

APPENDIX E – FLMAP REGIONAL OUTER HEBRIDES 2020

Scottish Hydro Electric Power Distribution

Fishing Liaison Mitigation Action Plan

(covering all sea users)

Outer Hebrides



	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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1 Introduction

- 1.1 Scottish Hydro Electric Power Distribution (SHEPD) would like to make it easy for all stakeholders who have interests in the submarine electricity cable planning process to have a strong voice in helping us determine our installation and protection practices but also inform our inspection and maintenance works. We are committed to open, honest and transparent communication and engagement.
- 1.2 This Fishing Liaison Mitigation Action Plan (FLMAP) outlines how we will interact with all sea users, prior to and during any works relating to 15 submarine cables at the following locations:
- Laxay-Kershader (2)
 - North Uist-Berneray
 - Barra-Vatersay
 - Eriskay-Barra 1
 - Eriskay-Barra 2
 - Harris-Scalpay East
 - Harris-Scalpay West
 - Kismul Castle
 - South Uist-Eriskay
 - North Uist-Benbecula East
 - North Uist-Benbecula West
 - North Uist-Benbecula Centre
 - North Uist-Benbecula Centre 2
 - Benbecula-South Uist East
 - Benbecula-South Uist West
- 1.3 The purpose of this FLMAP is to:
- Illustrate the associated risks to the commercial fisheries industry (and other legitimate sea users) and address the potential effects (highlighted in the marine licenced evidence).
 - Identify how to minimise and mitigate potential impacts on local communities.
- 1.4 SHEPD aim to facilitate co-existence between all parties as recommended in the FLOWW¹ and ESCA² (previously SCUK) guidelines. SHEPD has also developed the policy document *How Scottish Hydro Electric Power Distribution co-exists with other marine users*³ which should be used in conjunction with this FLMAP.

¹ Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fishing Liaison, 2014

² European Subsea Cables Association

³ Scottish and Southern Electricity Networks: *How we co-exist with other marine users*, available: <https://www.ssen.co.uk/SubmarineCables/AboutUs/>

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- 1.5 To help us understand the impacts that our cable installation decisions have, we work proactively with our regulators, customers and stakeholders. This helped our collaborators to better understand the impacts our engineering decisions can have on the safety of mariners, energy costs for communities we serve, on local and national economic activity and on the natural environment⁴.
- 1.6 Cable works that will be covered by this FLMAP include cable inspections, surveys and cable installations. This FLMAP operates in conjunction with the Outer Hebrides FLMAP Delivery Programme, which outlines the programme of communication for the identified stakeholders during the cable works activities and sets out the register of commitments for disseminating this information. The FLMAP Delivery Programme also forms an audit trail, documenting communication and agreed mitigation between SHEPD and sea users during specific cable works. This will advise SHEPD's approach to continuous improvement on mitigating cable activities throughout the region and will be developed and updated accordingly.
- 1.7 A summary table of potential interactions for each cable outlines key potential interactions with the fisheries industry and other sea users. These are given in Appendix E *Cable-Specific Interactions*.
- 1.8 This FLMAP identifies the respective responsibilities of the Company Fishing Liaison Officer (CFLO) and the Fishing Industry Representative (FIR), and how the FIR and CFLO will operate. The FLMAP has been constructed to facilitate co-existence between SHEPD and other legitimate sea users.
- 1.9 The potential marine activities relevant to the area of cable works are listed below. A more detailed summary of activities is provided in Chapters 6 and 7 and visual representations of relevant activities are provided in Appendix C and Appendix D:
- The Outer Hebrides are a moderately popular area for marine recreation.
 - There are moderate to high levels of coastering over Barra-Vatersay.
 - There are very low to high levels of canoeing/kayaking, scuba diving and sea angling from shore.
 - There are low to moderate levels of bird and wildlife watching, visits to historic sites or attractions, motor cruising, sailing and cruising.
 - There are very low to low levels of all other activities over the cables: power boating, long distance swimming, chartered angling, surfing and paddle boarding, yacht racing, jet skiing, wild fowling and rowing and sculling.
 - There are no renewable energy developments in the vicinity of the cable works.
 - There are a number of shellfish and finfish aquaculture sites in the vicinity of the cable works.
 - Conservation designations within the vicinity of the cable locations include:

⁴ For further details see Scottish and Southern Electricity Networks: *Submarine Electricity Cable Cost Benefit Analysis Method Statement*: <https://www.ssen.co.uk/CBAFULL/> and *Method Statement Executive Summary*: <http://news.ssen.co.uk/media/266234/CBA-Model-Statement-Executive-Summary.pdf>

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- The National Scenic Areas (NSAs) South Uist Machair and South Lewis, Harris and North Uist
- The Special Area of Conservation (SAC) with marine components Sound of Barra
- There are a number of wreck sites in the vicinity of Eriskay-Barra, Kismul Castle and Harris-Scalpay.
- A number of cables fall within the following Harbour Authority boundaries:
 - Sound of Scalpay, Harris⁵ – covers Harris-Scalpay East
 - Sound of Berneray, Berneray⁶ – adjacent to North Uist-Berneray
 - Ludaig, South Uist⁷ – adjacent to the South Uist landfall of South Uist-Eriskay
 - Haun, Eriskay⁸ – adjacent to the Eriskay landfall of South Uist-Eriskay
 - Ceann a' Gharaidh, Eriskay⁹ – covers Eriskay cable landfall of Eriskay-Barra
 - Eoligaray, Barra¹⁰ – covers Barra cable landfall of Eriskay-Barra 2
 - Castle Bay Pier, Barra¹¹ – covers Kismul Castle
 - Vatersay Causeway, Vatersay¹² – covers Barra-Vatersay
- The cables Laxay-Kershader 2, North Uist-Benbecula and Benbecula-South Uist do not fall within any harbour authority boundaries.

1.10 The main commercial fishing activity around the Outer Hebrides is potting (creeling) for Nephrops (and to a lesser extent crab and lobster), scallop dredging and (Nephrops) trawling. Potting vessels represent the most days at sea within the region due to the nearshore location of the cables, it is likely to be the primary fishery that may interact with the cable locations.

⁵ <http://www.cne-siar.gov.uk/harbourmaster/index.asp>

⁶ <http://www.cne-siar.gov.uk/harbourmaster/index.asp>

⁷ <http://www.cne-siar.gov.uk/harbourmaster/index.asp>

⁸ <http://www.cne-siar.gov.uk/harbourmaster/index.asp>

⁹ <http://www.cne-siar.gov.uk/harbourmaster/index.asp>

¹⁰ <http://www.cne-siar.gov.uk/harbourmaster/index.asp>

¹¹ <http://www.cmassets.co.uk/location/barra-castlebay/>

¹² <http://www.cne-siar.gov.uk/harbourmaster/index.asp>

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2 Communications

- 2.1 Information regarding any cable survey or construction works (referred to as works hereafter) required will be issued to all fishing and other relevant statutory and non-statutory stakeholders to ensure effective co-existence during the works (this includes inspection surveys and any subsequent requirement for cable installation).
- 2.2 Some activities such as cable installation works require additional information which will inform the potential interactions with sea users. When required SHEPD will provide the Project Description and other necessary documents.
- 2.3 Survey contractors shall provide details of all vessel movements, works and relevant co-ordinates to the CFLO and the FIR who will disseminate this information.
- 2.4 Relevant stakeholders will be contacted before planned works which have the potential to impact them and, depending on the progress of this activity; it would also be common practice for there to be regular contact throughout the works.
- 2.5 In addition to statutory stakeholder engagement, SHEPD also has a number of obligations where it is necessary to engage with non-statutory stakeholders prior to, during and/or upon completion of certain work activities.
- 2.6 In the event that the date or duration of works deviates from the notification timings (e.g. NtM) outlined in the *Outer Hebrides FLMAP Delivery Programme*¹³, an update will be issued to the relevant stakeholders. Similarly, if the scope or methodology of the planned works activity changes, then any stakeholder likely to be affected, including any relevant licensing authority, would be consulted. Any change to associated timelines would be agreed prior to the works commencing.

¹³ The Delivery Programme is to cover the entire period to April 2023.

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3 Scheduling of liaison and information distribution

3.1 Dissemination of information to the fishing industry and other legitimate sea users will be issued as described in Table 1.

Table 1 Schedule for dissemination of information

Activity	Timescale for distribution
Inspection Programme	<ul style="list-style-type: none"> ▪ Notice and information to be distributed at the earliest opportunity once information is available. ▪ Regular liaison and updates by Fishing Industry Representative (FIR) with local fishermen of proposed timings with confirmations of when operations are finalised. ▪ Regular liaison and updates by the Company Fishing Liaison Officer (CFLO) with other legitimate sea users of proposed timings with confirmations when operations are finalised.
Surveys (including any requirement for Pre-construction surveys) that have the potential to require gear relocation	<ul style="list-style-type: none"> ▪ Regular liaison and updates by FIR with local fishermen, well in advance of disruption, defining who might be affected, where and when. Liaison to take into account weather, number of creels to be moved, bait ordering etc. ▪ Notice to Mariners and information distributed not less than 20 days prior to survey mobilisation, if possible, to allow inclusion in the Kingfisher Fortnightly Bulletin.
Specific construction activities i.e. installation works	<ul style="list-style-type: none"> ▪ Notice to Mariners and information distributed not less than 20 days, if possible, for individual construction vessels mobilisations. ▪ Regular liaison and updates by FIR with local fishermen of proposed timings with confirmations when operations are finalised. ▪ Regular liaison and updates by CFLO with other legitimate sea users of proposed timings with confirmations provided when planned works are finalised.
Meetings with fishery stakeholders	<ul style="list-style-type: none"> ▪ Meetings as required during all works i.e. the inspection surveys and any subsequent requirements for pre-construction and construction phases.
Meetings with other legitimate sea users	<ul style="list-style-type: none"> ▪ Meetings as required during all works i.e. the inspection surveys and any subsequent requirements for pre-construction and construction phases.
Ongoing Liaison	<ul style="list-style-type: none"> ▪ Additional unscheduled liaison and consultation will be undertaken by either the CFLO or the FIR as required to address issues or fishermen's concerns as they arise.

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4 Formal Notifications

4.1 Details of the cable works will be distributed to appropriate sea users. The anticipated formal communications are provided in Table 2.

Table 2 Formal notifications

Type	Function	Distribution
Submarine electricity cable flyer	<ul style="list-style-type: none"> It is intended that flyers will be issued for specific cable works. This is not a requirement set out in the marine licences but is a proactive initiative taken by SHEPD to provide as much advance warning of the forthcoming works as possible. 	<ul style="list-style-type: none"> Flyers¹⁴ will be published through Kingfisher Information Service Offshore Renewables and Cable Awareness (KISORCA) and Fishing News. Flyers will be issued nominally at least 4 weeks, if possible, prior to commencing the operations to which they relate.
Notices to Mariners (NtM)	<ul style="list-style-type: none"> NtM and/or radio navigational warnings and publication in appropriate bulletins to comply with the conditions in the marine licences. Each NtM will contain full details of the vessel, location, activities, contact details etc. In the case of incidents or emergencies requiring notification, the NtM will be issued as soon as reasonably possible. Any actions required to notify an incident or emergency will go ahead even if there is not sufficient time for it to appear in the Kingfisher Fortnightly Bulletin. 	<ul style="list-style-type: none"> All NtMs¹⁵ will be issued by the CFLO NtMs will be published through KISORCA Details of the works will be promulgated to all appropriate sea users NtMs will be issued at least 20 days prior to works' start date, if possible, to allow inclusion in the Kingfisher Fortnightly Bulletin. NtMs will be issued using the example NtM document at relevant stages of cable surveys and works.
NtM updates	It is intended that the issued NtMs will comprehensively describe the planned activities. However, in the unlikely event that a significant change to these activities becomes apparent, an update will be issued.	If required, the NtM update to be issued by email to the Source Data Receipt at the UK Hydrographic Office and copied to the distribution list set out in the NtMs.

¹⁴ The flyer will contain the following information: submarine electricity cable specific information; useful contacts; working area; national and regional charts; site specific charts.

¹⁵For details see Appendix A: *Notice to Mariners* example template.

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Type	Function	Distribution
Notices to static gear fishermen	Further specific liaison will take place between SHEPD's FIR and the fishermen who have static fishing gear in the works areas to agree the detailed arrangements for removal of static gear. This will include details of dates and numbers of creels.	The static gear fishermen will receive the NtMs.
Notices to mobile gear fishermen	Specific liaison between SHEPD's FIR and the fishermen who will be affected by the survey and installation operations will take place to ensure that they are given a minimum of 24 hours' notice that vessels of restricted mobility will be in the area.	The mobile gear fishermen will receive the NtMs.
Notices to other legitimate sea users	Specific liaison between SHEPD's CFLO and the legitimate sea users who will be affected by operations will take place to ensure that they are given a minimum of 24 hours' notice that vessels of restricted mobility will be in the area.	Other legitimate sea users identified through consultation will receive the NtM (the distribution lists are given in Table 3, and Table 4).

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5 Communication Distribution List

- 5.1 A key aim is to co-exist with sea users in the marine environment. Coexistence is assisted by actively engaging with sea users and stakeholders and those with consented development rights. The way we approach engagement is specific to each cable although there is a generic set of *Standard Operating Procedures*¹⁶ to ensure our approach is consistent and fair to all sea users in the area.
- 5.2 The Outer Hebrides submarine electricity cables have a discrete footprint in a small regional area. For simplicity, the communication distribution list has been separated into regional stakeholders, given in Table 3, and cable specific stakeholders in Table 4.
- 5.3 The communication distribution list provides the following information on each stakeholder:
- Stakeholder name
 - SHEPD point of contact
 - Role of the stakeholder in the consent procedure
 - Details of specific contact to be made by SHEPD with a given stakeholder.

¹⁶ Scottish and Southern Electricity Networks: *Standard Operating Procedures*, available: <https://www.ssen.co.uk/SubmarineCables/AboutUs/>

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Table 3 Regional stakeholders' roles and duties

Regional Stakeholder	SHEPD point of contact	Role	Details
Marine Scotland (MS)	Lead Engagement and Submarine Policy Manager	MS is the licensing authority for all works and as such all consent conditions that require to be met must be demonstrated to them either upon request or as agreed in the license.	<p>Specific contact with MS will be made</p> <ul style="list-style-type: none"> ▪ Prior to commencement of the works: <ul style="list-style-type: none"> · Marine Scotland is responsible for the integrated management of Scotland's seas. This includes consultation on the proposed FLMAP and delivery plan; and inclusion of compliance with it as a licence condition. ▪ During the works: <ul style="list-style-type: none"> · to allow access for an authorised Enforcement Officer to inspect the works · to notify any changes to the works that may affect the validity of the licence · to submit and seek approval of plans to mitigate navigational dangers or risks, where required ▪ On completion of the works: <ul style="list-style-type: none"> · to notify the completion of the works · to submit an assessment of any risks posed by the installed cable

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Regional Stakeholder	SHEPD point of contact	Role	Details
Scottish Natural Heritage (SNH)	Lead Engagement and Submarine Policy Manager	SNH is the Scottish public body responsible for natural heritage. SNH advises the Scottish Government regarding nature conservation requirements when deciding whether to consent activities. SNH are a consultee to Marine Scotland and as such they can influence licence conditions.	SHEPD will engage on matters related to the project as required.
Maritime and Coastguard Agency (MCA)	Up to work starting Stakeholder Engagement Manager During Works - Project Manager	The MCA is an executive agency of the United Kingdom and is responsible for implementing British and international maritime law and safety policy. The MCA are a consultee to Marine Scotland and as such they can influence licence conditions.	SHEPD will engage on matters related to the project as required.
Northern Lighthouse Board (NLB)	Up to work starting Stakeholder Engagement Manager During Works - Project Manager	The NLB is a consultee to Marine Scotland and as such they can influence licence conditions.	SHEPD will engage on matters related to the project as required.
Scottish Environment Protection Agency (SEPA)	Up to work starting Stakeholder Engagement Manager During Works - Project Manager	SEPA is Scotland's environmental regulator. SEPA is a consultee to Marine Scotland and as such they can influence licence conditions.	SHEPD will engage on matters related to the project as required.

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Regional Stakeholder	SHEPD point of contact	Role	Details
Royal Society for the Protection of Birds (RSPB)	Lead Engagement and Submarine Policy Manager	The RSPB is a consultee to Marine Scotland and as such they can influence licence conditions.	SHEPD will engage on matters related to the project as required.
Scottish Fishermen's Federation (SFF)	Company Fishing Liaison Officer (CFLO)	The SFF represents predominantly the mobile commercial fishing fleet that operate in deeper waters outside of where the cables will be replaced.	Specific contact will be made with the SFF and the associations that are represented by the SFF. Regular liaison and updates by CFLO will be undertaken with meetings as required. As part of ongoing regular liaison with the SFF, SHEPD will keep the SFF apprised of the installation as it proceeds, specifically in relation to the presence of support vessels.
Outer Hebrides Regional Inshore Fisheries Group (OHRIFG)	Company Fishing Liaison Officer (CFLO)	The organisation is legally authorised to impose restrictions and regulations, to issue licences and the right to set tolls.	Specific contact will be made with the OHRIFG. Regular dialogue between the CFLO and the OSF will be maintained prior to and during the survey work (and any subsequent requirement for cable installation), noting that both mobile and static gear commercial fishing operations are present in the area
Scottish Creel Fishermen's Federation (SCFF)	Company Fishing Liaison Officer (CFLO)	SCFF is the national trade association for the creel fishing industry. It is comprised of ten fishermen's associations including the Scottish Scallop Divers Association and Scottish Creelers and Divers.	Specific contact will be made with the SCFF. Regular dialogue between the CFLO and the SCFF will be maintained prior to and during any installation work.
Unaffiliated commercial fishermen	Company Fishing Liaison Officer (CFLO)	There are independent commercial fishing operators who are not affiliated with the RIFG.	Specific contact will be made with relevant unaffiliated commercial fishermen. The CFLO and FIR will identify these individuals and maintain liaison with them, particularly in relation to the requirement to remove creels to allow the works to be carried out.

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Regional Stakeholder	SHEPD point of contact	Role	Details
The Crown Estate (TCE)	Wayleaves Project Manager	TCE manage property belonging to the Sovereign. Part of the HDD installation (seaward of MHWS) is located within Sovereign territory and, as such, SHEPD is required to obtain permission via survey licences and wayleave consent in terms of the Master Wayleave Agreement from TCE.	SHEPD will engage on matters related to the project as required.
United Kingdom Hydrographic Office (UKHO)	Project Manager and Company Fishing Liaison Officer (CFLO)	The UKHO is the UK's agency providing hydrographic and geospatial data to mariners and maritime organisations across the world.	SHEPD will maintain contact with the UKHO to provide regular updates on progress of the works provide a copy of the marine licence and provide as-built details upon completion. The CFLO will maintain contact with the UKHO via NtMs or Hydrographic notes.
Kingfisher Information Service Offshore Renewables and Cable Awareness (KISORCA)	Company Fishing Liaison Officer (CFLO)	Kingfisher works with all the offshore industries, including oil & gas, subsea cable, renewable energy and marine aggregates to provide the latest news and most accurate information to the fishing industry. Information is in relation to the latest hazards, planned developments, new structures being installed and zones created.	SHEPD will maintain contact with KISORCA to provide regular updates on progress of the works and provide as-built details upon completion. The CFLO will maintain contact with KISORCA via NtMs for the Kingfisher bulletin.

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Regional Stakeholder	SHEPD point of contact	Role	Details
Ministry of Defence (MoD)	Company Fishing Liaison Officer (CFLO)	The MoD is the British government department responsible for implementing the defence policy set by Her Majesty's Government and is the headquarters of the British Armed Forces. The MoD has access to training areas and ranges in marine areas.	SHEPD and CFLO will engage on matters related to the project as required
Royal Yacht Association (RYA)	Company Fishing Liaison Officer (CFLO)	The RYA is the national governing body for certain water sports in the United Kingdom. Activities it covers include Sailing, Windsurfing, Motor cruising, Powerboating and Personal watercraft.	Specific contact will be made with the RYA. Regular dialogue between the CFLO and the RYA will be maintained prior to and during the installation work that may affect recreational activities in the area.
Comhairle nan Eilean Siar (Western Isles Council)	Company Fishing Liaison Officer (CFLO)	The CC will keep the local community up to date on proposals.	CFLO will engage on matters related to the project as required.
NAFC Marine Centre	Company Fishing Liaison Officer (CFLO)	The NAFC marine centre is an educational and scientific institute. Research and development in subjects relevant to the fishing and aquaculture industries and marine spatial planning.	We will engage on matters related to the project as required.

