure that natural recovery processes will maintain the availability and quality of marine waters. Impacts are likely to be localised, temporary, and reversible.

5.2.2.4 Regards biodiversity, temporary, localised interactions with benthic habitats, PMF, fish and shellfish, marine mammals, and seabirds may occur. However mitigation measures such as minimising underwater noise, sensitive project layout, avoidance of key designated sensitive features, INNS controls, scour protection, and environmental monitoring (see Table 5-1), will ensure that biodiversity resources and natural ecosystem functions will be maintained.

5.2.2.5 Overall, the Project does not materially use or deplete natural resources, and its contribution to cumulative pressures on the sustainable availability of land, soil, water, or biodiversity is minimal. Following mitigation as proposed in Table 5-1, the likelihood of significant effects is low.

### 5.2.3 Emissions, Nuisances and Waste

- 5.2.3.1 The Project has been assessed in relation to emissions of pollutants (spills, noise, vibration and light), the creation of nuisances, and the management of waste.
- 5.2.3.2 During construction and decommissioning, potential Project effects include temporary increases in SSC, mobilisation of sediment-bound contaminants, and the risk of accidental fuel or chemical spills. Construction activities may also generate underwater noise and vessel-related disturbance, while navigational lighting may also introduce artificial light. No heat or radiation sources are associated with the Project.
- 5.2.3.3 Mitigation measures addressing emissions, nuisances and waste are outlined in Table 5-1. These include a CMS, EMP, VMP, O&M, DP, Marine Pollution Contingency Plan and waste management procedures. These will be designed to ensure that emissions, noise, vibration, and waste impacts are localised, temporary, and reversible.
- 5.2.3.4 Noting the Project's location within the Moray Firth SAC, designated for the Annex II species Bottlenose dolphin (*Tursiops truncatus*), underwater noise impacts are considered a key potential effect. The Project is committed to minimising underwater noise during all phases. If piling is selected as the preferred anchor installation option, the Project will work to adopt low noise installation methods such as helical or micro piling or similar low-impact designs over conventional impact piling. The potential use of low noise piling options for the Project is higher than a standard OWF pile, due to its sheltered inshore location. Lower wave, wind, and current forces inshore mean anchors require less holding capacity than a FLOW unit anchor would in a fully offshore development.
- 5.2.3.5 Operational activities may produce short-term increases in local turbidity, and low-level, localised disturbance from vessel movements and floating foundations, such as minor disruption to seabed habitats, marine mammals and birds. All project phases maintain the potential for INNS. These will be managed through multiple mitigation measures and management plans (Table 5-1) covering all aspects of O&M planning and control.
- 5.2.3.6 As stated in Table 5-1, the potential for significant visual effects does exist with respect to higher sensitivity coastal, landscape and visual receptors in locations closest to the Moray FLOW Park area. These effects however are anticipated to be localised to a limited stretch of coastline (in particular along the Moray coast in Winter). There would be no effects during the Summer.

5.2.3.7 Overall, following mitigation as proposed in Table 5-1, potential emissions, nuisance and waste impacts are considered localised, temporary and reversible for all receptors apart from seascape and visual environment.

## 5.2.4 Risks to Human Health, Cultural Heritage or the Environment

5.2.4.1 The Project has been assessed in relation to risks arising from accidents or unplanned events that could affect human health, cultural heritage, or the environment (Table 5-1).

5.2.4.2 During construction and decommissioning, potential hazards include accidental fuel or chemical spills, disturbance of seabed archaeological features, and temporary safety risks for commercial and recreational marine users. Vessel movements, anchor installation, and other nearshore activities could also interact with submerged cultural heritage assets if not properly managed.

5.2.4.3 Mitigation measures, including a Marine Pollution Contingency Plan, Navigational Safety Plan, Fisheries Liaison Officer, Archaeological Written Scheme of Investigation, exclusion zones during construction, and monitoring programmes will ensure these risks are minimised and managed. The Project does not involve operations that could generate persistent hazards such as radiation or heat, and all potential interactions will be controlled to avoid injury or irreversible damage.

5.2.4.4 Overall, following mitigation as proposed in Table 5-1, significant effects are not likely to occur.

## 5.2.5 Risk of Major Accidents

5.2.5.1 To manage the risk of major accidents, the Moray FLOW-Park will operate a specifically devised MCS to provide live management and oversight to enhance safety and reduce risks. The MCS is similar to a live port tracking system and includes live 24 hours a day, 7 days a week, 365 days a year tracking of all marine assets within and surrounding the Moray FLOW-Park. It will provide a proactive system of alerts, responses and communication to vessels, owners, and maritime authorities including the Royal National Lifeboat Institution (RNLI), MCA and Northern Lighthouse Board (NLB). Live human 24/7/365 monitoring and communications will occur within a locally position base to ensure continual safety coverage.