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Regional Stakeholder	SHEPD point of contact	Role	Details
Scottish Coastal Forum	Company Fishing Liaison Officer (CFLO)	The Scottish Coastal Forum was formed in 1996 to encourage debate at national level on coastal issues. Its members advise Marine Scotland, from an operational perspective, on the development of policy relating to marine planning and licensing within a sustainable marine environment.	CFLO will engage on matters related to the project as required.
Stornoway Port Authority	Company Fishing Liaison Officer (CFLO)	The main port on the Outer Hebrides is Stornoway Port and is regularly used by visiting cruise ships. Shellfish are also landed into this port.	We will engage on matters related to the project as required.

Table 4 Cable specific stakeholders

Cable specific stakeholder	SHEPD point of contact	Role	Details
Western Isles Fisherman Association	Company Fishing Liaison Officer (CFLO)	The local fisheries association in the Outer Hebrides	Specific contact will be made with the SFA. Regular dialogue between the CFLO and the SFA will be maintained prior to and during the installation work, noting that both mobile and static gear commercial fishing operations are present in the area.
Caledonian MacBrayne (Ferry operator)	Company Fisheries Liaison Officer (CFLO)	The ferry operator of the Outer Hebrides ferry routes.	CFLO will engage on matters related to the project as required

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Cable specific stakeholder	SHEPD point of contact	Role	Details
Majestic Line (West Coast Cruises)	Company Fisheries Liaison Officer (CFLO)	The luxury cruise operator runs cruises around the Outer Hebrides from 6- 10 days.	CFLO will engage on matters related to the project as required.
Hebrides Cruises	Company Fisheries Liaison Officer (CFLO)	Hebrides Cruises runs wildlife cruises around the Outer Hebrides.	CFLO will engage on matters related to the project as required.
The Cruise Line	Company Fisheries Liaison Officer (CFLO)	The luxury cruise operator runs cruises around the Outer Hebrides (7-day cruises)	CFLO will engage on matters related to the project as required.
Nobel Caledonia	Company Fisheries Liaison Officer (CFLO)	Nobel Caledonian offer luxury cruises (including in the Outer Hebrides)	CFLO will engage on matters related to the project as required.
St Hilda Sea Adventures	Company Fisheries Liaison Officer (CFLO)	Small scale cruise ship operator around the Outer Hebrides	CFLO will engage on matters related to the project as required.
Skye Adventure	Company Fisheries Liaison Officer (CFLO)	They offer a range of marine recreational activities including coasteering and sea swimming.	CFLO will engage on matters related to the project as required.
Skye Sailing Club	Company Fisheries Liaison Officer (CFLO)	Offers a range of marine activities including Dinghy sailing, rowing and power boating around Skye.	CFLO will engage on matters related to the project as required.

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Cable specific stakeholder	SHEPD point of contact	Role	Details
SeaSkye Marine	Company Fisheries Liaison Officer (CFLO)	Marine tourism firm offering boat trips around Skye.	CFLO will engage on matters related to the project as required.
Responsible Travel	Company Fisheries Liaison Officer (CFLO)	Small ship cruising holidays around the Outer Hebrides (13 trips including)	CFLO will engage on matters related to the project as required.
The Royal Scottish Shipping Line	Company Fisheries Liaison Officer (CFLO)	Luxury super yacht tours around West coast of Scotland – including the Outer Hebrides	CFLO will engage on matters related to the project as required.
South Uist Angling Club	Company Fisheries Liaison Officer (CFLO)	Local angling club based in South Uist.	CFLO will engage on matters related to the project as required.
Hebridean Sea Swimmers	Company Fisheries Liaison Officer (CFLO)	Sea swimming club covering the sea and the lochs in the Inner and Outer Hebrides.	CFLO will engage on matters related to the project as required.
Stornoway Angling Association	Company Fisheries Liaison Officer (CFLO)	Angling club for Lewis and Harris.	CFLO will engage on matters related to the project as required.
Uist Sea Trips	Company Fisheries Liaison Officer (CFLO)	Uist Sea Tours operate boat trips from Lochboisdale. They operate whale watching and bird watching and access to uninhabited islands.	CFLO will engage on matters related to the project as required.

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Cable specific stakeholder	SHEPD point of contact	Role	Details
Comhairle nan Eilean Siar (West Isles Council) development	Company Fisheries Liaison Officer (CFLO)	Comhairle nan Eilean Siar (West Isles Council) department covers a range of responsibilities associated with policy and project development for the use and development of land in the Western Isles.	SHEPD will engage on matters related to the project as required.
Lady Anne Boat Trips	Company Fisheries Liaison Officer (CFLO)	Small boat trips based in Kallin Harbour, Isle of North Uist.	CFLO will engage on matters related to the project as required.
Isle of Man Fishermen	Company Fisheries Liaison Officer (CFLO)	Association of fishermen based on the Isle of Man, some of which regularly fish off the West Coast of Scotland.	CFLO will engage on matters related to the project as required.

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6 Commercial Fishing

- 6.1 This section summarises the existing commercial fishing baseline in relation to the submarine electricity cable assets. Commercial fishing activity is defined as the activity undertaken by licensed fishing vessels undertaken for the legitimate capture and sale of finfish and shellfish. The baseline evaluation will focus specifically on those fleets which are active in the vicinity of the cable corridors. The commercial fisheries charts are given in Appendix C (Figure 2 to Figure 15).
- 6.2 Commercial fishing in European Union (EU) waters is subject to numerous controls and regulations at European, national and local levels. Such measures may have a direct impact on fishing effort, landings weights and values. Many of these measures are implemented at short notice with limited consultation, which limits confidence in predicting future trends. The main bodies regulating fishing in sea areas in which the cables are located are the EU through the Common Fisheries Policy (CFP), Marine Scotland (MS) and the Inshore Fisheries Management and Conservation (IFMAC) through national and regional regulations, and regional Inshore Fisheries Groups (rIFGs).
- 6.3 The 15 Outer Hebrides submarine electricity cables are located within International Council for the Exploration of the Sea (ICES) 42E2, 43E2, 44E2, 44E3 and 45E3. Pressure stocks are managed by ICES Division and quota is also allocated at this scale. Fishing data are recorded, collated and analysed by ICES rectangles within each division. ICES rectangles are the smallest spatial unit available for the collation of fishing data and have therefore been used to define the analysis areas for the proposed cable replacements.
- 6.4 The Outer Hebrides submarine electricity cables are sited within the 6nm limit, in which the UK has exclusive fishing rights. The territorial fishing limits of EU member states extend out to 12nm, within which only the vessels of a state or vessels from other states with historical rights are entitled to legally fish.
- 6.5 There is no single data source or recognised model for establishing a baseline of commercial fishing activity within discrete sea areas such as those encompassed by the footprint of submarine electricity cables. The overview has therefore been derived using data and information from a number of sources. In addition to analysis of fisheries statistical datasets, emphasis has been placed on undertaking direct consultation with the relevant national fishermen's federations, local associations and skippers whose fishing grounds are located within the vicinity of the cable corridor.
- 6.6 The key data sources used to characterise the baseline of the commercial fishing receptors are summarised in Table 5. It should be noted that Vessel Monitoring Systems (VMS) datasets show activity for the over-15m fleet only and will therefore underrepresent total fishing activity. It is considered that the surveillance sightings and effort data will be more representative as vessels working in the vicinity of the cable corridors will often be under 10m vessels.

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Table 5 Commercial fishing key data sources

Data	Year	Coverage	Confidence	Notes
UK Marine Management Organisation (MMO) Fishing Statistics (landings values data)	2014 to 2018	UK vessels landing into UK and European ports. Non-UK vessels landing into UK ports.	High	Landings data provided by value (£).
UK MMO Surveillance Sightings	2014 to 2018	Sightings of vessels by gear type (all nationalities) recorded in UK waters on weekly surveillance fly overs during daylight hours.	Medium to high	May underestimate total extent of fishing activity due to flyover frequency and timing.
UK MMO Satellite Tracking (VMS) Data	2014 to 2018	Aggregated VMS pings recorded in 0.05° by 0.05° grids from UK vessels only in European waters. Only vessels over 15m.	High	VMS provided by value (£). As dataset limited to vessels over 15m this will not be indicative of the inshore fleet.
European Marine Observation and Data Network (EMODnet)	2017	The maps are based on AIS data purchased by CLS and show shipping density in 1km*1km cells of a grid covering all EU waters (and some neighbouring areas). Density is expressed as hours per square kilometre per month. The following ship types have been covered in this dataset: other, fishing, service, dredging or underwater ops, sailing, pleasure craft, high speed craft, tug and towing, passenger, cargo, tanker, military and law enforcement, unknown and all ship types.	Low - High	EMODnet Vessel Density Maps were created by COGEA in 2019 in the framework of EMODnet Human Activities, an initiative funded by the EU Commission.


- 6.7 The potential fishing activity methods in the vicinity of the Outer Hebrides submarine electricity cables are reviewed in order to assess possible interaction scenarios. A brief characterisation of the fishing methods identified in the area around the Outer Hebrides cable corridors, with a description of the gear and photographic examples of the types of vessels is given in Table 6.
- 6.8 Surveillance sightings by method and nationality (Figure 2 and Figure 3) have recorded that most of the activity around the coastline of the Outer Hebrides islands is potting by UK-registered vessels, though towards the centre of the Inner Seas (the Minch, the Little Minch and Sea of the Hebrides) there appears to be a heavy concentration of demersal trawling activity sighted predominantly by UK vessels, though there are a few Irish and Danish trawler sightings also registered. There are lower levels of scallop activity by UK-registered vessels on the eastern coast of the Outer Hebrides islands.

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- 6.9 Landing values by species (Figure 4) indicate that the highest landings value is derived from Nephrops, which make up the majority of landings in both 45E3 and 44E3. There are smaller but significant landings values of scallops, edible crabs and lobsters. This is reflected in MMO data for landings values by gear (Figure 5), with pots (targeting Nephrops, crabs and lobsters) generating the highest proportion of landings values in the region, followed by bottom otter trawls (targeting Nephrops) and boat dredges (targeting scallops).
- 6.10 In ICES 45E3, 44E3 and 42E2, the largest proportion of landings values are derived from vessel 15m and over in length. In ICES 44E2 and 43E2, the largest proportion of landings values come from the 10m and under fleet (Figure 6).
- 6.11 MMO VMS effort data for all fishing methods indicates that there are high levels of effort from the east coast of the Outer Hebrides to the west coast of Skye, with the highest recorded effort over 100 hours. The highest recorded effort over the cables was in the central section of Eriskay-Barra (Figure 7).
- 6.12 VMS value by all gears shows somewhat lower levels of value relative to effort, with some small pockets of high value (>£35,000) along the east coast of Harris and Lewis, with moderate values (£6,000-£35,000) elsewhere along the east Hebrides coast. The highest recorded landings values are again over Eriskay-Barra (Figure 11).
- 6.13 Dredging effort is concentrated in the centre of the Little Minch and along the east coast of the Outer Hebrides, especially of South Uist, Eriskay and Barra. The highest effort over the cables is over Eriskay-Barra (50 to 100 hours; Figure 8).
- 6.14 Dredging values follow the pattern shown for fishing effort, with the peak of value over cable assets over Eriskay-Barra (£10,000 - £20,000; Figure 12).
- 6.15 Effort by mobile gear shows high levels (50 to 100+ hours) along the east coast of the Outer Hebrides, with the highest levels seen off the east coast of Harris and Lewis. The highest effort seen in the vicinity of the cables is over 50-100 hours between Eriskay and Barra (Figure 9). The peak value derived from mobile gear is £10,000 to £20,000 around the landfall and central portion of the Eriskay-Barra cable (Figure 13).
- 6.16 As discussed earlier in Chapter 6.6 the creeling potting activity is likely to be under represented as this is predominately undertaken by the under 10m vessels not represented by VMS. No effort or value for potting and trapping is recorded in the cable locations. The highest value and effort seen between the east coast of the Outer Hebrides and the west coast of Skye is 20-50 hours (Figure 10) and £10,000 to £20,000 (Figure 14).
- 6.17 EMODnet fishing vessel AIS density (Figure 15) shows generally low to medium levels of activity (0.5-10 hours per km² per month) in the Outer Hebrides region, the highest over the cables being 10 hours per km² per month seen over Barra-Vatersay and 5 hours per km² seen over Harris-Scalpay.


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Table 6 Characterisation of the fishing methods in the area

Fishing gear	Description	Pictorial representation
Creeling	<p>Creels (pots) are static traps commonly baited with low value fish such as mackerel, herring, and dogfish. Creels are the principal method used to target active scavenging crustaceans such as brown crab, velvet crab, lobster, Nephrops, green crab and whelks. A number of pots are set on a main line anchored to the seabed and marked with a buoy or a 'dhan' (flag and buff) at either end. The number of pots per string can vary from 5-50. Vessels generally work between 200-500 pots at sea, which are fished on a continuous cycle to maintain cover of the ground.</p> <p>Fishing effort follows a seasonal pattern with activity varying to shelter from adverse weather conditions, react to seasonal changes and exploit target species.</p> <p>The Outer Hebrides Inshore Fisheries Group Management Plan¹⁷ suggests the importance of the shellfish sector in the region, operating in the inshore waters around the Outer Hebrides. Over recent years there has been a shift from trawled Nephrops to creel caught Nephrops due to reduced fuel costs and acquiring a higher value from this method.</p>	 <p>© gordon maclean MarineTraffic.com</p> <p>Source: Stornoway Harbour MarineTraffic.com</p>


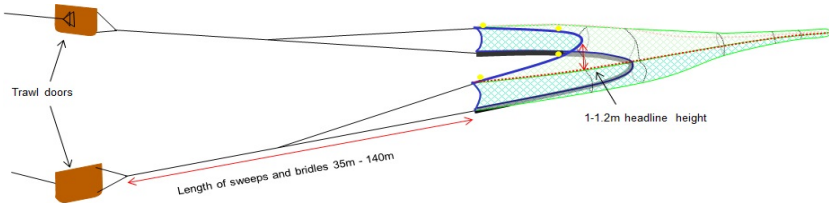
¹⁷ Outer Hebrides Inshore Fisheries Group Management Plan available from: <http://www.gov.scot/resource/0042/00422311.pdf>
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Fishing gear	Description	Pictorial representation
Scallop dredging	<p>Each dredge consists of a ruggedly constructed triangular steel frame and a tooth bar, behind which a mat of linked steel rings is secured. Heavy netting is laced into the frame to form a bag into which the catch is retained. As scallops usually lie recessed in sand and fine gravel, they are raked out by teeth and swept into the bag. Typical tooth length is around 15cm which corresponds to the approximate penetration depth of the gear.</p> <p>A number of dredges are attached to a bar fitted with bridles and is towed using a single warp. The dredges are usually deployed from outrigger booms. The number of dredges deployed varies with the size of the vessel. Scallop dredges are typically towed at speed around 3 knots.</p> <p>Many scallop grounds around the Outer Hebrides can only support periodic and light fishing levels. Most of the activity is located around the Minches and the west coast of Harris¹⁸</p>	 <p>Source: Scottish scalloper Fishing News</p>

¹⁸ Outer Hebrides Inshore Fisheries Group Management Plan available from: <http://www.gov.scot/resource/0042/00422311.pdf>
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Fishing gear	Description	Pictorial representation
Nephrops trawls	<p>Specifically designed Nephrops trawls are also used to target this species. A long winged low net, with light weight gear is towed over predominately soft muddy grounds.</p> <p>This net is designed so that the relatively fragile bottom of the net (known as the fishing line) skims a few inches off the seabed with the leaded bights of grass rope trailing on the seabed encouraging Nephrops into the net. These nets differ little from white fish gear apart from being lighter rigged with a smaller mesh size.</p>	 <p>Source: Fishing news : Trawler based on Skye (above) Nephrops trawl below (Source: Seafish)</p>  <p>Nephrops trawl with trawl doors, sweeps and bridles.</p>

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7 Other Sea Users

- 7.1 This section of the report provides a brief overview of other sea users in relation to the submarine electricity cable assets. For the purposes of these interaction tables, named cables with multiple components (e.g. Benbecula-South Uist East and Benbecula-South Uist West) are treated as one. Other legitimate sea users that may be affected by cable replacement works include:
- Aquaculture
 - Marine Archaeology
 - Ferries
 - Shipping
 - Sailing
 - Recreational: bird and wildlife watching, visits to historic sites and attractions, long distance swimming, surfing, coastering, sailing, diving, boating, angling, canoeing/kayaking, jet skiing and wild fowling
 - MoD
 - Conservation sites/areas
 - Telecommunications
 - Subsea cables
- 7.2 There is no single data source or recognised model for determining the activity of all other legitimate sea users within discrete sea areas such as those encompassed by the footprint of sub-sea cables. It is beyond the scope of this report to produce a complete baseline overview for all other legitimate sea users therefore data and information are derived from assessments utilised by regional marine spatial plans and the PAC report.
- 7.3 AIS vessel density data for all vessels in 2017 has been published by EMODnet, showing hours of activity per km² per month (Figure 16). The highest levels of activity (100+ hours per km² per month) can be seen in the xx over the xx cables and at the entrance of xx. Across xx a range of 20-50 hours per km² per month was reported. Lower levels (2-15 hours) can be seen elsewhere along the cables. These data have been further separated into the categories of fishing vessels (as detailed in the previous chapter), cargo vessels, high speed vessels, passenger vessels, sailing vessels, tankers and tugs, shown in Figure 15, and Figure 17-Figure 22.
- 7.4 The Scottish Marine Recreation and Tourism Survey (SMRTS) 2015¹⁹ and the Marine Scotland interactive Marine Plan²⁰ have been the main sources of reference for legitimate sea users listed in Table 7. Additional data on conservation sites has been sourced from the Scottish Government SpatialData.gov.scot website, Royal Society for the Protection of Birds (RSPB) Reserves web map service, European Marine Observation and Data Network (EMODnet) and

¹⁹ Scottish Marine Recreation and Tourism Survey (SMRTS) 2015; <http://www.gov.scot/Resource/0049/00497904.pdf>

²⁰ Marine Scotland National Marine Plan Interactive; <https://marinescotland.atkinsgeospatial.com/nmpi/>

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the website Ports and Harbours of the UK²¹. Where information is available, charts of spatial activity are provided for each of the legitimate sea users defined above.

Table 7 Other legitimate sea users data sources

Data	Year	Coverage	Confidence	Notes
Marine Scotland National Marine Plan Interactive	Varied	Overall Assessment Physical Characteristics Clean and Safe Healthy and Biologically Diverse Productive Climate Change Administrative Regions National Marine Plan Aerial Photography Base Layers	Low - High	National Marine Plan interactive (NMPI) allows you to view different types of information and, where appropriate, links have been provided to the related parts of Scotland's Marine Atlas and will also be provided to the National Marine Plan in due course.
Scottish Marine Recreation and Tourism Survey (SMRTS) 2015	2015	The SMRTS survey was carried out between August and October 2015. The survey provides baseline information to inform marine planning in Scotland. More than 2100 individuals, 137 clubs and 279 businesses completed the survey, indicating areas where people conducted different activities.	Low-High	Commissioned by the Scottish Government, the Firth of Clyde Forum, The Crown Estate and Scottish Coastal Forum. Aim to gather robust information on marine recreation and tourism activity around Scotland.
Scottish Government SpatialData.gov.scot	2018	National Scenic Areas (NSAs) are Scotland's only national landscape designation, and defined as areas "of outstanding scenic value in a national context" for which special protection measures are required. NSAs are broadly equivalent to the Areas of Outstanding Natural Beauty found in England, Wales and Northern Ireland. There are 40 NSAs in total covering roughly 1 million hectares (13% of Scotland).	High	The designation's purpose is both to identify our finest scenery and to ensure its protection from inappropriate development.