- 5.2.5.2 Any stored floating asset will be required to prepare a full emergency response and pre-engineering plan before access is granted to the Moray FLOW-Park. This information is stored within the MCS and provides detailed operating and safety parameters that can be monitored 24/7/365 and linked to agreed and prepared intervention strategies and actions. This provides early warning of prospective issues and significantly reduces the risk of major accidents.
- 5.2.5.3 The Project does not involve hazardous substances, pressurised systems, energy generation or high-risk industrial processes.
- 5.2.5.4 Given the nature of the works, and implementation of the MCS, the Project does not present a risk of major accidents. The potential for likely significant effects is considered low.

## 5.2.6 Climate Impacts and Climate Change Vulnerability

- 5.2.6.1 Regards the Project's potential contribution to climate change and its vulnerability to climate-related effects. The Project will generate limited operational Greenhouse Gas (GHG) emissions, and construction and decommissioning activities are associated with only minor, temporary emissions from vessel fuel use and machinery operation. With limited permanently installed infrastructure, embodied carbon in materials is considered low.
- 5.2.6.2 The Project has also been designed to be resilient to expected climate pressures, including sea-level rise, increased storminess, and changes in wave and current conditions. Design measures, unit spacing, and monitoring programmes will ensure that infrastructure can accommodate future conditions, and routine O&M will reduce the risk of climate-related failures.
- 5.2.6.3 The Project will have a negligible impact on climate and is designed to be robust to foreseeable climate change effects. The Project will actively support the development of the wider offshore wind industry, and the UK's net zero targets. The potential for likely significant effects is considered low.

## 5.3 Cumulative Effects

- 5.3.1.1 In accordance with Schedule 3 of the Marine EIA Regulations, cumulative effects are also considered when screening Schedule 2 projects for EIA requirements. This involves assessing the potential interactions of the proposed Project with other existing, approved, or reasonably foreseeable marine developments, infrastructure, and activities within the study area. Consideration of cumulative effects ensures the combined impacts of multiple projects on receptors such as water quality, marine habitats, protected species, and human activities are taken into account in determining whether a full EIA is required.
- 5.3.1.2 A summary of potential cumulative effects associated with the Project is given in Table 5-2.

Table 5-2 Potential Cumulative Effects associated with the Project

Receptor	Potential Cumulative Effect
<p><b>Physical</b> Marine and Coastal Processes</p> <p>Sediment and Water Quality</p>	<p>Certain potential physical environmental impacts, such as an increase in SSC, have the potential to be observed over a wider area. Potential cumulative impacts on Marine and Coastal Processes receptors will be guided by tidal excursions. For example, any maintenance dredging undertaken at nearby harbours such as Findhorn, Nairn, Burghead or Ardersier, if occurring concurrently with Project construction activities, could contribute to cumulative increases in SSC within the local water column.</p> <p>For MW&amp;SQ, these cumulative interactions may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Burghead Dredge Spoil Disposal Site;</li> <li>• Burghead Longsea Outfall;</li> <li>• Whiteness Sands B Spoil Disposal Site; or</li> <li>• Whiteness Sands C Spoil Disposal Site.</li> </ul>
<p><b>Biodiversity</b></p>	<p><b>Benthic, Subtidal and Intertidal Ecology</b></p> <p>Most impacts to Benthic, Subtidal and Intertidal ecology would be close to the Moray FLOW-Park. Cumulative temporary increases in SSC and sediment deposition do however have the potential to occur over a wider area.</p> <p><b>Fish and Shellfish Ecology</b></p> <p>For Fish and Shellfish Ecology, cumulative interactions may occur with:</p> <ul style="list-style-type: none"> <li>• Cumulative mortality, injury and behavioural changes resulting from UWN; and</li> <li>• Cumulative temporary increase in suspended sediment and sediment deposition.</li> </ul> <p><b>Ornithology</b></p> <p>The cumulative impact assessment for ornithology will consider potential operational disturbance and displacement, as well as indirect effects on prey availability for seabird receptors. The overall contribution from the Project is expected to be low, given its limited spatial footprint and seasonal nature. Additionally, the likelihood of significant cumulative effects arising from other plans or projects during construction is considered low, as construction activities associated with the ScotWind leasing round are spatially dispersed and unlikely to coincide temporally with the Project. These factors reduce the potential for overlapping disturbance or displacement effects at a population level.</p> <p><b>Marine Mammals</b></p> <p>For marine mammals, cumulative effects are most likely to arise from UWN generated during construction activities associated with other inshore and offshore developments. These activities have the potential to cause behavioural disturbance, displacement, and in some cases, auditory injury</p>