²¹ Ports and Harbours of the UK; <http://ports.org.uk/>

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Data	Year	Coverage	Confidence	Notes
Joint Nature Conservation Committee (JNCC) Marine Protected Area (MPA) mapper	2019	The JNCC Marine Protected Area (MPA) mapper is an interactive resource containing information on the MPAs designated in UK and Crown Dependency waters.	High	This includes certain Special Areas of Conservation (SACs) for habitats and non-avian species and Special Protection Areas (SPAs) for birds. The JNCC MPA mapper only displays SACs and SPAs that protect the marine environment - so called SACs and SPAs with 'marine components'.
Royal Society for the Protection of Birds (RSPB)	2019	All RSPB reserve boundaries.	High	The dataset contains the boundaries of all land managed, leased or owned as part of publicly accessible RSPB reserves.
European Marine Observation and Data Network (EMODnet)	2017	The maps are based on AIS data purchased by CLS and show shipping density in 1km*1km cells of a grid covering all EU waters (and some neighbouring areas). Density is expressed as hours per square kilometre per month. The following ship types have been covered in this dataset: other, fishing, service, dredging or underwater ops, sailing, pleasure craft, high speed craft, tug and towing, passenger, cargo, tanker, military and law enforcement, unknown and all ship types.	Low - High	EMODnet Vessel Density Maps were created by COGEA in 2019 in the framework of EMODnet Human Activities, an initiative funded by the EU Commission.
Ports and Harbours of the UK	2019	Online resource containing information on over 950 ports, harbours, jetties and piers around the coastline of the UK.	Low-High	The site has been compiled by a volunteer and is not an official list.

7.5 The range of water sports activity in the vicinity of the subsea electricity cables in the Outer Hebrides is given below. A heat map using the data collated from the Scottish Marine Recreation and Tourism Survey (SMRTS) is used to summarise all recreational activity around the Outer Hebrides cables. The recreational activities recorded in the vicinity of the submarine electricity cable assets are:

- Bird and wildlife watching
- Visits to historic sites and attractions

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- Angling
- Yacht racing
- Wildfowling
- Rowing and sculling
- Canoeing or kayaking
- Coasteering
- Long distance swimming
- Motor cruising
- Jet skis
- Power boating
- Sailing and cruising
- Scuba diving
- Surfing and paddle boarding

7.6 Recreational activity has been assessed using regional datasets as there is little information on discrete sea areas such as those encompassed by the footprint of the Outer Hebrides cables.

7.7 The charts showing recreational activity are given in Appendix D (Figure 23 to Figure 38).

7.8 The SMRTS 2015 survey around Scotland show predominantly moderate, and some low levels of bird and wildlife watching across the cable locations (944 people provided spatial information). This activity and possible interaction is summarised in Table 8 below and shown in Figure 23.

Table 8 Bird and wildlife watching

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Low to moderate levels of activity over the cables.
South Uist-Eriskay	Yes	Moderate levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Low to moderate levels of activity over the cables.
Kismul Castle	Yes	Low levels of activity over the cable.
Laxay-Kershader 2	Yes	Moderate levels of activity over the cable.
North Uist-Berneray	Yes	Moderate levels of activity over the cable.
Barra-Vatersay	Yes	Low levels of activity over the cables.
Harris-Scalpay (East and West)	Yes	Moderate levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Moderate levels of activity over the cables.

7.9 The SMRTS 2015 survey around Scotland for visits to historic sites or to attractions show very low to moderate levels of activity in the vicinity of all cable locations except Kismul Castle, where there are high levels of activity (924 people provided spatial information). This activity and possible interaction is summarised in Table 9 below and shown in Figure 24.

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Table 9 Visits to historic sites or to attractions

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables.
South Uist-Eriskay	Yes	Very low to low levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Very low to low levels of activity over the cables.
Kismul Castle	Yes	High levels of activity over the cable.
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	Yes	Very low levels of activity over the cable.
Barra-Vatersay	Yes	Low to moderate levels of activity over the cable. There is a hotspot of high activity adjacent to the east of the cable.
Harris-Scalpay (East and West)	Yes	Low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

- 7.10 The SMRTS 2015 survey results for power boating show very low to low levels of activity in the vicinity over the cable locations, with no activity recorded over Laxay-Kershader 2 (204 people provided spatial information). This activity and possible interaction is summarised in Table 10 below and shown in Figure 25.

Table 10 Power boating

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables.
South Uist-Eriskay	Yes	Very low levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Very low to low levels of activity over the cables.
Kismul Castle	Yes	Low levels of activity over the cable.
Laxay-Kershader 2	No	
North Uist-Berneray	Yes	Very low levels of activity over the cable.
Barra-Vatersay	Yes	Low levels of activity over the cable.
Harris-Scalpay (East and West)	Yes	Very low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

- 7.11 The SMRTS 2015 survey results for canoeing and kayaking show activity levels ranging from very low to high depending on cable location (418 people provided spatial information). This activity and possible interaction is summarised in Table 11 below and shown in Figure 26.

Table 11 Canoeing and kayaking

Cable Name	Interaction on chart	Notes
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North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables, though there is an area of low activity adjacent to the east of the cables.
South Uist-Eriskay	Yes	Low to moderate to high levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Low to moderate to high levels of activity over the cables. There is a small spot of high activity approximately 2.6km south of the cables.
Kismul Castle	Yes	High levels of activity over the cable.
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	Yes	Low to moderate levels of activity over the cable.
Barra-Vatersay	Yes	Low levels of activity directly over the cable, though there is an area of high activity approximately 850m east of the cable.
Harris-Scalpay (East and West)	Yes	Low levels of activity over the cables, though there is an area of moderate activity adjacent to the west of the cables.
Benbecula-South Uist (East and West)	Yes	Very low to low levels of activity over the cables.

- 7.12 The SMRTS 2015 survey results for long distance sea swimming show very low to low levels of activity in the immediate vicinity of all cable locations (79 people provided spatial information). This activity and possible interaction is summarised in Table 12 below and shown in Figure 27.

Table 12 Long distance swimming

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables.
South Uist-Eriskay	Yes	Very low levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Very low to low levels of activity over the cables.
Kismul Castle	Yes	Very low levels of activity over the cable.
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	Yes	Very low levels of activity over the cable.
Barra-Vatersay	Yes	Very low levels of activity over the cable.
Harris-Scalpay (East and West)	Yes	Very low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

- 7.13 The SMRTS 2015 survey results for motor cruising show activity levels ranging from very low to moderate depending on cable location (163 people provided spatial information). This activity and possible interaction is summarised in Table 13 below and shown in Figure 28.

Table 13 Motor cruising

Cable Name	Interaction on chart	Notes
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North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables. There is a hotspot of higher activity approximately 3.2km east of the cables.
South Uist-Eriskay	Yes	Very low to low levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Very low to low levels of activity over the cables.
Kismul Castle	Yes	Moderate levels of activity over the cable.
Laxay-Kershader 2	Yes	Very low to low levels of activity over the cable.
North Uist-Berneray	Yes	Very low to low levels of activity over the cable.
Barra-Vatersay	Yes	Very low to low levels of activity over the cable.
Harris-Scalpay (East and West)	Yes	Very low to low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

7.14 The SMRTS 2015 survey results for sailing and cruising show activity levels ranging from low to moderate in the immediate vicinity of the cables, depending on the cable location (542 people provided spatial information). This activity and possible interactions is summarised in Table 14 below and shown in Figure 29.

Table 14 Sailing and cruising

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables.
South Uist-Eriskay	Yes	Low levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Low levels of activity over the cables.
Kismul Castle	Yes	Moderate levels of activity over the cable.
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	Yes	Very low levels of activity over the cable.
Barra-Vatersay	Yes	Low levels of activity directly over the cable, though there is an area of moderate activity adjacent to the east of the cable.
Harris-Scalpay (East and West)	Yes	Low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

7.15 The SMRTS 2015 survey results for chartered angling show no activity over the cables except for Laxay-Kershader 2, over which there are very low levels of activity (353 people provided spatial information). This activity and possible interactions is summarised in Table 15 below and shown in Figure 30.

Table 15 Chartered angling

Cable Name	Interaction on chart	Notes
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North Uist-Benbecula (East, West, Centre and Centre 2)	No	
South Uist-Eriskay	No	
Eriskay-Barra (1 and 2)	No	
Kismul Castle	No	
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	No	
Barra-Vatersay	No	
Harris-Scalpay (East and West)	No	
Benbecula-South Uist (East and West)	No	

- 7.16 The SMRTS 2015 survey results for sea angling from shore show activity levels ranging from very low to high in the immediate vicinity of the cables, depending on cable location (368 people provided spatial information). This activity and possible interactions is summarised in Table 16 below and shown in Figure 31.

Table 16 Sea angling from shore

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables, though there is a hotspot of activity approximately 2.4km north west of the cables.
South Uist-Eriskay	Yes	Very low levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Very low levels of activity over the cables.
Kismul Castle	Yes	Very low levels of activity over the cable.
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	Yes	Very low levels of activity over the cable.
Barra-Vatersay	Yes	Very low levels of activity over the cable.
Harris-Scalpay (East and West)	Yes	Low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

- 7.17 The SMRTS 2015 survey results for surfing/paddle boarding show activity levels ranging from low to none in the immediate vicinity of the cables, depending on cable location (201 people provided spatial information). This activity and possible interactions is summarised in Table 17 below and shown in Figure 32.

Table 17 Surfing and paddle boarding

Cable Name	Interaction on chart	Notes
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	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
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North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Low levels of activity over the cables.
South Uist-Eriskay	No	
Eriskay-Barra (1 and 2)	No	No activity directly over the cables, though there is an area of low activity adjacent to the east of the cables.
Kismul Castle	No	
Laxay-Kershader 2	Yes	Low levels of activity over the cable.
North Uist-Berneray	Yes	Low levels of activity over the cable.
Barra-Vatersay	No	
Harris-Scalpay (East and West)	Yes	Low levels of activity over the cable.
Benbecula-South Uist (East and West)	Yes	Low levels of activity over the cables.

7.18 The SMRTS 2015 survey results for yacht racing show activity levels ranging from very low to none in the immediate vicinity of the cables, depending on cable location (26 people provided spatial information). This activity and possible interactions is summarised in Table 18 below and shown in Figure 33.

Table 18 Yacht racing

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables.
South Uist-Eriskay	No	
Eriskay-Barra (1 and 2)	Yes	Very low levels of activity over the cables.
Kismul Castle	No	
Laxay-Kershader 2	No	
North Uist-Berneray	No	
Barra-Vatersay	No	
Harris-Scalpay (East and West)	Yes	Very low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

7.19 The SMRTS 2015 survey results for coasteering show hotspots of activity in the immediate vicinity of Barra-Vatersay and nearby Harris-Scalpay. There are very low levels of activity over all other cables. 238 people provided spatial information. This activity and possible interactions is summarised in Table 19 below and shown in Figure 34.

Table 19 Coasteering

Cable Name	Interaction on chart	Notes
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North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables.
South Uist-Eriskay	Yes	Very low levels of activity over the cable.
Eriskay-Barra (1 and 2)	Yes	Very low levels of activity over the cables.
Kismul Castle	Yes	Very low levels of activity over the cable.
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	Yes	Very low levels of activity over the cable.
Barra-Vatersay	Yes	Moderate to high levels of activity over the cable.
Harris-Scalpay (East and West)	Yes	Very low levels of activity directly over the cables, though there is a hotspot of activity adjacent to the west of the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

7.20 The SMRTS 2015 survey results for jet skiing show a small amount of activity adjacent to the cables at Barra-Vatersay and Kismul Castle (9 people provided spatial information). This activity and possible interactions is summarised in Table 20 below and shown in Figure 35.

Table 20 Personal water craft (jet skis)

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	No	
South Uist-Eriskay	No	
Eriskay-Barra (1 and 2)	No	
Kismul Castle	Possible	There is an area of low activity adjacent to the south east of the cable.
Laxay-Kershader 2	No	
North Uist-Berneray	No	
Barra-Vatersay	Possible	There is an area of low activity adjacent to the south east of the cable.
Harris-Scalpay (East and West)	No	
Benbecula-South Uist (East and West)	No	

7.21 The SMRTS 2015 survey results for wild fowling show very low levels of activity over all cables (59 people provided spatial information). This activity and possible interactions is summarised in Table 21 below and shown in Figure 36.

Table 21 Wild fowling

Cable Name	Interaction on chart	Notes
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	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
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North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables.
South Uist-Eriskay	Yes	Very low levels of activity over the cables.
Eriskay-Barra (1 and 2)	Yes	Very low levels of activity over the cables.
Kismul Castle	Yes	Very low levels of activity over the cables.
Laxay-Kershader 2	Yes	Very low levels of activity over the cables.
North Uist-Berneray	Yes	Very low levels of activity over the cables.
Barra-Vatersay	Yes	Very low levels of activity over the cables.
Harris-Scalpay (East and West)	Yes	Very low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

7.22 The SMRTS 2015 survey results for scuba diving show activity levels ranging from very low to high in the immediate vicinity of the cables, depending on cable location (168 people provided spatial information). This activity and possible interactions is summarised in Table 22 below and shown in Figure 37.

Table 22 Scuba Diving

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	Yes	Very low levels of activity over the cables.
South Uist-Eriskay	Yes	Very low to low levels of activity directly over the cable, though there is a hotspot of moderate-high activity directly adjacent to the south of the cable.
Eriskay-Barra (1 and 2)	Yes	Moderate-high levels of activity at both cable landfalls, with very low activity elsewhere along the route.
Kismul Castle	Yes	High levels of activity over the cable.
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	Yes	Very low levels of activity over the cable.
Barra-Vatersay	Yes	High levels of activity over the cable.
Harris-Scalpay (East and West)	Yes	Very low levels of activity over the cables.
Benbecula-South Uist (East and West)	Yes	Very low levels of activity over the cables.

7.23 The SMRTS 2015 survey results for rowing and sculling show no activity over any of the cables, except for Laxay-Kershader 2, for which activity levels are very low (237 people provided spatial information). This activity and possible interactions is summarised in Table 23 below and shown in Figure 38.

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Table 23 Rowing and sculling

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	No	
South Uist-Eriskay	No	
Eriskay-Barra (1 and 2)	No	
Kismul Castle	No	
Laxay-Kershader 2	Yes	Very low levels of activity over the cable.
North Uist-Berneray	No	
Barra-Vatersay	No	
Harris-Scalpay (East and West)	No	
Benbecula-South Uist (East and West)	No	

- 7.24 There are potential wreck sites within the cable corridors as indicated in Figure 39 and summarised in Table 24. An online database of historical wreck sites, Canmore, has been used to assess the potential for interaction between wreck sites and submarine electricity cables. It includes a record of Scotland's maritime heritage and any current or scheduled archaeological sites of national importance, legally protected under the Ancient Monuments and Archaeological Areas Act 1979. This database has been compiled and managed by Historic Environment Scotland, and is available as part of Marine Scotland's NMPI.

Table 24 Marine archaeology

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	No	
South Uist-Eriskay	No	No wreck sites in the immediate vicinity, but the nearest is 2.9km away.
Eriskay-Barra (1 and 2)	Yes	Possible interaction with wreck sites.
Kismul Castle	Yes	Possible interaction with wreck sites.
Laxay-Kershader 2	No	
North Uist-Berneray	No	
Barra-Vatersay	No	No wreck sites in the immediate vicinity, but the nearest is 1.7km away.
Harris-Scalpay (East and West)	Possible	Possible interaction with wreck sites in close proximity to the cables.
Benbecula-South Uist (East and West)	No	

- 7.25 The Special Area of Conservation (SAC) with marine components Sound of Barra covers both South Uist-Eriskay and Eriskay-Barra. The National Scenic Areas (NSAs) South Uist Machair and

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South Lewis, Harris and North Uist interact with several cables as well. There are RSBC reserves on Lewis and Harris (Loch na Muilne) and North Uist (Vallay and Balranald), though these do not interact with any of the cable routes. The nature conservation designations in the vicinity of the cable corridors are shown in Figure 40, Figure 41 and Figure 42 and summarised in Table 25.

Table 25 Conservation designations

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	No	
South Uist-Eriskay	Yes	Sound of Barra SAC – covers entirety of the cable. South Uist Machair NSA – Covers South Uist landfall of the cable.
Eriskay-Barra (1 and 2)	Yes	Sound of Barra SAC – covers entirety of the cables.
Kismul Castle	No	
Laxay-Kershader 2	No	
North Uist-Berneray	Yes	North Uist Machair and Islands SPA – does not intersect the cable, but lies adjacent to the west of the Berneray landfall. South Lewis, Harris and North Uist NSA – Covers the entirety of the cable.
Barra-Vatersay	No	
Harris-Scalpay (East and West)	No	Inner Hebrides and the Minches SAC – does not intersect the cables, but lies adjacent to the east. South Lewis, Harris and North Uist NSA – Covers the entirety of the cables.
Benbecula-South Uist (East and West)	No	

- 7.26 There are a number of recorded aquaculture farms within the vicinity of the cables, operated by Traigh Mhor Oysters, Mowi Scotland Limited, Biadh na Gradh, Western Isles Mussels, Raven Rock Sea Products Ltd., Lewis Mussels and Alisdair Cunningham. These are, for the most part shellfish farms, though there are finfish farms in the vicinity of Eriskay-Barra and Harris-Scalpay. The potential interaction is summarised in Table 26 and shown in Figure 43.

Table 26 Aquaculture sites

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	No	
South Uist-Eriskay	No	
Eriskay-Barra (1 and 2)	Yes	Two shellfish aquaculture sites lie adjacent to the Barra landfalls of each cable – Sounds of Barra (1), operated by Traigh Mhor Oysters and Ard Mhor (2), also operated by Traigh Mhor Oysters. There are a number of other shellfish aquaculture sites and one finfish site within 5km of the cables.

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Kismul Castle	Possible	Nearest shellfish aquaculture site is Biadh na Gradh (operated by Biadh na Gradh), approximately 1.3km west of the cable.
Laxay-Kershader 2	Yes	There are four shellfish aquaculture sites in the vicinity of the cable; Gob Glass (700m east), Keose (2.5km east), Sgeir nan Each (32.km east) and Rubh a Chleirich (2.4km west). These are operated by Western Isles Mussels, Raven Rock Sea Products Ltd., Lewis Mussels and Western Isles Mussels respectively.
North Uist-Berneray	No	
Barra-Vatersay	Possible	Nearest shellfish aquaculture site is Biadh na Gradh (operated by Biadh na Gradh), approximately 2.6km north east of the cable.
Harris-Scalpay (East and West)	Yes	The shellfish aquaculture site Sound of Scalpay operated by Alisdair Cunningham lies directly over the eastern cable. Two finfish sites, Raineach and Scotasay (both operated by Mowi Scotland Ltd.) are approximately 1.7km and 2.4km west of the western cable respectively.
Benbecula-South Uist (East and West)	No	

7.27 There are a number of ferries that overlap with the cables. The proximity of these ferry routes to the cable works is summarised in Table 27. There is an average of 20-50 transits undertaken in the immediate vicinity of South Uist-Eriskay, Eriskay-Barra, Kismul Castle, and North Uist-Berneray. There are 20 or fewer transits over all other cables, shown in AIS density data for passenger vessels, Figure 44.

Table 27 Ferry routes

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	No	
South Uist-Eriskay	No	No ferry routes directly over the cable, but the ferry route from Barra to Eriskay, operated by CalMac Ferries, runs approximately 1.7km south of the cable.
Eriskay-Barra (1 and 2)	Yes	The Barra-Eriskay ferry route overlaps with the cables.
Kismul Castle	Yes	The Barra-Kismul ferry service, operated by Historic Scotland, runs adjacent to the east of the cable. The Oban-Barra service (operated by CalMac Ferries) runs approximately 120m west of the cable.
Laxay-Kershader 2	No	
North Uist-Berneray	Possible	The North Uist-Harris ferry service, operated by CalMac Ferries, departs from Berneray approximately 580m east of the cable.
Barra-Vatersay	No	No ferry routes directly over the cable, but the ferry route from Barra to Kismul runs approximately 1.9km east of the cable.

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Harris-Scalpay (East and West)	No	No ferry routes directly over the cables, but the ferry route from Skye to Harris (operated by CalMac Ferries) runs approximately 3.2km west of the western cable.
Benbecula-South Uist (East and West)	No	

7.28 The nearest ports to each of the cable works is summarised in Table 28 below. Information on these ports is gathered from the website, Ports and Harbours of the UK. A summary of vessel movements (by AIS) is shown in Figure 45 (all vessels), broken down into the categories of cargo vessels (Figure 46), port service craft (Figure 47), tankers (Figure 48) and passenger vessels (previously shown in Figure 44).

Table 28 Local ports

Cable Name	Interaction on chart	Notes
North Uist-Benbecula (East, West, Centre and Centre 2)	No	Nearest harbour is Kallin, approximately 11.6km south west of the cables. This hosts a sizeable fishing fleet targeting shellfish and flatfish. A number of vehicles from southern Europe use the harbour to pick up produce for markets and restaurants in Spain or Italy.
South Uist-Eriskay	Possible	Nearest piers are Ludag and Haun, 1km from the South Uist and 2.1km from the Eriskay landfalls respectively. Both are used primarily for fishing and leisure purposes.
Eriskay-Barra (1 and 2)	Yes	The harbours of Isleornsay and Ceann a' Gharaidh lie adjacent to the cables. Isleornsay is used mainly by fishing boats and as a landing point for yachts moored in the harbour. Ceann a' Gharaidh operates as a ferry terminal for the Barra services.
Kismul Castle	Yes	Castlebay lies adjacent to the west of the Barra cable landfall, and is used as a ferry terminal for the Oban-Barra service.
Laxay-Kershader 2	No	Keose is located approximately 3km east of the cable.
North Uist-Berneray	Yes	Orasaigh lies approximately 210m east of the North Uist cable landfall. Eoligarry lies approximately 1.1km east of the Berneray landfall, and is used primarily by fishing vessels.
Barra-Vatersay	Yes	Vatersay lies approximately 760m east of the Barra cable landfall, and is used by a small number of fishermen.
Harris-Scalpay (East and West)	Possible	Kyles Scalpay lies approximately 410m west of the eastern cable, though it is no longer in use. Scalpay is located approximately 1.6km south of the western cable, and is used mainly by local fishing boats.
Benbecula-South Uist (East and West)	No	Nearest harbour is Petersport, approximately 9km south west of the cables. It is used by a small number of fishing boats.

7.29 There has been no activity recorded for water skiing and wakeboarding and kite surfing in the location of the cables.

7.30 There are currently no operational wave or tidal energy farms in the vicinity of the cables.

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7.31 A summary of the potential interactions between the Outer Hebrides submarine electricity cable and other legitimate sea users is given in Table 29.

7.32 The key points of contact for these legitimate sea users are identified in Appendix B: *Communications Strategy*.

Table 29 Summary of other legitimate sea users' interactions

Activity		Interaction on chart	Notes
Recreational	Bird and wildlife watching	Yes	Low to moderate levels of activity over the cables.
	Visits to historic sites or to attractions	Yes	Very low to moderate levels of activity over the cables.
	Power boating	Yes	Very low to low levels of activity over the cables.
	Canoeing/kayaking	Yes	Very low to high levels of activity over the cables.
	Long distance swimming	Yes	Very low to low levels of activity over the cables.
	Motor cruising	Yes	Very low to moderate levels of activity over the cables.
	Sailing and cruising	Yes	Low to moderate levels of activity over the cables.
	Chartered angling	Yes	Only very low levels of activity over Laxay-Kershader 2.
	Sea angling from shore	Yes	Very low to high levels of activity over the cables.
	Surfing and paddle boarding	Yes	Low to no activity over the cables.
	Yacht racing	Yes	Low to no activity over the cables.
	Coasteering	Yes	Moderate to high levels of activity over Barra-Vatersay, very low levels elsewhere.
	Personal water craft (jet skis)	Yes	Low levels of activity adjacent to Barra-Vatersay and Kismul Castle, none elsewhere.
	Wild fowling	Yes	Very low levels of activity over the cables.
	Scuba diving	Yes	Very low to high levels of activity over the cables.
	Rowing and sculling	Yes	Only very low levels of activity over Laxay-Kershader 2.

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Activity	Interaction on chart	Notes
Conservation sites	Yes	The Special Area of Conservation (SAC) with marine components Sound of Barra covers both South Uist-Eriskay and Eriskay-Barra. The National Scenic Areas (NSAs) South Uist Machair and South Lewis, Harris and North Uist interact with several cables as well.
Wave/Tidal	No	
Aquaculture (finfish and shellfish)	Yes	Some local finfish and shellfish sites in the vicinity of the cable locations.
Marine Archaeology	Yes	Possible interaction with wreck sites, including protected wrecks.
Shipping	Yes	AIS indicates that there are low levels of cargo vessel transits (<10 transits) over all cable routes.
Ferries	Yes	There are ferry routes overlapping Eriskay-Barra and Kismul Castle, with ferry routes in the vicinity of the other cables.

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8 Cable Asset Interactions: Commercial Fishing and Other Sea Users

- 8.1 The potential interactions to fishing stakeholders and other sea users, based on the site specific proposed construction methods, are specified in the Cefas and MCEU (2004)²² guidelines and summarised in the Cost Benefit Analysis Model²³. It should be noted that stakeholders will vary in their sensitivity to socio-economic pressures depending on:
- Spatial adaptability based on operational range and
 - Spatial tolerance based on dependency on fishing grounds and specific sea areas
- 8.2 The main gear types within the Outer Hebrides are potting (creeling) for Nephrops (and to a lesser extent crab and lobster), scallop dredging and Nephrops trawling. However, potting (creeling) vessels represent the primary fishery that may interact with the cable locations, due to their nearshore location.
- 8.3 While fishermen will be kept up to date with construction areas by Notices to Mariners (NTMs), Weekly Notices of Operations (WNO) and update emails from the developer and their subcontractors, there is scope for conflicting demands on the same area of sea. Construction schedules are fluid and dependent upon many factors and fishermen may not regularly read emails, if they have access to the internet at all and therefore may not be aware of recent updates.
- 8.4 In most cases the presence of a FIR onboard the survey boats should prevent fishing gear interactions by survey/construction vessels. However, it may not be feasible for all vessels to have an offshore FIR on board therefore a standard operating procedure (SOP) has been created for the FIR and crew of the survey and construction vessels to follow (Fishing Gear Interaction SOP)²⁴.
- 8.5 The potential interactions between fishing stakeholders and other sea users with survey vessels (and construction vessels if cable installation is required following inspection surveys) are dependent on the survey and installation methods to be used.
- 8.6 Inspections will be carried out on SHEPD's submarine electricity cables to identify the behaviour and integrity of the cable. This will inform the ongoing maintenance plan and influence cable replacement decisions. Survey information obtained along the cable route will include ROV mountable magnetometer, MBES and SSS, and a gradiometer array for a minimum corridor

²² Cefas, Marine Consents and Environment Unit (MCEU), Department for Environment, Food and Rural Affairs (DEFRA) and Department of Trade and Industry (DTI) (2004) Offshore Wind Farms - Guidance note for Environmental Impact Assessment In respect of FEPA and CPA requirements, Version 2

²³ Please refer to Scottish and Southern Electricity Networks: *Submarine Electricity Cable Cost Benefit Analysis Method Statement*: <https://www.ssen.co.uk/CBAFULL/> and *Method Statement Executive Summary*: <http://news.ssen.co.uk/media/266234/CBA-Model-Statement-Executive-Summary.pdf>

²⁴ Scottish and Southern Electricity Networks: *Standard Operating Procedures*, available: <https://www.ssen.co.uk/SubmarineCables/AboutUs/>

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width of +/-7.5m, centred on the existing cable route. Please refer to the *Construction Method Statement* for full details where cable installation is identified, following the inspection surveys.

- 8.7 Due to the range in levels of activity for all other sea users there is scope for conflicting demands on the same area of sea. It is anticipated that the formal notifications such as NtMs, COLREGS and the code of good practise for all vessels will provide sufficient mitigation for potential interactions.

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9 Safety

9.1 Safety management is a key aspect of the FLMAP. SHEPD's approach to safety and to ensuring co-existence has been outlined in the document *How Scottish Hydro Electric Power Distribution co-exists with other marine users*²⁵. With regards to commercial fishing, Safety Management Plans produced by SHEPD for submarine cable works will include reference to the following elements:

- Code of Good Practice for all Vessels
- Procedures in Relation to Gear Fastening or Loss
- Safety Zones (500m) around any required Active Construction Areas
- *Appendix B: Communication Strategy*

9.2 When we employ contractors for the surveys and construction required for the Outer Hebrides cable inspections, we will outline certain obligations to which the contractors must follow in order to ensure external communication is accurate and to aid coexistence with legitimate sea users. These may include ensuring:

- Any debris accidentally dropped during any construction and maintenance activities (if required following inspection surveys) is removed if practicably feasible and safe to do so
- All vessels under contract with us adhere to COLREGS and SOLAS requirements
- All vessels under contract with us do not engage in any commercial or recreational fishing activities whatsoever
- All vessels under contract with us will maintain polite, proactive and professional communications with fishing vessels and other legitimate sea users during offshore operations
- All vessels under contract with us will monitor the required VHF channels at all times so as to receive communications directly from fishing vessels and other legitimate sea users
- All vessels contracted to undertake project specific work will have undertaken appropriate risk assessments in respect of potential interactions with commercial fishing vessels and their gears
- Where appropriate, for vessels using anchored positioning, contractors will be obliged wherever possible to adopt anchor release procedures to minimise the size of anchor mounds and where necessary undertake remedial actions to level any significant anchor mounds
- All vessels contracted with us will have on board approved fishing liaison/interaction manuals
- Where appropriate, suitably qualified and certified offshore FIRs will be on board certain project vessels
- Standard transit routes for vessels engaged by us will be discussed with fishing stakeholders prior to operations commencing and vessels transiting to the site shall follow these where possible.

²⁵ Scottish and Southern Electricity Networks: *How we co-exist with other marine users*, available: <https://www.ssen.co.uk/SubmarineCables/AboutUs/>

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- 9.3 The following procedure outlined below replicates that which has been in place in respect of the UK offshore oil and gas industry and describes the steps that should be undertaken in the event of fishing gear becoming fastened on or in the vicinity of a submarine electricity cable:
- If the fastened gear is not easily retrieved, fishermen should not apply excessive winch, line or net hauler loads or engine powers in attempts to retrieve fastened gear
 - Fishermen are to advise the coastguard and the CFLO/FIR immediately, giving an accurate position of the vessel and/or lost gear
 - If the coastguard or CFLO/FIR confirms that the vessel is in the immediate vicinity of a cable, serious consideration will be given to the slipping of the gear and buoying and recording of its position;
 - If the gear is slipped, after buoying off the gear, the position should be confirmed with the coastguard and the CFLO/FIR
 - On return to port, the skipper is to contact the local Fishery Office and register the incident in the normal manner
 - On no account should skippers grapple in an attempt to recover fishing gear lost or cut away in the vicinity of a submarine electricity cable.
- 9.4 The purpose of a safety zone is to ensure the safety of other legitimate sea users by communicating a safe distance between other users and the construction, operation and maintenance activities related to the submarine electricity cables.
- 9.5 Whilst 500m is the maximum permissible size for a safety zone, it could be that during any required construction phases, the safety of other users is better served through an additional precautionary area communicated by Notice to Mariners in which it is recommended other legitimate sea users do not enter. If entry is unavoidable, then navigation with extreme caution is advised.
- 9.6 We will aim to organise any required construction schedules as far as is practicably possible with the aim of reducing potential combined loss of fishing area during this phase.
- 9.7 Fishing stakeholders will be informed of all the cable works throughout the inspection surveys (and any subsequent pre-construction or construction phases).
- 9.8 SHEPD will, in consultation with commercial fishing stakeholders, work towards identifying acceptable and feasible mitigation options with the aim of minimising any potential effects on commercial fishing associated with the replacement of submarine electricity cables. There are various options available to mitigate the risks describe previously, including:
- Continuing effective positive liaison with commercial fishing stakeholders through the pre-construction, construction and operational phases of any cable replacement
 - Continued employment of CFLO/FIR services until the completion of the replacement works
 - Ensuring contractors comply with the contractor's obligations outlined above so as to minimise any interference to commercial fishing activities
 - Managing the cable replacement works so as to minimise any potential effects on the marine environment, habitats and commercial fishing
 - Raising awareness of the danger of fishing in the vicinity of submarine cables

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- Adopting a hierarchical approach to submarine cable protection, taking account of legitimate sea users concerns
- Organising a construction phasing workshop (if new cable is required) to inform commercial fishermen of planned activities
- Organising construction schedules (if new cable is required) as far as is practicably possible in order to reduce the combined loss of fishing area associated with safety zones
- Distributing Weekly Notices of Operations
- Providing information in plotter format to enable fishermen to easily interpret the information
- Scouting surveys to identify potting areas and any other relevant static gear areas.

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10 UK Legislation, References and Guidance

- 10.1 Damage to submarine cables is expensive to repair and can cause disruption to power distribution to often sparsely populated islands. There is applicable legislation in respect to safety zones (Energy Act 2004), navigation (International Regulations for Preventing Collisions at Sea 1972; COLREGS) and submarine cable protection (United Nations Convention on the Law of the Sea (UNCLOS) Article 113, 1982, and UK 1964 Continental Shelf Act). It is an offence to wilfully damage submarine cables (UNCLOS, 1982; UK 1964 Continental Shelf Act).
- 10.2 In regards to navigation, in normal circumstances, the provisions laid down by COLREGs are sufficient to ensure that actions taken by fishing vessels and those restricted in their ability to manoeuvre when two vessels are approaching allow both to continue operating with minimum disruption.
- 10.3 Further information on UK and international legislation for subsea cables, safety zones and navigation is provided in the document *How Scottish Hydro Electric Power Distribution co-exists with other marine users*²⁶.

²⁶ Scottish and Southern Electricity Networks: *How we co-exist with other marine users*, available: <https://www.ssen.co.uk/SubmarineCables/AboutUs/>

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Appendix A Notice to Mariners Example Template

Notice to Mariners

Scottish Hydro Electric Power Distribution (SHEPD) – Notice to Mariners [Month Year].

Issued [Date].

Please be advised that [Contractor] (on behalf of SHEPD) will be undertaking a [description of works, e.g.: survey across the CABLE ROUTE submarine electricity cable corridor]. The survey will utilise four different vessels to complete survey operations:

- Vessel 1
- Vessel 2
- Vessel 3
- Vessel 4

The survey operations will commence during an appropriate weather window following [date] and will continue over a planned minimum period of [16 weeks], weather permitting.

The survey operations will be concentrated across the cable corridor within the boundary defined by the following coordinates.

[Chart of survey area]

[Coordinates of survey area boundary]

The survey operations will be undertaken by the [vessel 1, vessel 2, vessel3.....] pictured below. The vessels may not commence their activities at the same time but may operate simultaneously at times over the survey duration. The vessels may operate primarily from [Kirkwall] but may use other ports along the [island] coastlines, such as [port 1] or [port 2].

Vessel Photo	Vessel Description
[Photo of vessel 1]	[Description, contact details and call sign of vessel 1, e.g.: The M.V. [vessel name] is a multi-purpose survey vessel, 65.2 m in length with a beam of 14m and a draft of 5.3 m; transit speed of 12 kts and a survey speed of ~5 kts (geophysical survey). Operating on a 24-hour basis]
[Photo of vessel 2]	[Description, contact details and call sign of vessel 2]
[Photo of vessel 3]	[Description, contact details and call sign of vessel 3]
[Photo of vessel 4]	[Description, contact details and call sign of vessel 4]

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Survey Description

The [survey/installation] will involve [the coverage of dedicated survey lines by the vessel(s) with a full suite of geophysical survey systems (Multi beam Echo Sounder, Side Scan Sonar and Magnetometer)] mounted on the vessel or towed from the stern of the vessel.

Other vessels should maintain an appropriate and safe distance of 500 m when passing the [survey] vessel(s) whilst undertaking survey operations and should pass at the lowest possible speed to avoid vessel wash effects. The vessel(s) will be working [24-hour operations] and will display appropriate day shapes and lights during reduced visibility and night operations. The vessel(s) will also monitor VHF Channels 16 and 12.

Primary Survey Equipment

Primary equipment	Towed / Hull mounted / Sampling	Approximate tow length (if applicable)	Vessel
Multibeam Echosounder	Hull mounted	N/A	Vessel 1, Vessel 2
Sidescan Sonar	Towed	50-350m	Vessel 1, Vessel 2
Magnetometer Array	Towed	50-350m	Vessel 1, Vessel 2
Remotely Operated Vehicle (ROV)	Tether Management System	N/A	Vessel 1
Subsea Crane Operations	Crane	WD 140 max	Vessel 1

Contact Details

The vessel contact details are given in the tables below

VESSEL 1	
Call sign	
Bridge	
Offshore manager / Party Chief	
Email	
Onshore Site Manager	

VESSEL 2	
Call sign	
Bridge	
Offshore manager / Party Chief	
Email	
Onshore Site Manager	

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Fishing Liaison Officers

Fishing liaison for the [survey] will be co-ordinated by Brown and May Marine (BMM). For any commercial fishery queries please contact the Company Fishing Liaison Officer (CLFO) Alex Winrow-Giffin on 07760 160039 / 01379 872144, alex@brownmay.com. A local Fishing Industries Representative (FIR) [name and contact details TBC] will also be in place to liaise with the vessel and fishing operations in the area. The vessel master will issue regular broadcasts whilst the survey vessel is operating to ensure minimal disruption and that vessels maintain an appropriate and safe distance.

Further Details

Further enquiries should be addressed to the following people in the following order:

Name	Contact Number	Email

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Appendix B Communication Strategy

An example standardised high level cable replacement communication plan is given in in Table 30. (This is in the event that cable replacement is identified following inspection surveys). A programme of actions to be undertaken in the event of an unplanned outage is given in Table 31. Please note that the communication plan will need to be applied for each cable.

Table 30 Example of a communication programme for cable replacement

Time	What's happening	What we want to communicate	Who we are speaking to and frequency
Month 1	<p><u>Cable inspection list created for [year]</u></p> <p>We have developed a list based on a number of define factors and pervious cable history. This allows us to “guess future health” where the most vulnerable cables will be and their importance on the network. This includes roughly 150% of the cable projects we intend to deliver, so we make sure we capture the right projects.</p>	<ul style="list-style-type: none"> No communications at this stage. 	N/A
Month 2	<p><u>Mobilisation of inspection vessels for [year] programme of cable replacement</u></p> <p>Sending out inspection vessel, divers and/or ROV closely following cable to inspect cable condition and record it on film. This is then used to inform our health assessment of the cable.</p>	<ul style="list-style-type: none"> Essentially a safety message to let mariners know that we will have vessels in the area. 	<ul style="list-style-type: none"> Mariners: the number of vessels, routes they are taking and activities they will be completing (daily)

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Time	What's happening	What we want to communicate	Who we are speaking to and frequency
Month 3	<p><u>Review inspections from 2 years ahead to create 1 year ahead survey list</u></p> <p>From Inspection data we refine our project list to 125% of projects to make sure we survey as much as possible without wasting these works on cables which are healthy.</p>	<ul style="list-style-type: none"> No communications at this stage, unless there has been engagement with stakeholders who have experienced wet outages. 	<ul style="list-style-type: none"> Domestic and generation SHEPD customers to advise them that we will be replacing the cable (one off).
Month 4	<p><u>Survey [year] Cable routes</u></p> <p>With our 125% list we then issue instruction to survey the cable routes.</p> <p>This uses a vessel dragging a sonar device across a wide area multiple times to build up an image of the sea bed. It may also include carrying out intrusive geotechnical investigations.</p>	<ul style="list-style-type: none"> Essentially a safety message to let mariners know that we will have vessels in the area. Messaging to highlight any environmental mitigation measures we have implemented to safeguard marine life (e.g. checking for dolphins before beginning sonar survey) 	<ul style="list-style-type: none"> Mariners: the number of vessels, routes they are taking and activities they will be completing (daily). Environmental groups: to highlight any mitigation measures (one off).
Month 5	<p><u>Select [year] cable routes and advise Marine Scotland (licensing)</u></p> <p>From our survey we will then define the project which is to be delivered.</p> <p>Reducing our project list to 100% of what we are able to deliver.</p>	<ul style="list-style-type: none"> No external communications at this stage. 	N/A

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Time	What's happening	What we want to communicate	Who we are speaking to and frequency
Month 6-7	<u>PAC events and license application</u> Pre-application consultation events are advertised and held. Comments received are noted and addressed as part of the licence application.	<ul style="list-style-type: none"> The proposed project including location and route along with possible protections methods. 	<ul style="list-style-type: none"> Statutory and non-statutory stakeholders as well as communities and mariners (one off).
Month 8	<u>Mobilisation of vessels for cable installation</u> With all cable projects now consented and licences approved, cable laying vessels are in the water. The boats(s) will collect all cables and fittings from our storage depot.	<ul style="list-style-type: none"> Essentially a safety message to let mariners know that we will have vessels in the area. 	<ul style="list-style-type: none"> Mariners: the number of vessels, routes they are taking and activities they will be completing (daily).
Month 9	<u>Start – completion of installation works</u> <ul style="list-style-type: none"> From there the vessel will transit to the cable installation location and begin works. Dependant on the projects the vessel(s) might do one of more than one cable installation during one voyage. Dependant on physical protection levels of cables there may be a number of extra vessels dispatched to complete the works. In parallel there will be onshore works which will be connecting the cable from the sea/shore end into the existing electrical network. All vessel(s) return to port(s) 	<ul style="list-style-type: none"> Essentially a safety message to let mariners know that we will have vessels in the area. 	<ul style="list-style-type: none"> Mariners: the number of vessels, routes they are taking and activities they will be completing (daily). Domestic and business customers to be advised of any planned outages to allow us to carry out works (as required).