Receptor	Potential Cumulative Effect
	<p>to sensitive species. For example, when considering the broader regional study area, defined by the appropriate species Management Unit (MU), the nearest OWFs to the Project that are not currently operational are Caledonia, Stromar, Broadshore, Scaraben and Sinclair.</p>
<p><b>Human, Socio-economic</b></p>	<p><b>Commercial Fisheries</b> For commercial fisheries, the following impacts from the Project have the potential to act cumulatively with impacts from other developments:</p> <ul style="list-style-type: none"> <li>• Reduction in access to, or exclusion from established fishing grounds;</li> <li>• Displacement leading to gear conflict and increased fishing pressure on adjacent grounds; and</li> <li>• Disturbance of commercially important fish and shellfish resources leading to displacement or disruption of fishing activity.</li> </ul> <p><b>Shipping and Navigation</b> For shipping and navigation, Cumulative effects are subject to a wider screening radius of 50 nm. The main issue is the level of interaction with commercial routes passing in proximity to the FLOW-Park, (to be reviewed during the NRA process).</p> <p><b>Marine Archaeology and Cultural Heritage</b> For MACH, direct cumulative effects are considered unlikely. They may occur however with regards to indirect effects, such as effects to local hydrodynamic and sediment transport regimes.</p> <p><b>SLVIA</b> For SLVIA, the significance of cumulative effects is determined through a combination of the sensitivity of the coastal, landscape or visual receptor and the magnitude of change upon it. For example, effects from the Project may act cumulatively other offshore marine activities in the Moray Firth such as ships at anchor, and other offshore, inshore or coastal renewables development within the Study Area.</p> <p><b>Socio-economics, Tourism and Recreation</b> For socio-economics, tourism and recreation, cumulative interactions have greatest potential to occur with other major infrastructure projects developed within the local study area, examples include:</p> <ul style="list-style-type: none"> <li>• Increased competition for local accommodation, but also positive effects (increased occupancy and spending);</li> <li>• Aggregated disturbance to coastal recreation users; and</li> <li>• Overlap in temporary access restrictions.</li> </ul> <p><b>Infrastructure and Other Users</b> For IOU, cumulative interactions may occur with all of the identified impact pathways where the activities overlap temporally and spatially with the activities of other plans/projects.</p>

- 5.3.1.3 Quantitative assessment of potential cumulative effects will be developed as part of the Marine Licence Application. At this screening stage, acknowledging the potential cumulative effects outlined in Table 5-2, and proposed mitigation measures (Table 5-1), the overall contribution of the Project to cumulative impacts is expected to be small. This reflects the Project's limited infrastructure, relatively small spatial footprint, and the localised nature of its construction, O&M and decommissioning activities.
- 5.3.1.4 In addition, programmes associated with ScotWind projects and other major offshore developments in the region are both spatially dispersed and generally planned for installation windows outside that of the Project, making temporal overlap with the FLOW Park unlikely, or to limited impact.
- 5.3.1.5 The likelihood of significant cumulative effects arising from interactions with the Moray FLOW-Park and other projects is therefore considered low.