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Time	What's happening	What we want to communicate	Who we are speaking to and frequency
18 months after installation	<u>Post installation cable inspections</u> <ul style="list-style-type: none"> Sending out inspection vessel, divers and/or ROV to inspect the cables most recently installed. This will allow us to decide what remedial works are required. The cable is inspected by closely following cable to inspect cable condition and record it on film. This is then used to inform our assessment. 	<ul style="list-style-type: none"> Essentially a safety message to let mariners know that we will have vessels in the area. 	<ul style="list-style-type: none"> Mariners: the number of vessels, routes they are taking and activities they will be completing (daily).
Remedial works following cable inspection (if required)	<u>Remedial works</u> If required, we will send more vessels to complete any works which are required (from protection to complete cable replacement).	<ul style="list-style-type: none"> Essentially a safety message to let mariners know that we will have vessels in the area. 	<ul style="list-style-type: none"> Mariners: the number of vessels, routes they are taking and activities they will be completing (daily).

Table 31 Example of unplanned outage due to wet fault in a cable

Time	What's happening	What we want to communicate	Who we are speaking to
Day 1	<ul style="list-style-type: none"> Declared a wet fault following testing at termination poles at both shore ends. This will give the distance to the fault location within the sea. 	<ul style="list-style-type: none"> We are aware of a submarine electricity cable fault. 	<ul style="list-style-type: none"> Domestic and business demand and generation customers.

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Time	What's happening	What we want to communicate	Who we are speaking to
	<ul style="list-style-type: none"> Depending on the severity of the fault and the demand of the island we may be able to restore power whilst still investigating the fault. Embedded generation team will be deployed to operate the generators on the island. There will be someone on site 24 hours. We formally notify Marine Scotland, Northern Lighthouse Board and Fishing Liaison Officer at this point. 	<ul style="list-style-type: none"> Our engineers are on site and are connecting generators to restore your power. 	
Day 2 -13	We are mobilising our marine contractors (divers, vessels and crew).	<ul style="list-style-type: none"> Power will have been restored from the customers' perspective. Generation customers may be assisting islands in maintaining supply stability. We may wish to communicate this as a good news story. 	<ul style="list-style-type: none"> Domestic and business demand customers if we want to share good news story.
Day 14 -17	<u>Locating the fault</u> <ul style="list-style-type: none"> If the cable is 30 m deep then divers visually inspect the cable to find the fault. If it is deeper than this Remote Operated Vehicles are deployed to do the same job. Visibility can be very poor so this will impact on how long this takes. 	<ul style="list-style-type: none"> We need to be sharing safety message with the marine community to beware that we have vessels operating in the area. This should highlight how many there are in the water and what they are doing. We may want to talk to the outside world about anyways we are mitigating our impact on either the environment or mariners. 	<ul style="list-style-type: none"> Mariners: We will have vessels operating in and around the cables. This should advise of specific movements.

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Time	What's happening	What we want to communicate	Who we are speaking to
Day 18	<u>Fault zone found</u> Fault zone found visually (probably a worn section of cable with splayed armour; or disruption on seabed; or orange deposits on the armour). There is still work to be done in actually pin pointing the fault.	<ul style="list-style-type: none"> ▪ We need to be sharing safety message with the marine community to beware that we have vessels operating in the area. ▪ This should highlight how many there are in the water and what they are doing. 	<ul style="list-style-type: none"> ▪ Mariners: We will have vessels operating in and around the cables.
Day 19 – 20	<u>Fault finding</u> <ul style="list-style-type: none"> ▪ We cut the cable in the fault zone. ▪ Tie one end that will remain in the sea to the buoy. We will check this is healthy once we have checked the end that we think has the fault. ▪ The end we think has a fault will be recovered onto the cable vessel. Jointers will strip the cable ready for testing. We find the exact location of the fault by cutting 10 metre lengths until the tests show that the cable is healthy. Once we know cable is healthy we make it waterproof and tie it to a buoy to it. 	<ul style="list-style-type: none"> ▪ We need to be sharing safety message with the marine community to beware that we have vessels operating in the area. This should highlight how many there are in the water and what they are doing. Especially since there will a number of anchors temporarily in the area whilst we are looking for the fault and fixing it. 	<ul style="list-style-type: none"> ▪ Mariners: We will have vessels operating in and around the cables. ▪ This should tell mariners where the buoys are and that the cable is at this location.
Day 21	<u>Option A</u> We call this a piece in where we are able to re-joint the cable with a new section of cable. <u>Option B</u>	<ul style="list-style-type: none"> ▪ We need to be sharing safety message with the marine community to beware that we still have vessels operating in the area. ▪ This should highlight how many there are in the water and what they are doing. 	<u>Option A and B</u> <ul style="list-style-type: none"> ▪ Mariners: We will have vessels operating in and around the cables and estimate when we will be away.

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Time	What's happening	What we want to communicate	Who we are speaking to
	<p>Depending on the distance from shore, we may take at new section of cable from the shore end to the existing cable (only needing one joint)</p> <p><u>Option C</u></p> <p>If the cable is too deep (greater than 50 metres) we can't repair the cable by traditional means we will have to replace the entire cable end to end.</p> <p><u>Option D</u></p> <p>If cable has faulted and is planned for replacement due to health of cable we will replace entire cable end to end.</p>	<p><u>Option A and B</u></p> <p>Estimate how long we will be in the area mending the cable for and advise of vessel movements.</p> <p><u>Option C and D</u></p> <p>We need to apply for full marine licence.</p> <p>Please refer to other communication plan from here on.</p>	<p><u>Option C and D</u></p> <p>Mariners and statutory consultees: We need to do a full cable replacement and so need to apply for a marine licence which gives us consent to carry out the work.</p>
Day 22	<p><u>Option A</u></p> <p>Take cable vessel to fault location and joint new piece in between the two ends. The cable is tested to make sure it is healthy and then lowered back onto the sea bed. We will then re-energise cable when safe to restore power.</p> <p><u>Option B</u></p> <p>Position the cable vessel close to the shore in line with the point of termination in land. We float the cable from the cable vessel to connection point on shore. The floats are removed when cable is in</p>	<ul style="list-style-type: none"> ▪ We need to be sharing safety message with the marine community to beware that we still have vessels operating in the area. ▪ This should highlight how many there are in the water and what they are doing. 	<ul style="list-style-type: none"> ▪ Domestic and business demand and generation customers: The submarine electricity cable has been repaired and mobile generators have been removed from the island. ▪ Mariners: We will have vessels operating in and around the cables and estimate when we will be away

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Time	What's happening	What we want to communicate	Who we are speaking to
	position and install the cable to the jointing location where it meets the cable which we left in the sea attached to a buoy (the original fault location) and joint the cable. We test the cable to make sure it is clear of all faults. We will then re-energise cable when safe to restore power.		

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Appendix C Commercial Fishing Charts

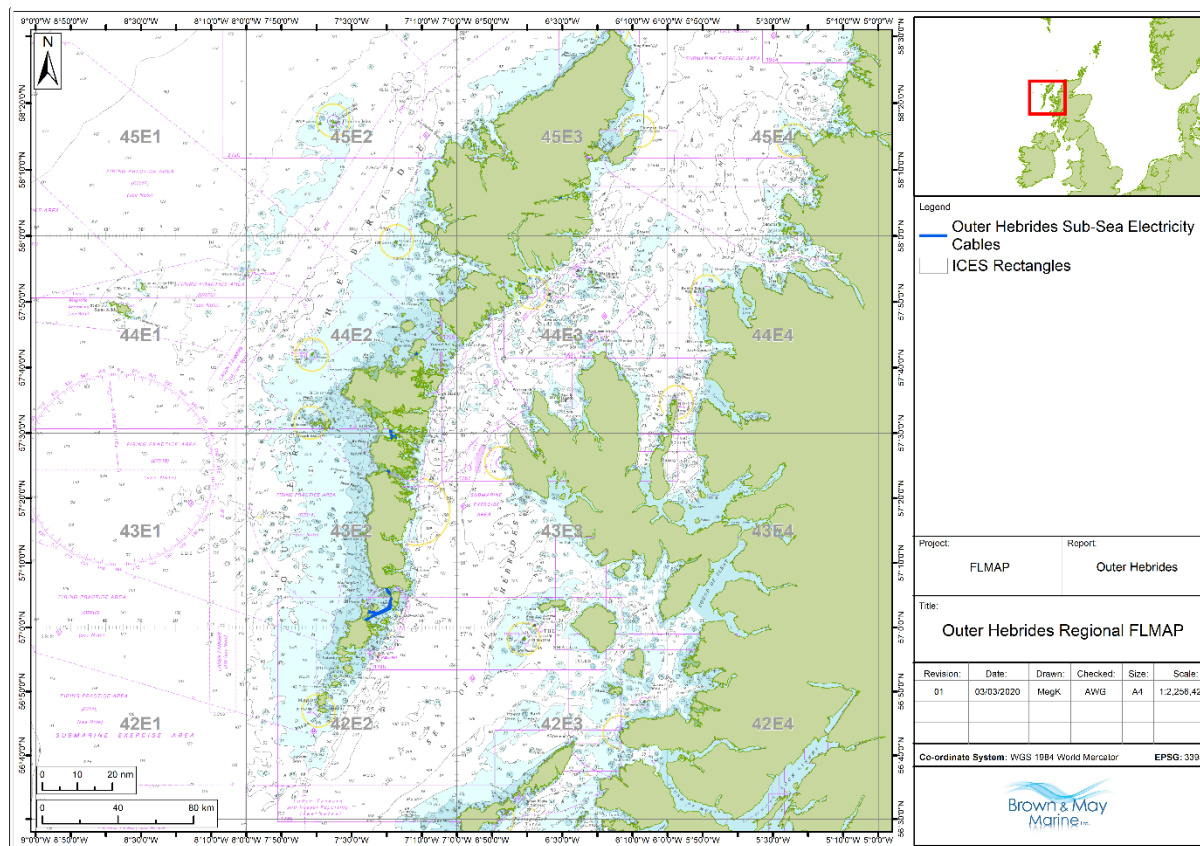


Figure 1 Outer Hebrides study area

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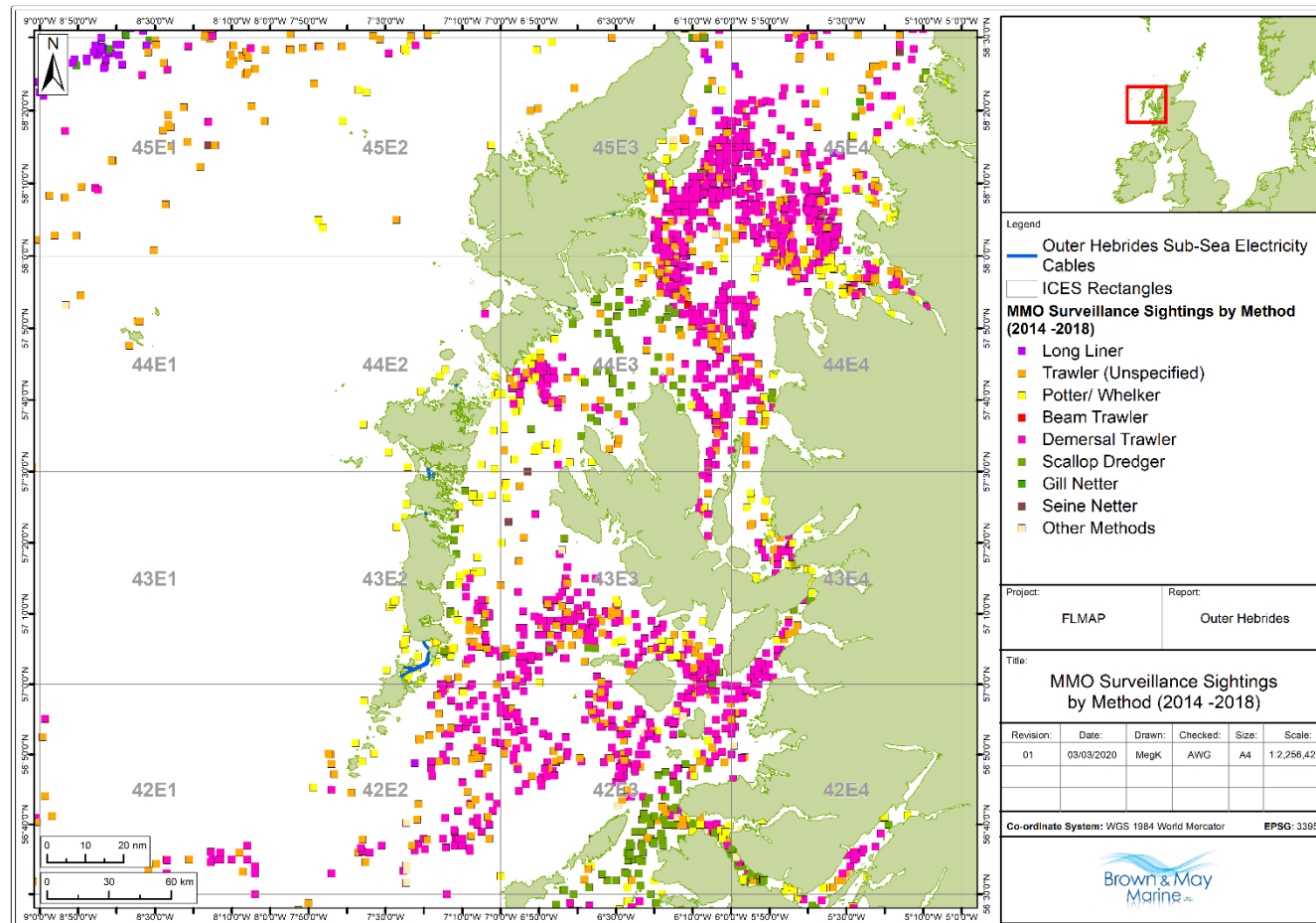


Figure 2 MMO surveillance sightings by method (2014-2018)

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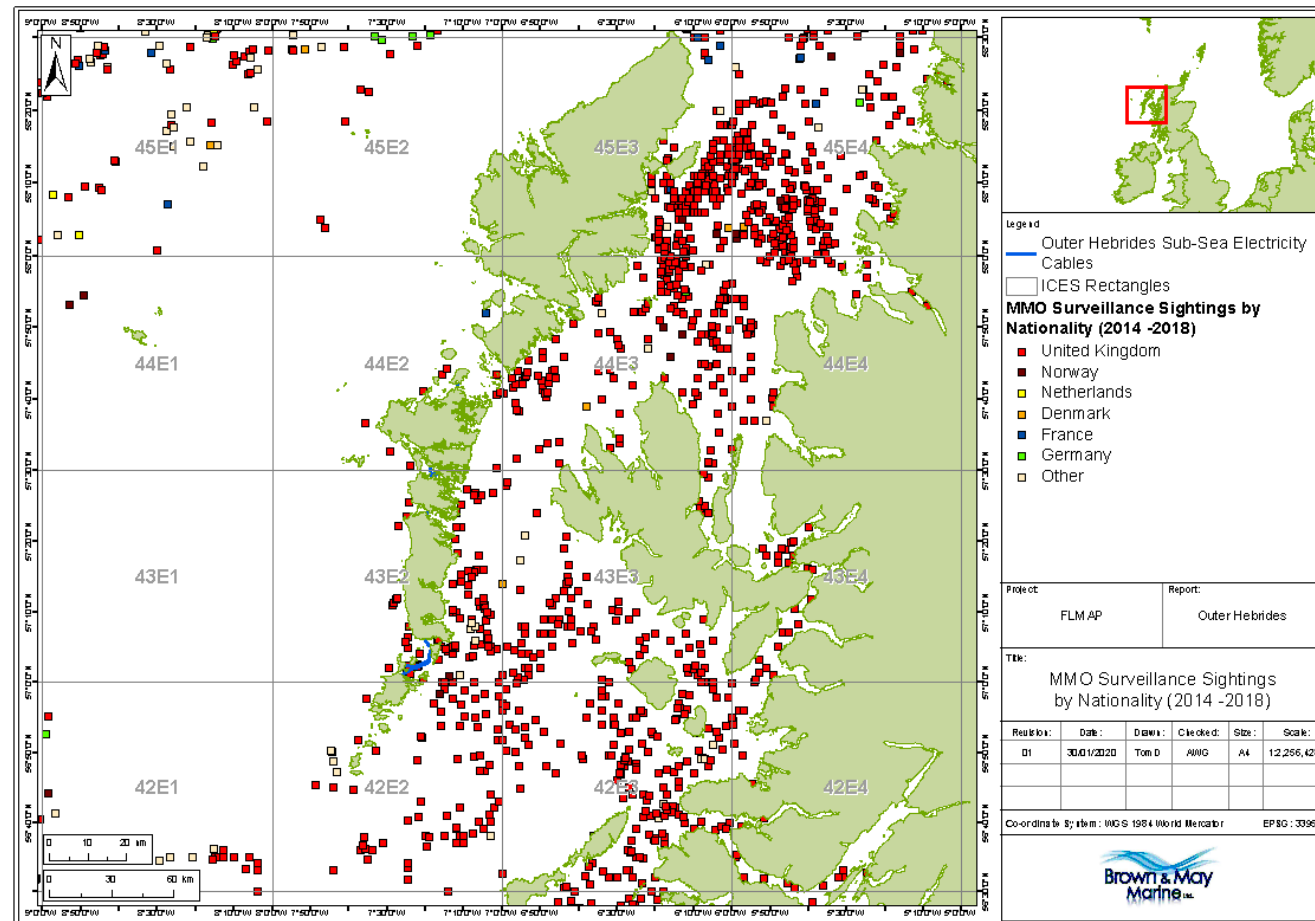


Figure 3 MMO surveillance sightings by nationality (2014-2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
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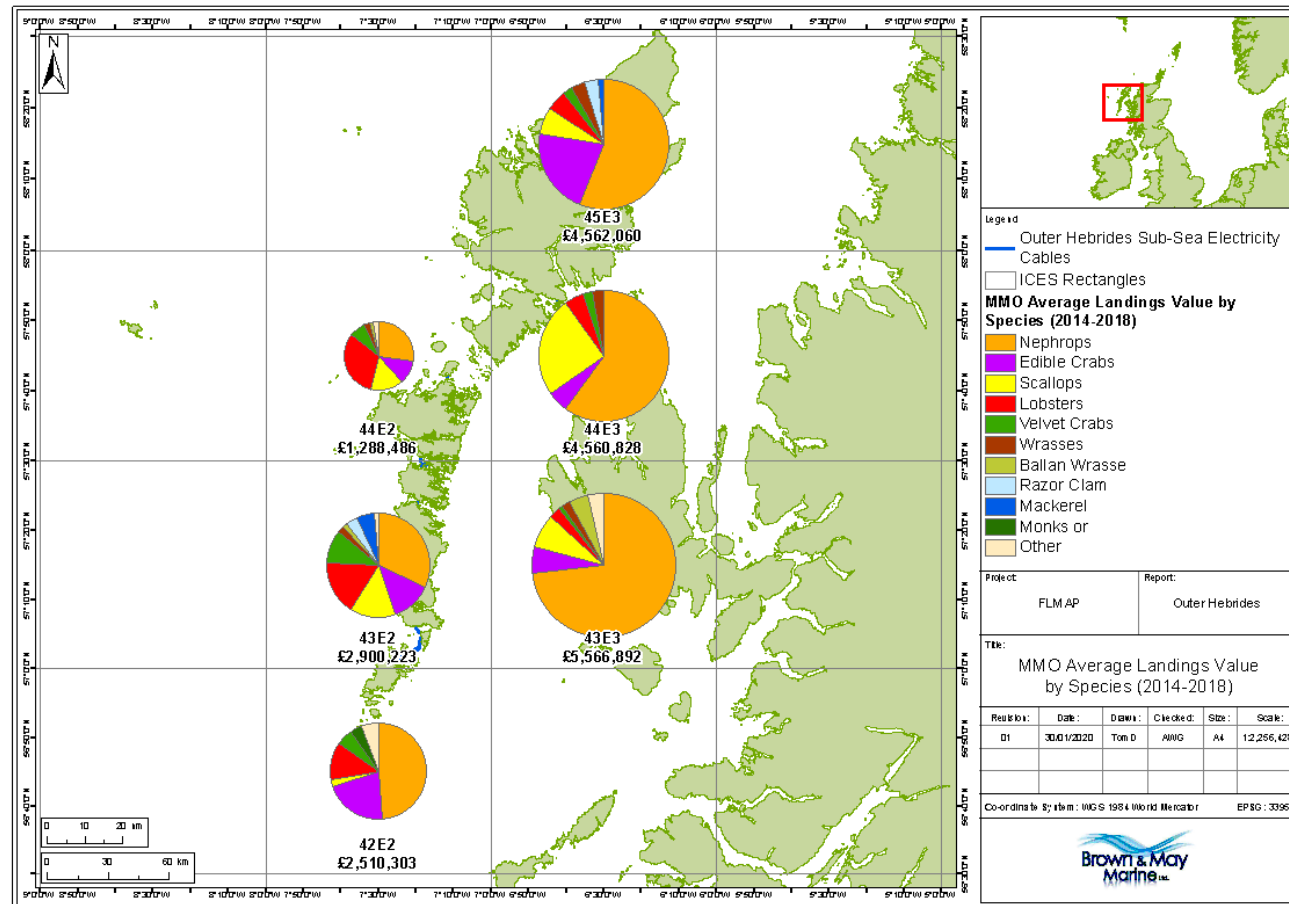


Figure 4 Average MMO landings value by species (2014-2018)

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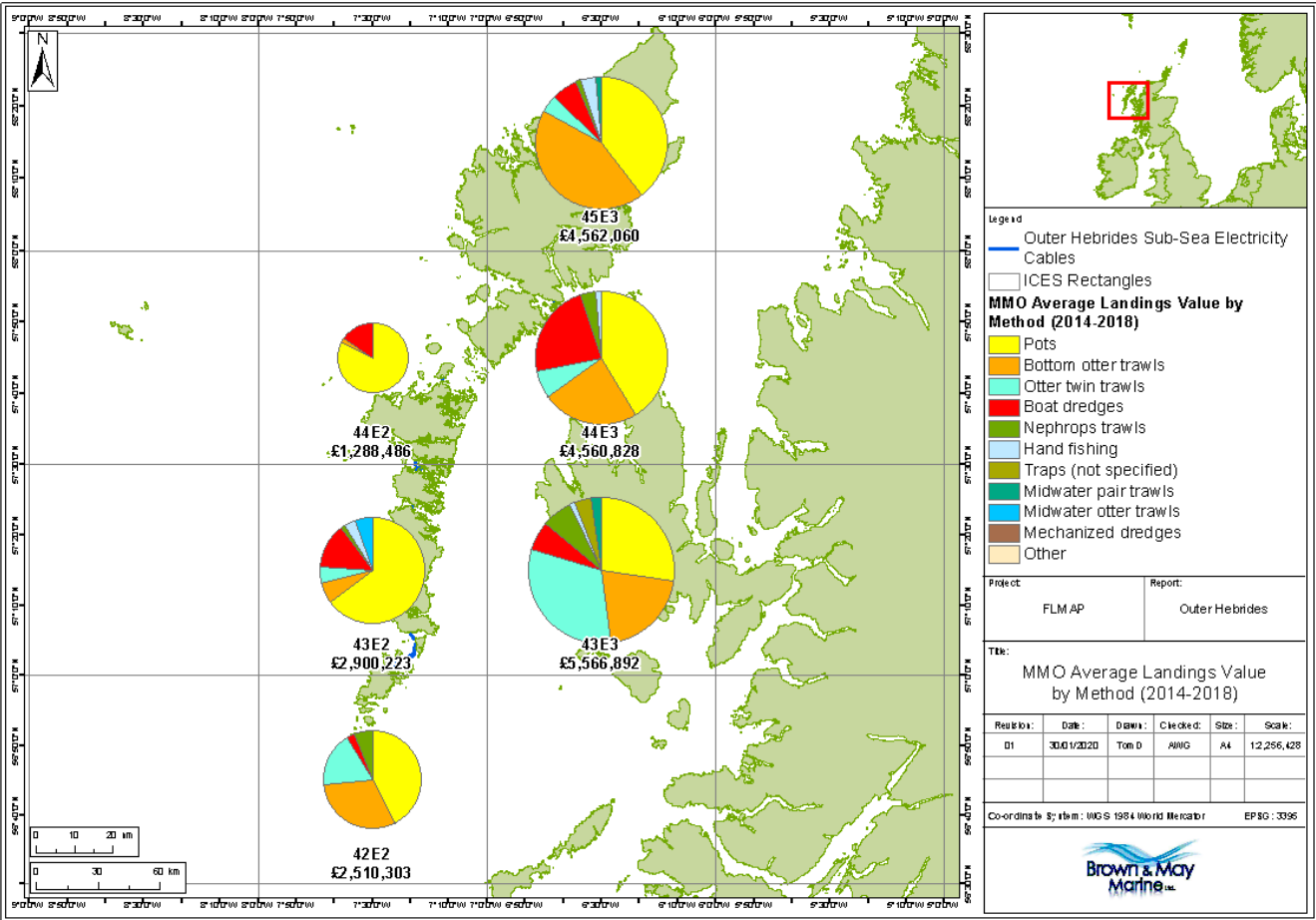


Figure 5 Average MMO landings value by method (2014-2018)

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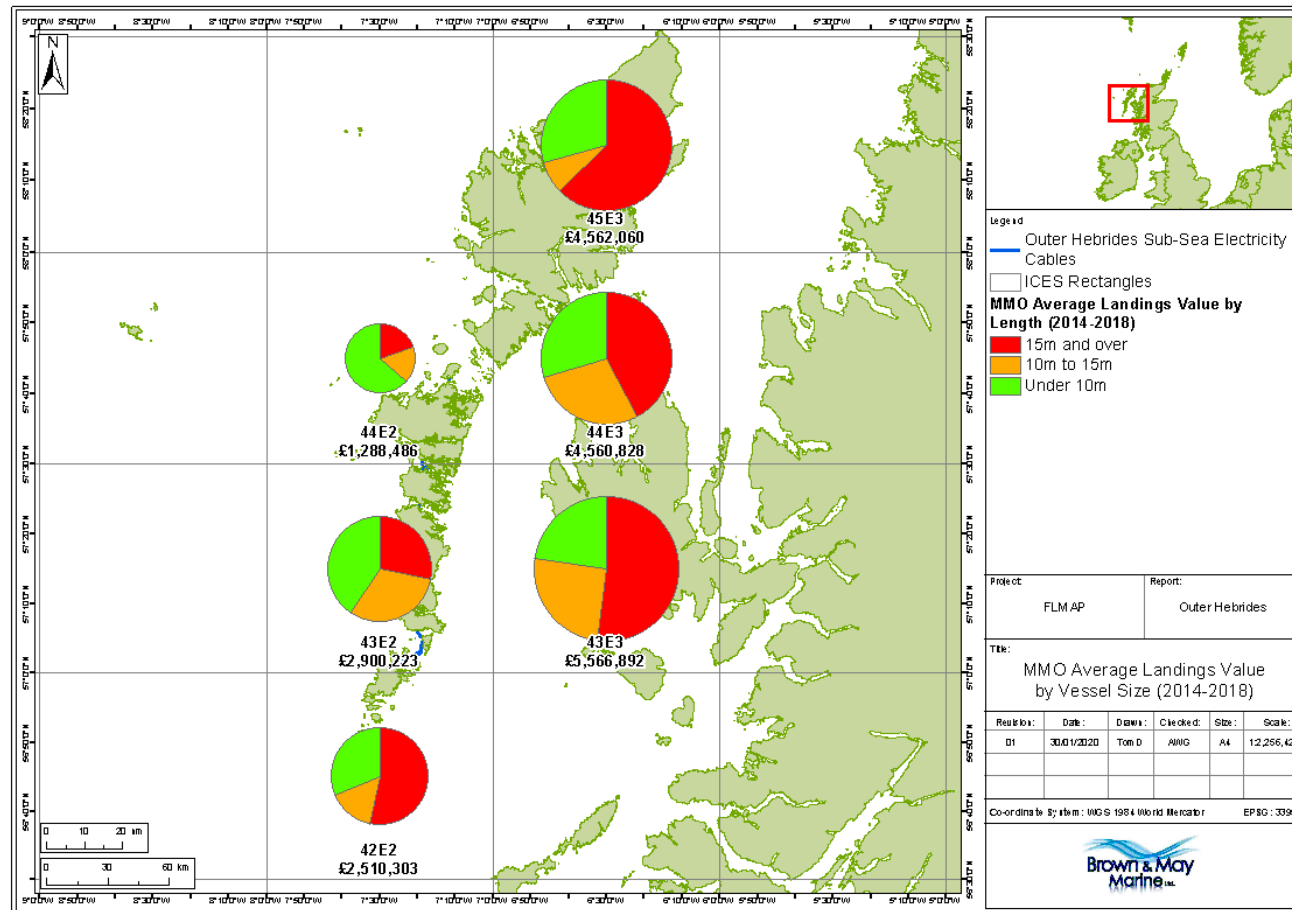


Figure 6 Average MMO landings value by vessel length (2014-2018)

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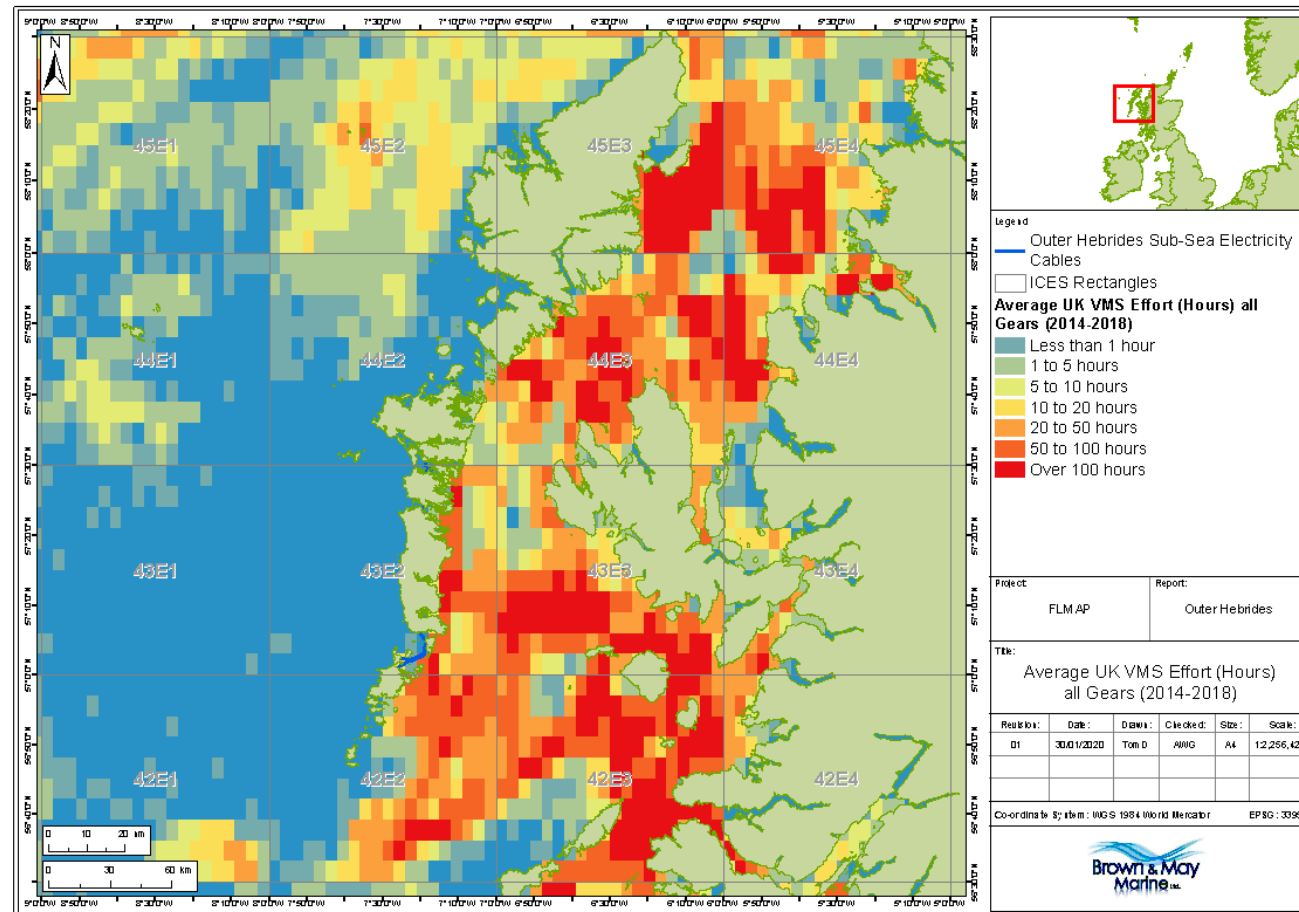


Figure 7 Average UK MMO VMS effort (hours) all gears (2014 to 2018)

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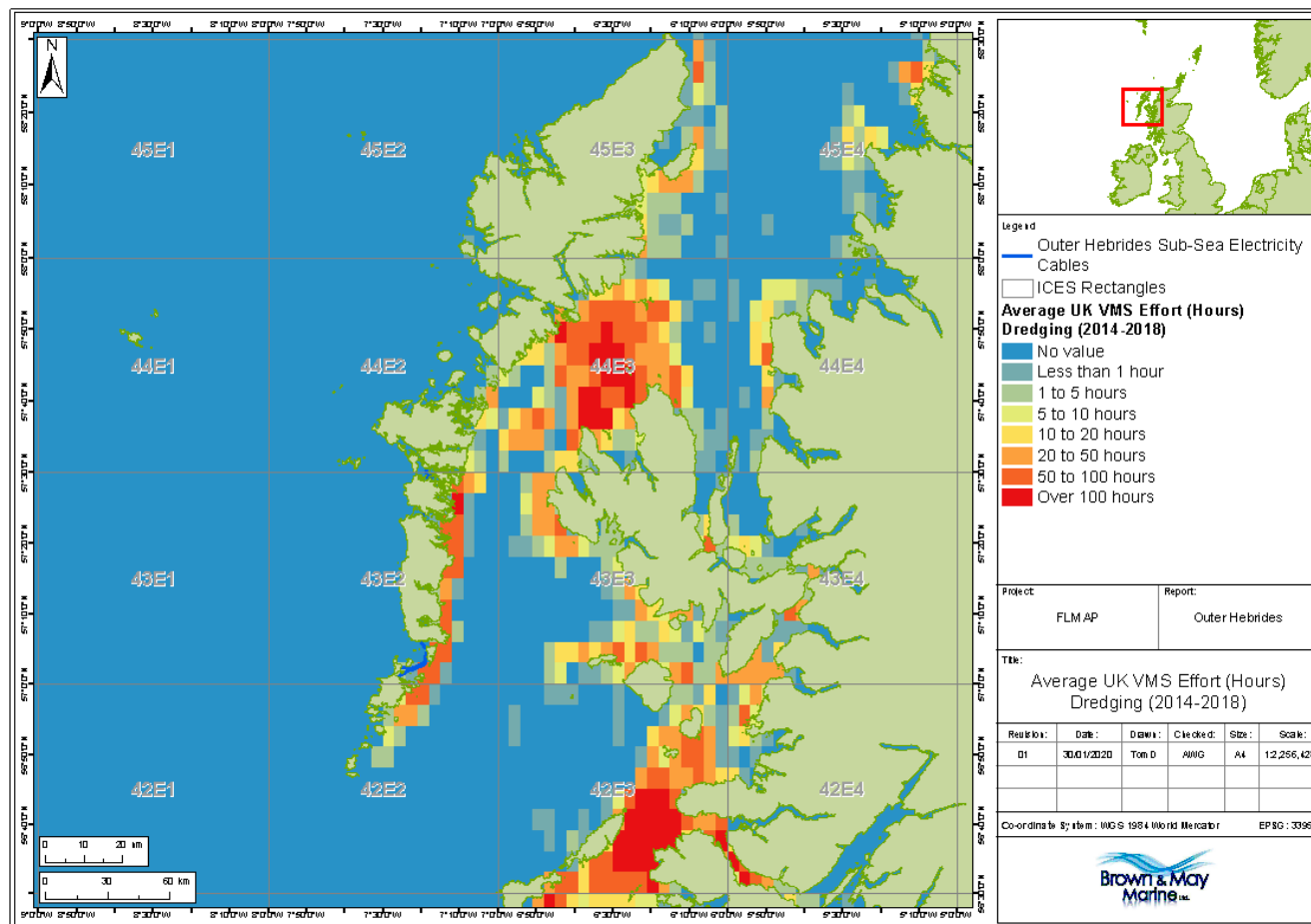


Figure 8 Average UK MMO VMS effort (hours) for dredges (2014 to 2018)