## 6 Summary

- 6.1.1.1 It is considered the Project will require a Marine License under Section 21 of the Marine (Scotland) Act 2010. The purpose of this Screening Report is to seek a screening opinion from MD-LOT, on behalf of the Scottish Ministers, regarding whether an EIA is required for Moray FLOW-Park in support of a Marine License application.
- 6.1.1.2 Under the Marine EIA Regulations, certain project classifications and associated likely significant effects will trigger the requirement for an EIA. Namely, Schedule 1 developments always require EIA, Schedule 2 developments only require EIA when they are likely to have significant effects on the environment, and developments which do not fall within Schedule 1 or Schedule 2 do not require EIA.
- 6.1.1.3 This report therefore aims firstly, to provide sufficient information for MD-LOT to determine the correct classification of the Project under Schedule 1 and 2 of the Marine EIA Regulations.
- 6.1.1.4 It is considered by the Applicant that the Project does not meet the thresholds or types of development that classify as a Schedule 1 development. Following that, on review the Project could potentially fall within a single Schedule 2 category i.e. 3) Energy industry (j) *installations for the harnessing of wind power for energy production (including offshore wind farms)*. However, as Moray FLOW-Park will not be used for harnessing wind power and is for the storage of FLOW foundation units only, with no fully assembled WTG to be stored or installed, the Applicant is of the view the Project is not a Schedule 2 development.
- 6.1.1.5 It is considered the Project is not classified under category 3(j) for the following reasons:
- The Project does not constitute an offshore energy generating installation or infrastructure associated with electricity production;
  - The Project does not involve the construction or operation of offshore WTG;
  - The Project does not involve transmission infrastructure, export cables, substations or grid connections;
  - The function of the development is limited exclusively to storage and logistics, comparable to a temporary floating storage or mooring facility;
  - The scale and nature of the works do not align with 3(j) when considered in terms of purpose, function, or environmental risk; and

- Although the purpose of the storage park is to support the development of offshore wind farms in Scotland, it is not in itself an OWF.
- 6.1.1.6 If the Project is to be classed by Scottish Ministers under Schedule 2, this Screening Report then aims to provide sufficient information to enable MD-LOT to determine whether the Project is likely to have significant effects on the environment (Regulation 10).
- 6.1.1.7 Potential receptors and known sensitivities to impact have been identified in Chapter 4. Potential effects on these have been assessed in Chapter 5, in line with Schedule 3 criteria.
- 6.1.1.8 Having regard to the characteristics of the Project, and the nature and scale of any potential impacts following mitigation (see Table 5-1), it is concluded that even if the Project is classed as a Schedule 2 EIA Project, it will not give rise to any likely significant effects as interpreted under Schedule 3 for all receptors, apart from seascape and visual impacts. Potential effects will predominantly be temporary, reversible, and small in spatial extent.
- 6.1.1.9 There is no or very limited potential for long-term emissions or pollution from the proposed works. Cumulative and/or transboundary effects are also not likely to be of a magnitude that would warrant EIA.
- 6.1.1.10 Regards seascape and visual impacts, following mitigation, impact magnitude still has the potential to be medium to high on coastal receptors (in particular along the Moray coast) who have a strong association with, and derive character and qualities based on, views of open seas and which are intervisible across the Firth, between the Moray and Highland coastlines.
- 6.1.1.11 At this screening stage it is noted that the use of ZTV modelling is still to take place. ZTV modelling could potentially inform the reduction of scope of landscape and visual receptors inland but is unlikely to reduce those at the coast (although the spatial extent of receptors might reduce with landform and woodland screening to the east and west).
- 6.1.1.12 To confirm, the Project is not located off coastline that is designated at a national level for its landscape qualities. Therefore, any potential significant effect would be on local landscape character and designations only. Any visual effects will be highly seasonal, with the FLOW park only to be used outside of Summer.
- 6.1.1.13 Following the information and conclusions presented in this Screening Report, it is our view that the Project does not require EIA under the Marine EIA Regulations.

6.1.1.14 It is therefore requested that MD-LOT, on behalf of the Scottish Ministers, confirm the classification of the Project in terms of the Marine EIA Regulations and whether they apply, noting the details of the proposed works, their nature and function. If MD-LOT conclude that the Project does indeed fall within Schedule 2 development, then a screening opinion is requested with respect to the likelihood of significant effects, in accordance with Schedule 3 of the Marine EIA Regulations.

## 7 References

Ancient Monuments and Archaeological Areas Act (1979 as amended), Available at: <https://www.legislation.gov.uk/ukpga/1979/46/enacted> [Accessed: January 2025].

Centre for Environment Fisheries and Aquaculture Science (Cefas) (2004), 'Guidance note for Environmental Impact Assessment in respect of FEPA and CPA requirements', Available at: <https://www.cefas.co.uk/publications/files/windfarm-guidance.pdf> [Accessed: January 2025].

Gilles, A., Authier, M., Ramirez-Martinez, N., Araújo, H., Blanchard, A., Carlström, J., Eira, C., Dorémus, G., Fernández, C., Geelhoed, S., Kyhn, L., Laran, S., Nachtsheim, D., Panigada, S., Pigeault, R., Sequeira, M., Sveegaard, S., Taylor, N., Owen, K., Hammond, P. (2023). Estimates of cetacean abundance in European Atlantic waters in summer 2022 from the SCANS-IV aerial and shipboard surveys.