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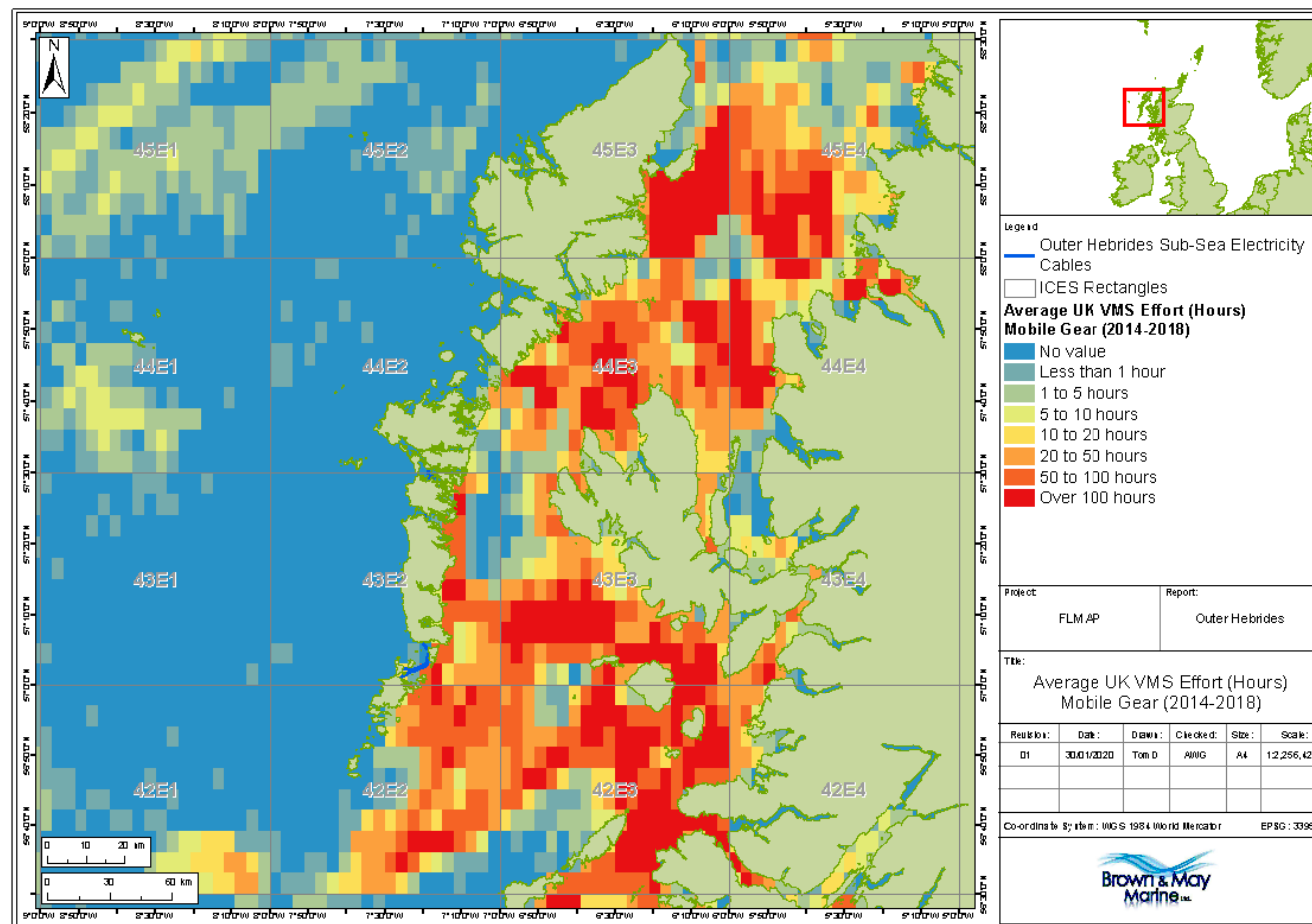


Figure 9 Average UK MMO VMS effort (hours) for mobile gear (2014 to 2018)

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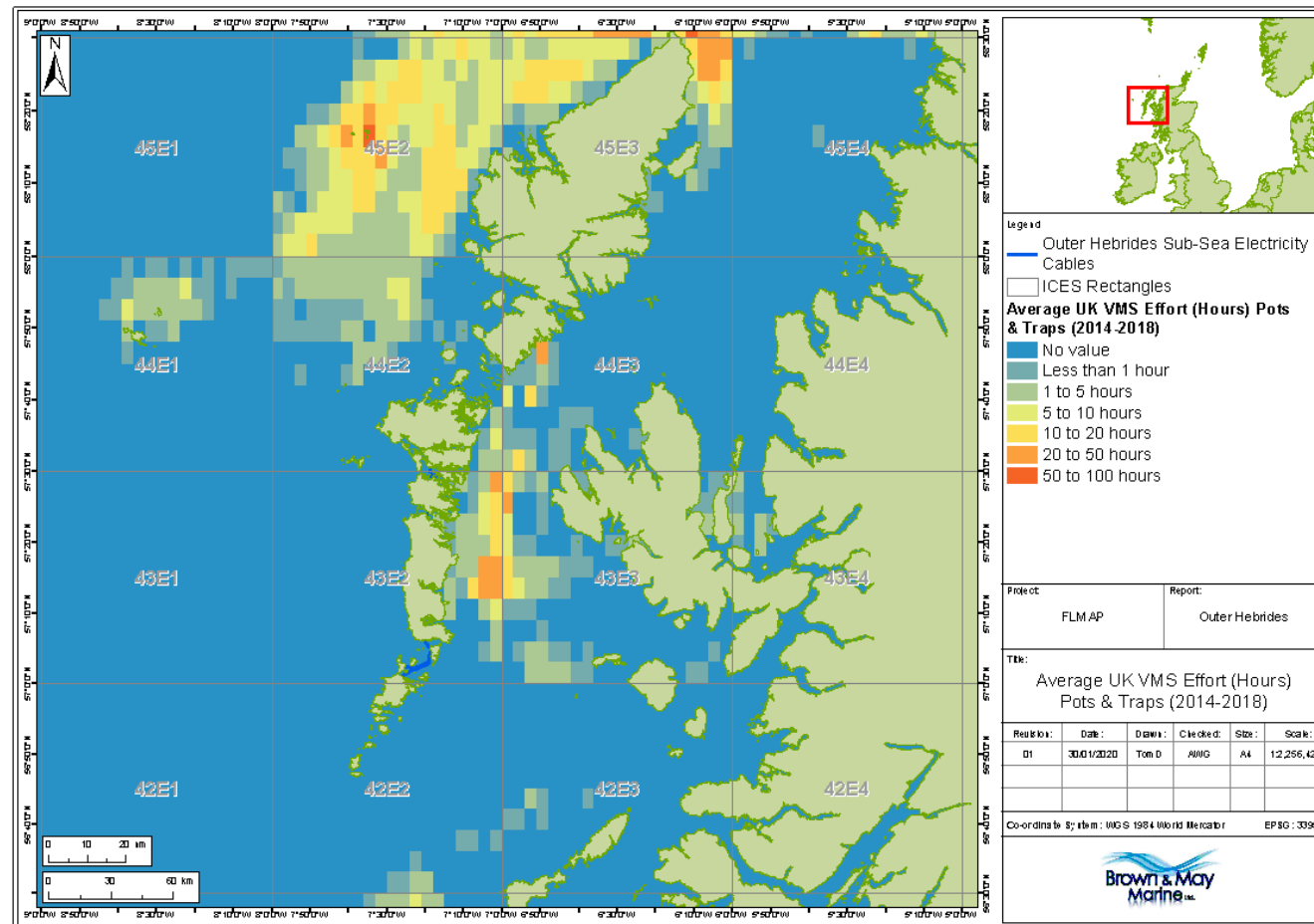


Figure 10 Average UK MMO VMS effort (hours) for pots & traps (2014 to 2018)

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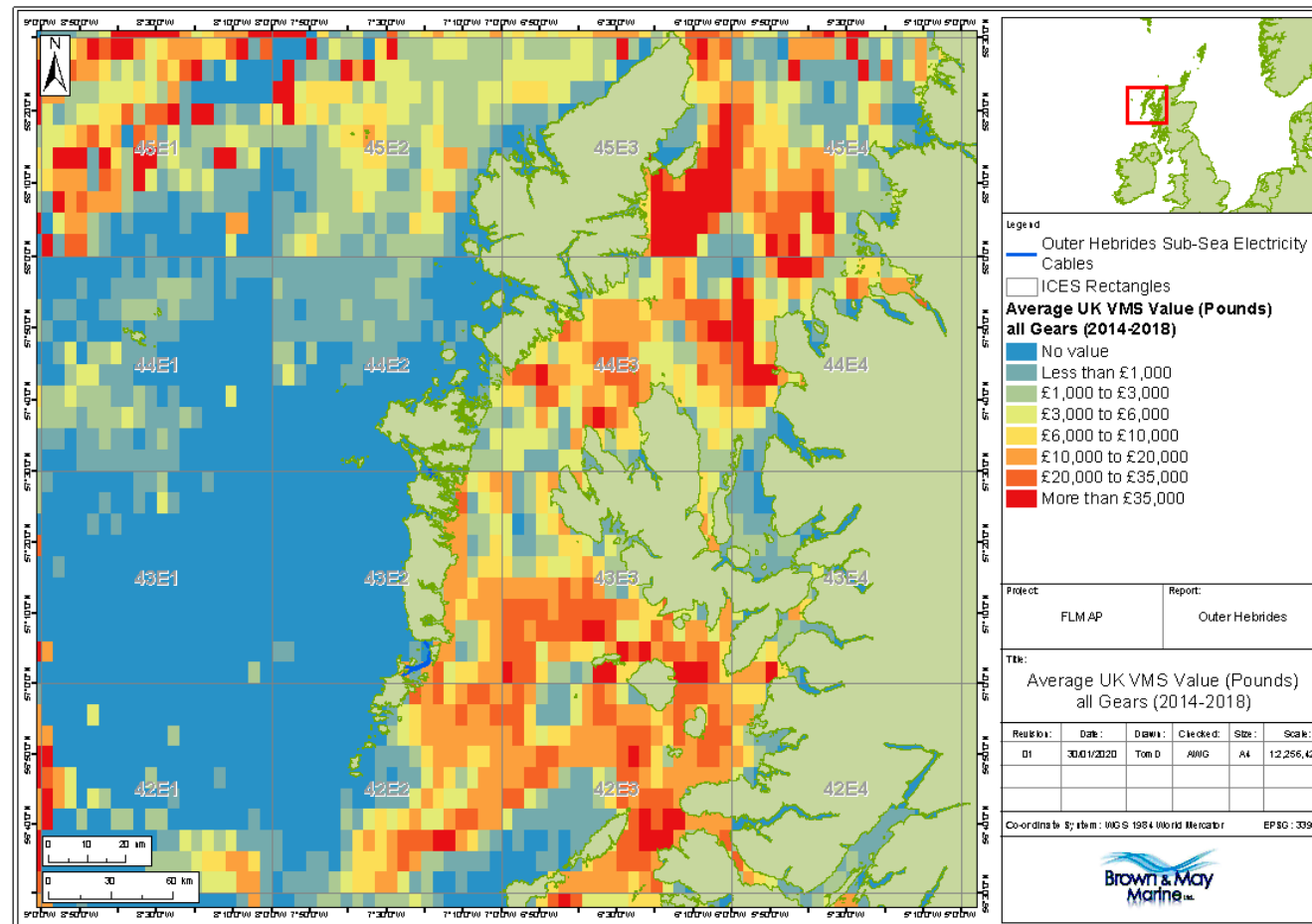


Figure 11 Average UK VMS value (£) for all gears (2014-2018)

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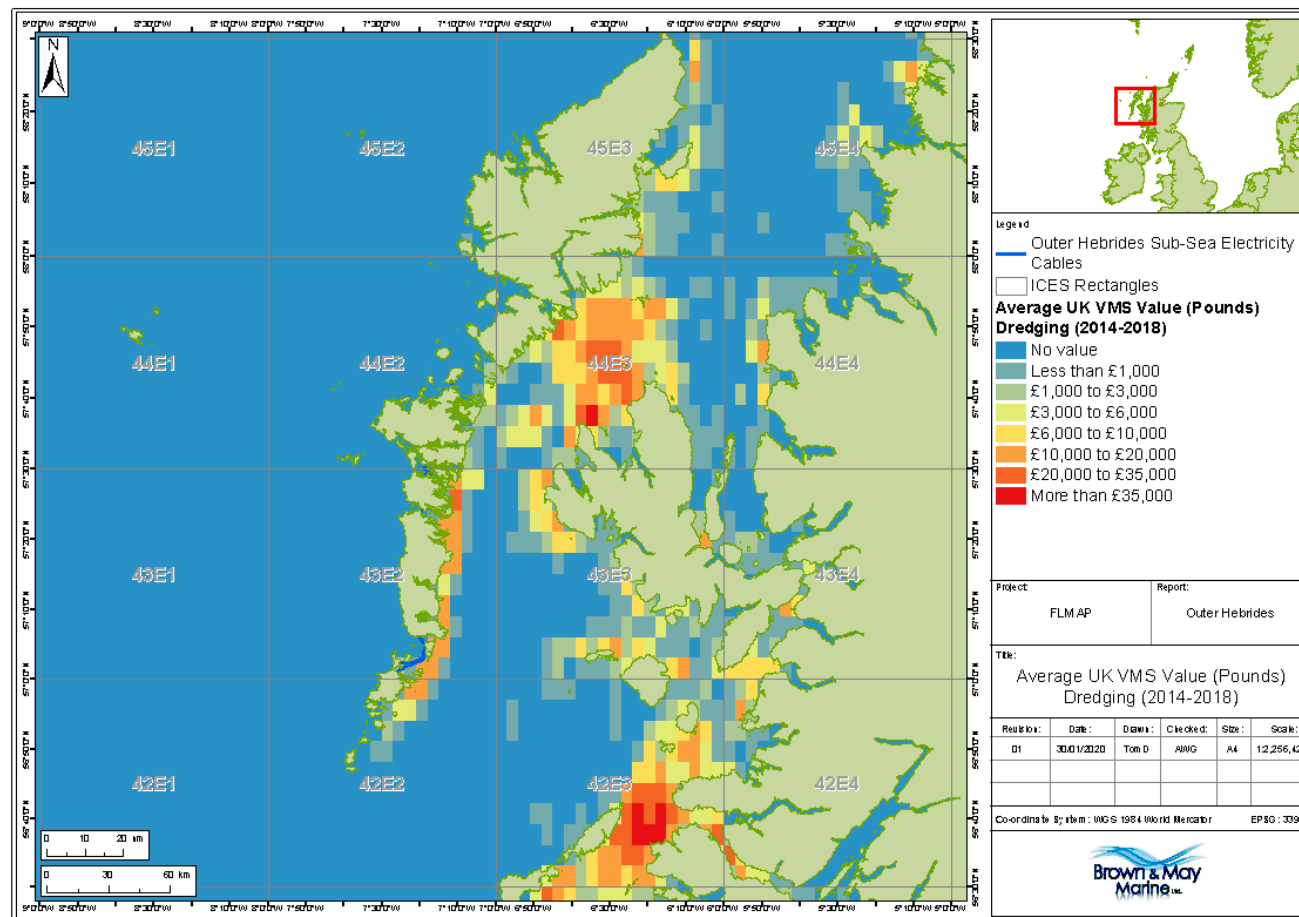


Figure 12 Average UK VMS value (£) for dredging (2014-2018)

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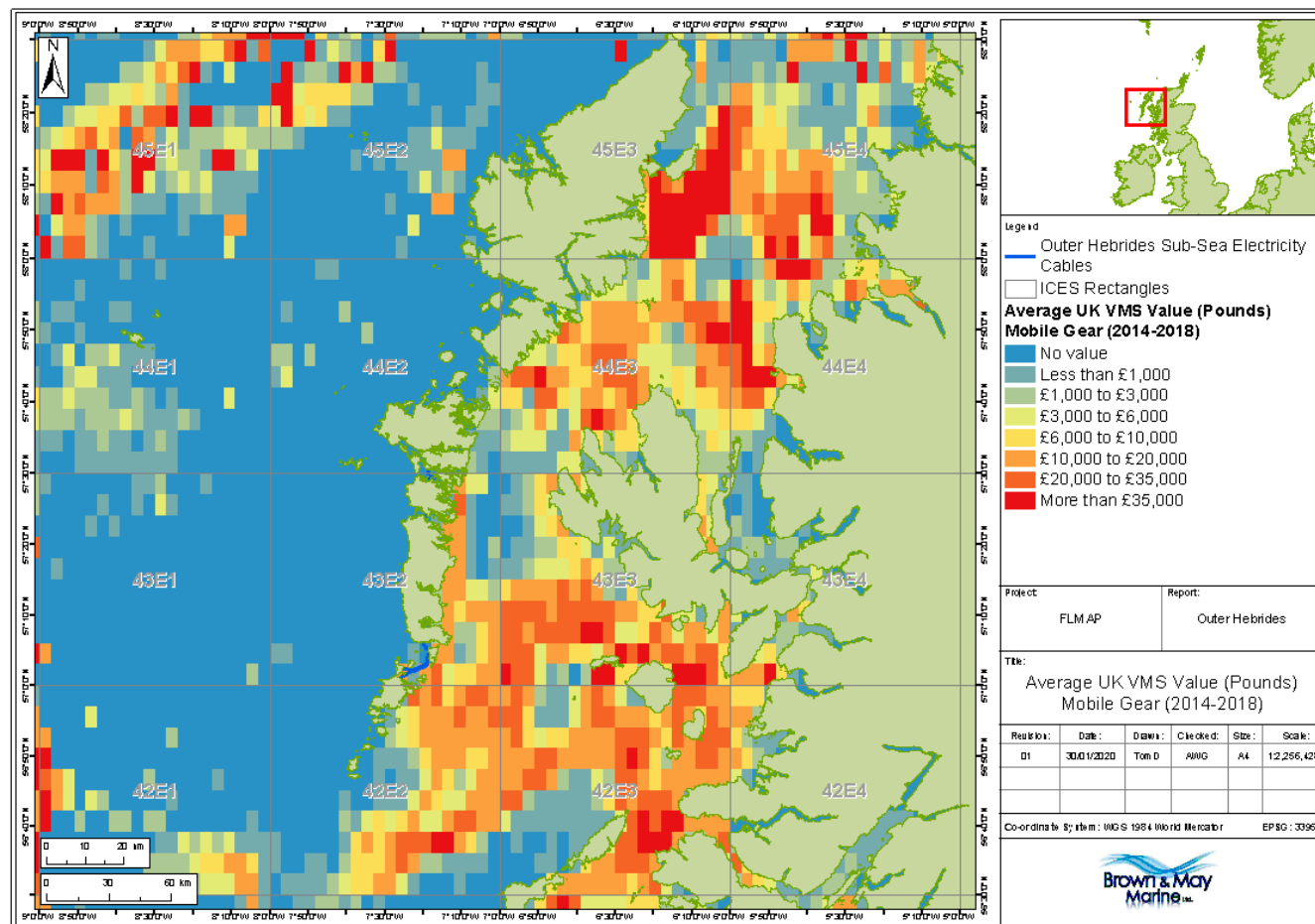


Figure 13 Average UK VMS value (£) for mobile gears (2014-2018)

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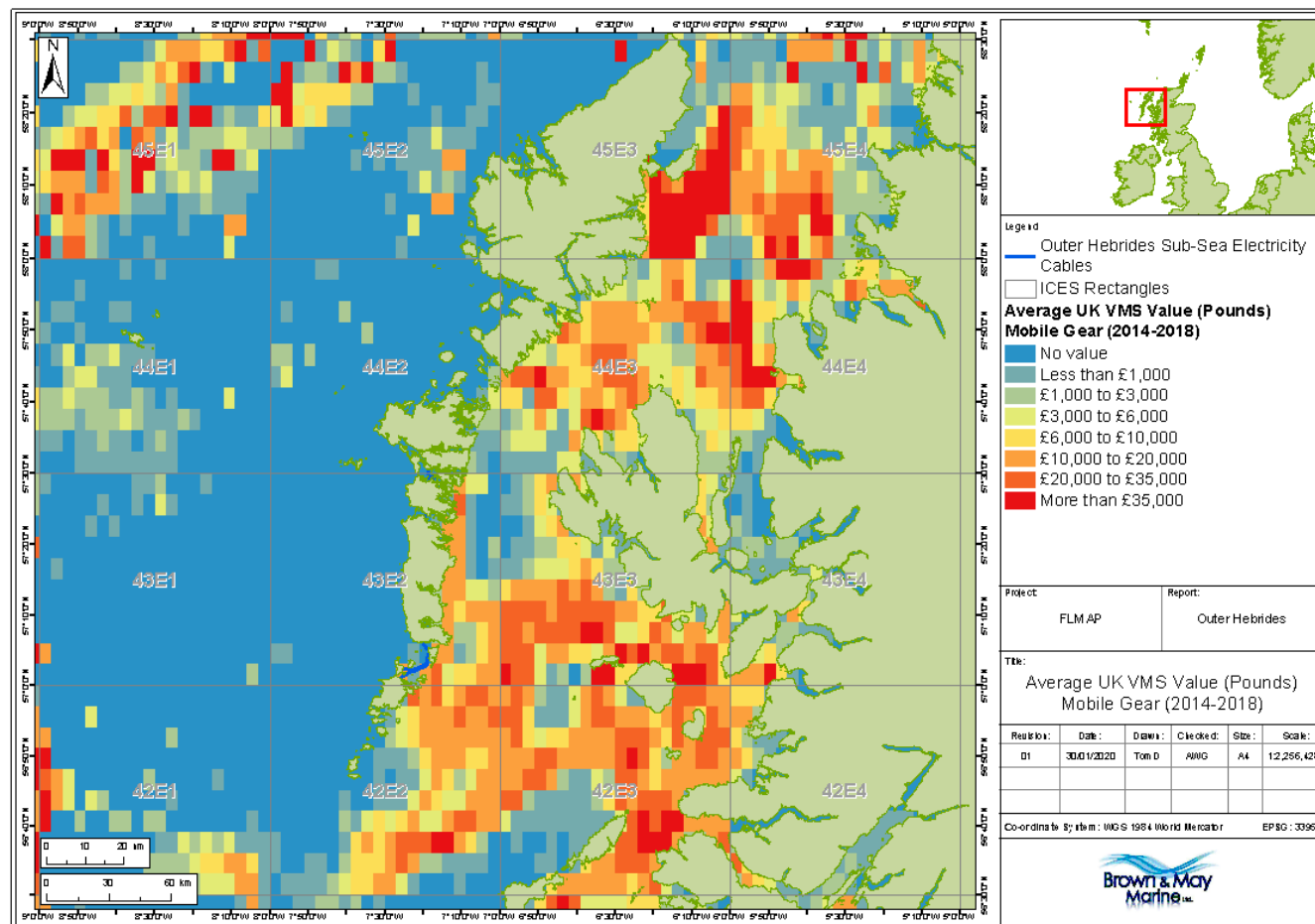