Hammond, P. S., Lacey, C., Gilles, A., Viquerat, S., Börjesson, P., Herr, H., Macleod, K., Ridoux, V., Santos, M., Scheidat, M., & Teilmann, J. (2021). Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. Wageningen Marine Research.

Hill, J. M., Tyler-Walters, H., Garrard, S. L. and Watson, A. (2023), 'Seapens and burrowing megafauna in circalittoral fine mud'. In Tyler-Walters H. Marine Life Information Network: Biology and Sensitivity Key Information Reviews. Plymouth: Marine Biological Association of the United Kingdom. Available at: <https://www.marlin.ac.uk/habitats/detail/131> [Accessed: January 2025].

HMSO (2010), 'Marine (Scotland) Act 2010'. <https://www.legislation.gov.uk/asp/2010/5/contents> [Accessed: January 2025].

Marine (Scotland) Act (2010 asp 5). Available at: <https://www.legislation.gov.uk/asp/2010/5/data.pdf> [Accessed: January 2025].

Marine Scotland (2024) 'Moray Firth SMR'. <https://marine.gov.scot/sma/region/moray-firth-smr> (Accessed: January 2025).

Marine Scotland. (2020), 'Moray Firth Special Protection Area: business and regulatory impact assessment', Available online at: <https://www.gov.scot/publications/moray-firthspecial-protection-area-business-regulatory-impact-assessment> (Accessed: January 2025).

Moray Offshore Renewables Ltd. (2011), 'Moray East Environmental Statement Technical Appendix 4.2A: Benthic Ecology Characterisation Survey. Available at:

<https://www.morayeast.com/application/files/1315/8014/0645/Appendix-4-2-A-Benthic-Ecology-Wind-Farm-Sites.pdf> [Accessed: January 2025].

NatureScot (2020a), 'Priority Marine Features in Scotland's seas - The List', Available at: <https://www.nature.scot/doc/priority-marine-features-scotlands-seas-list> [Accessed: January 2025].

NatureScot (2020b), 'Scottish Biodiversity List', Available at: <https://web.archive.org/web/20240422023328/https://www.nature.scot/doc/scottish-biodiversity-list> [Accessed: January 2025].

Protection of Military Remains Act (1986), Available at: <https://www.legislation.gov.uk/ukpga/1986/35/contents/enacted> [Accessed: January 2025].

Royal Society for the Protection of Birds (RSPB). (2014), 'Firth Wind Farms', Available online at: <https://www.rspb.org.uk/our-work/casework/cases/moray-firth-wind-farms> (Accessed: January 2025).

Scottish Government (2020) 'Sectoral Marine Plan for Offshore Wind Energy'. <https://www.gov.scot/publications/sectoral-marine-plan-offshore-wind-energy/> (Accessed: January 2025).

UK Government (1989) Electricity Act 1989. Available at: <https://www.legislation.gov.uk/ukpga/1989/29/contents> (Accessed: January 2025).

UK Government (2016) Scotland Act 2016. Available at: <https://www.legislation.gov.uk/ukpga/2016/11/contents> (Accessed: January 2025).

UK Government (2022) 'British Energy Security Strategy'. <https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy> (Accessed: January 2025).

UK Parliament (1981) 'Wildlife and Countryside Act 1981'. <https://www.legislation.gov.uk/ukpga/1981/69/contents> (Accessed: January 2025).

UK Parliament (1994) 'The Conservation (Natural Habitats, &c.) Regulations 1994'. <https://www.legislation.gov.uk/uksi/1994/2716/contents> (Accessed: January 2025).

UK Parliament (2004) 'Energy Act 2004'. <https://www.legislation.gov.uk/ukpga/2004/20/contents> (Accessed: January 2025).

UK Parliament (2004) 'Nature Conservation (Scotland) Act 2004'. <https://www.legislation.gov.uk/asp/2004/6/contents> (Accessed: January 2025).

UK Parliament (2010) 'Marine (Scotland) Act 2010'.

<https://www.legislation.gov.uk/asp/2010/5/contents> (Accessed: January 2025).

UK Parliament (2017a) 'The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017'. <https://www.legislation.gov.uk/ssi/2017/115/part/1> (Accessed: January 2025).

Wessex Archaeology (2008), 'Aircraft Crash Sites at Sea: A Scoping Study. Archaeological Desk-based Assessment', Salisbury: unpublished report ref. 666410.02.