Figure 14 Average UK VMS value (£) for pots and traps (2014-2018)

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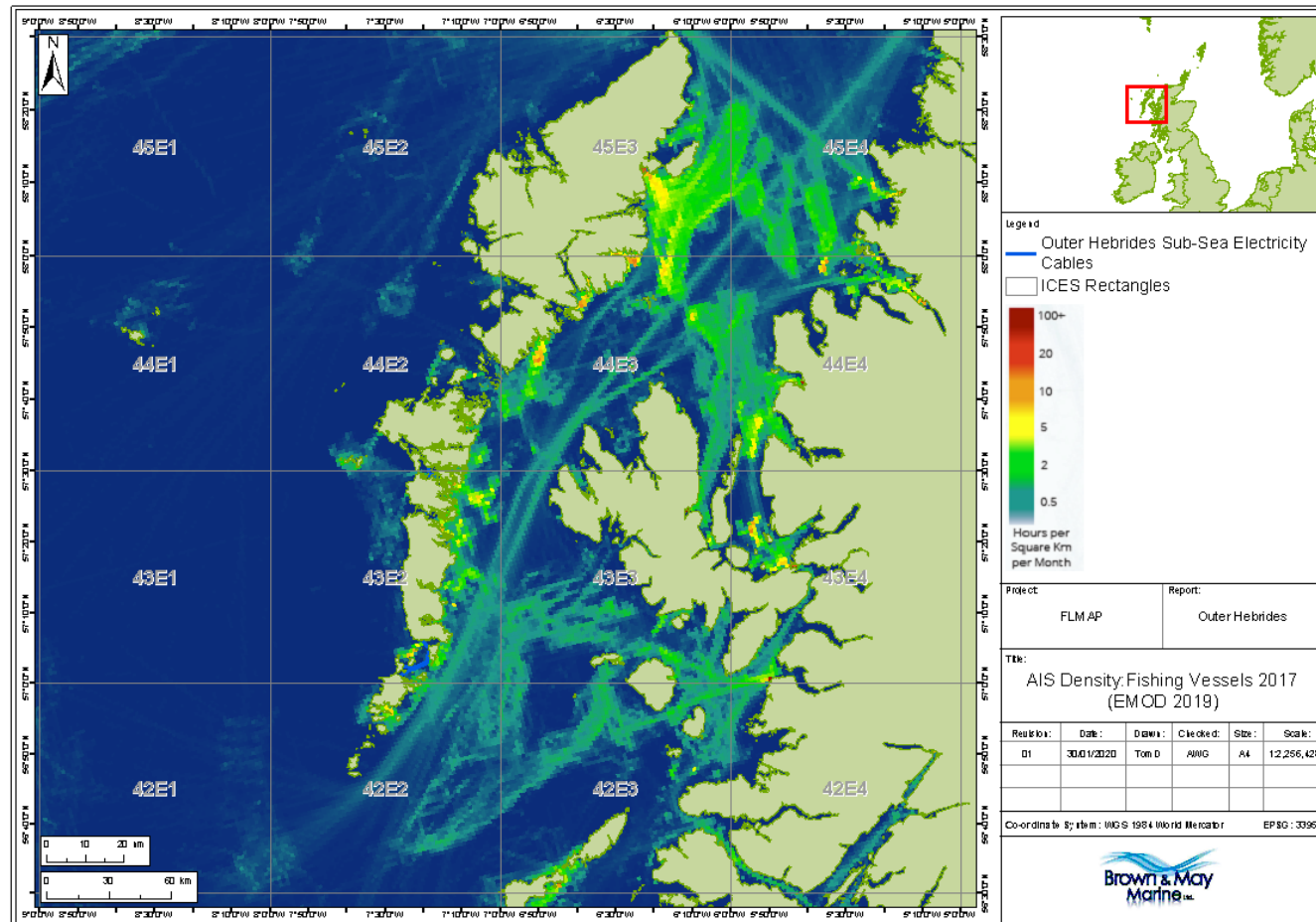


Figure 15 AIS density for fishing vessels in 2017 (EMODnet, 2019)

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Appendix D Other Sea Users Charts

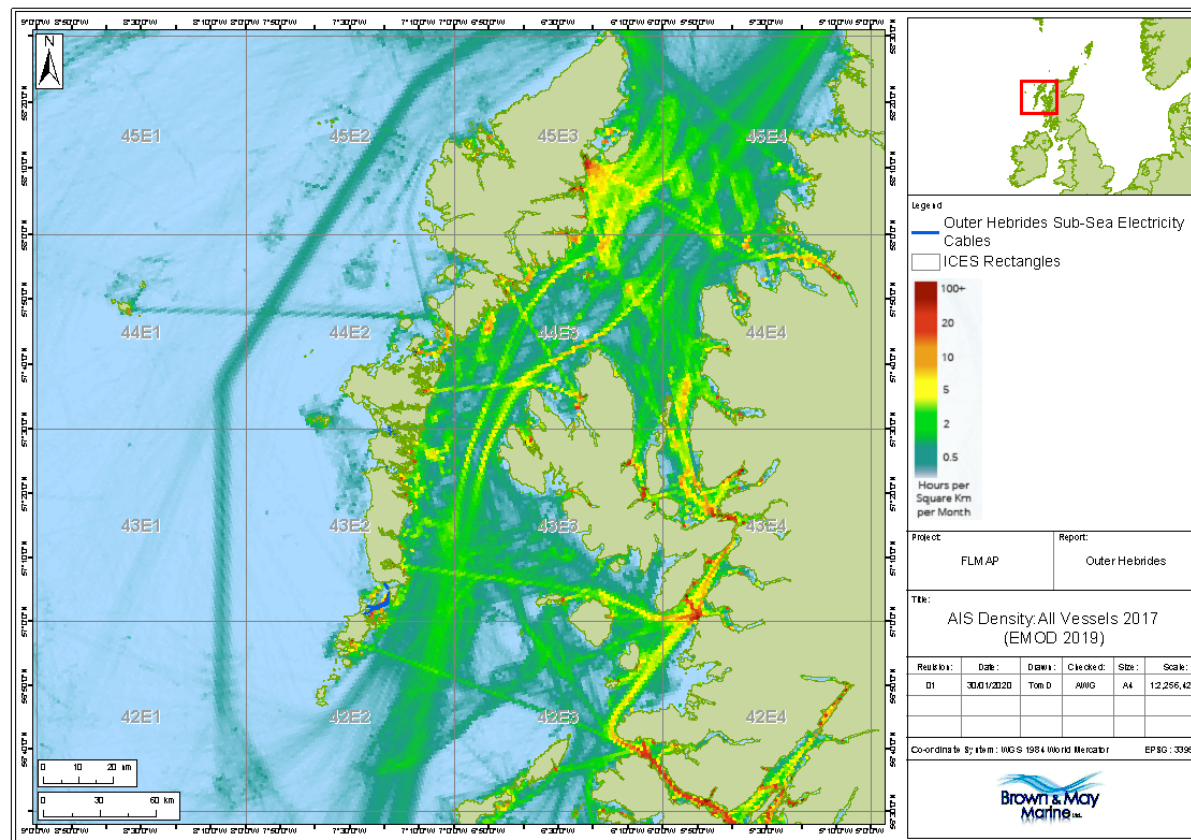


Figure 16 AIS density for all vessels (EMODnet, 2019)

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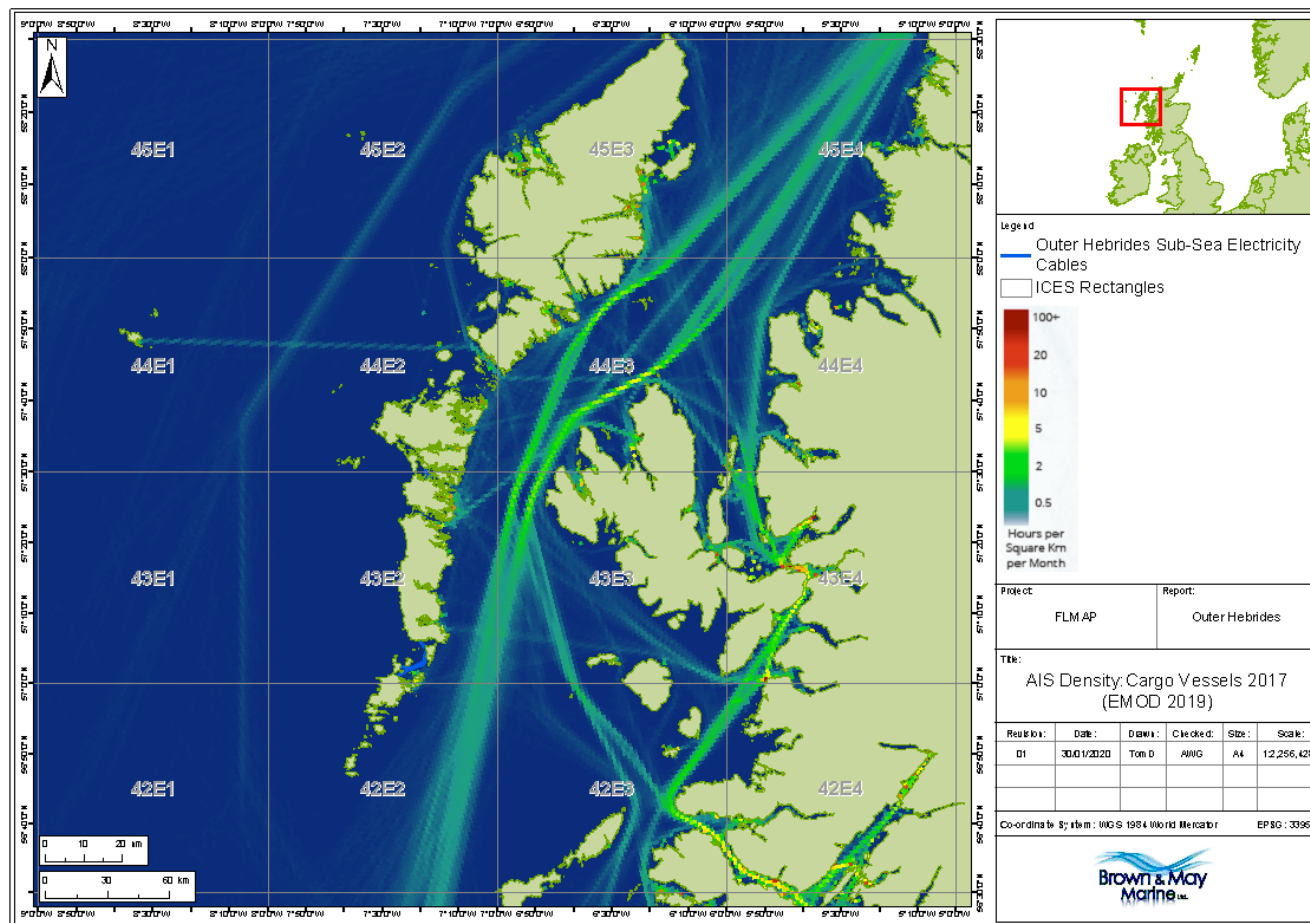


Figure 17 AIS density for cargo vessels (EMODnet, 2019)

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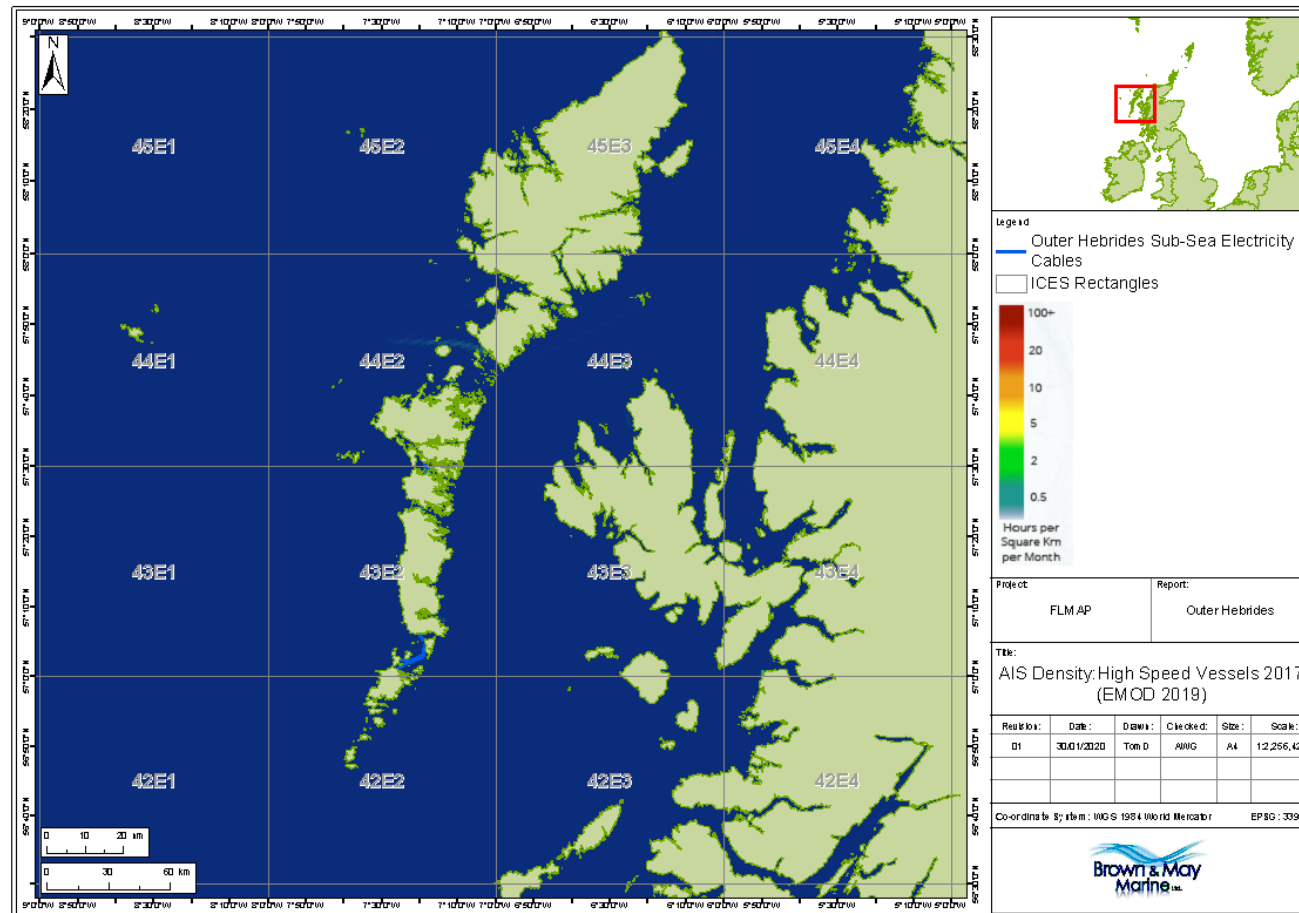


Figure 18 AIS density for high speed vessels (EMODnet, 2019)

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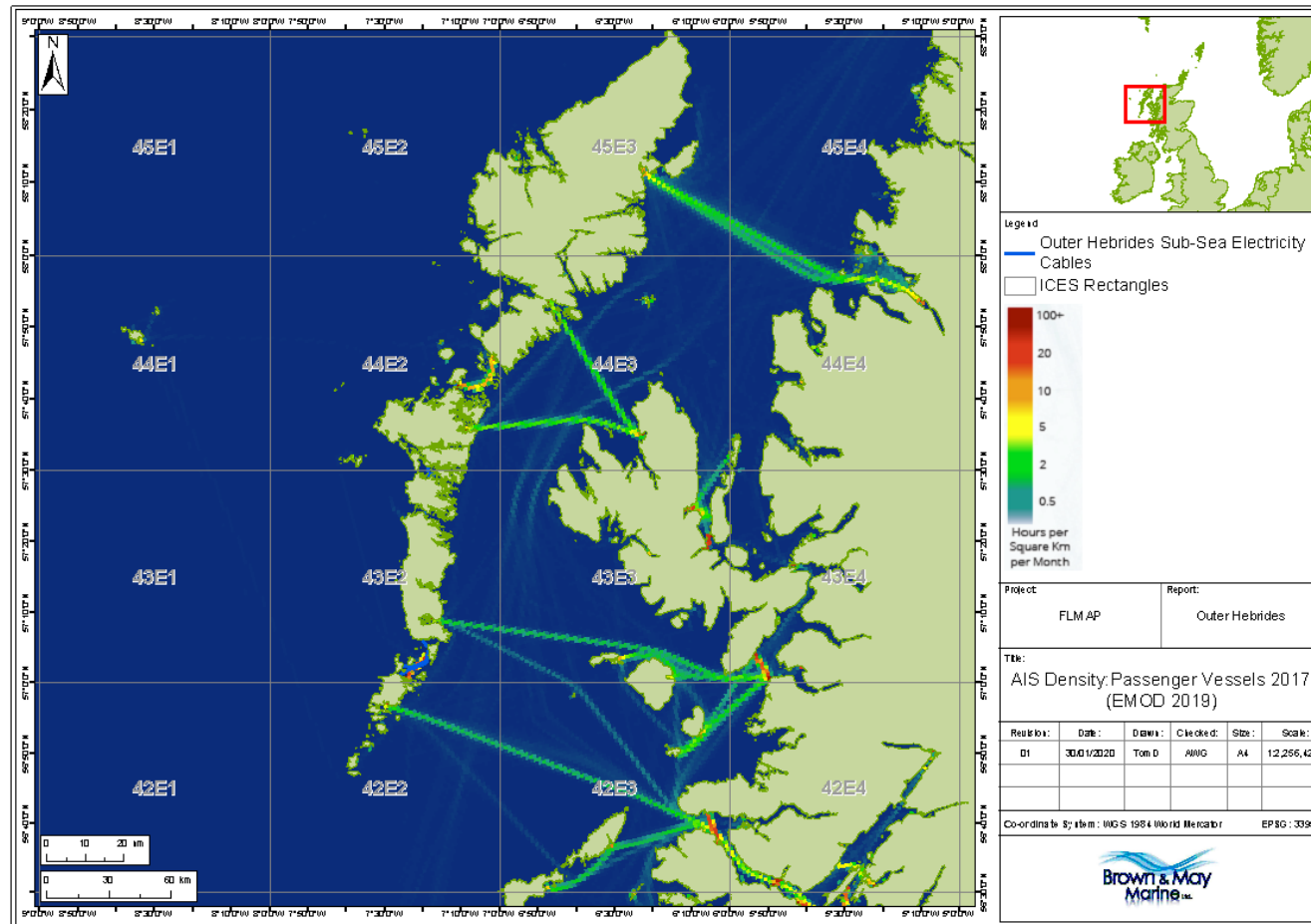


Figure 19 AIS density for passenger vessels (EMODnet, 2019)

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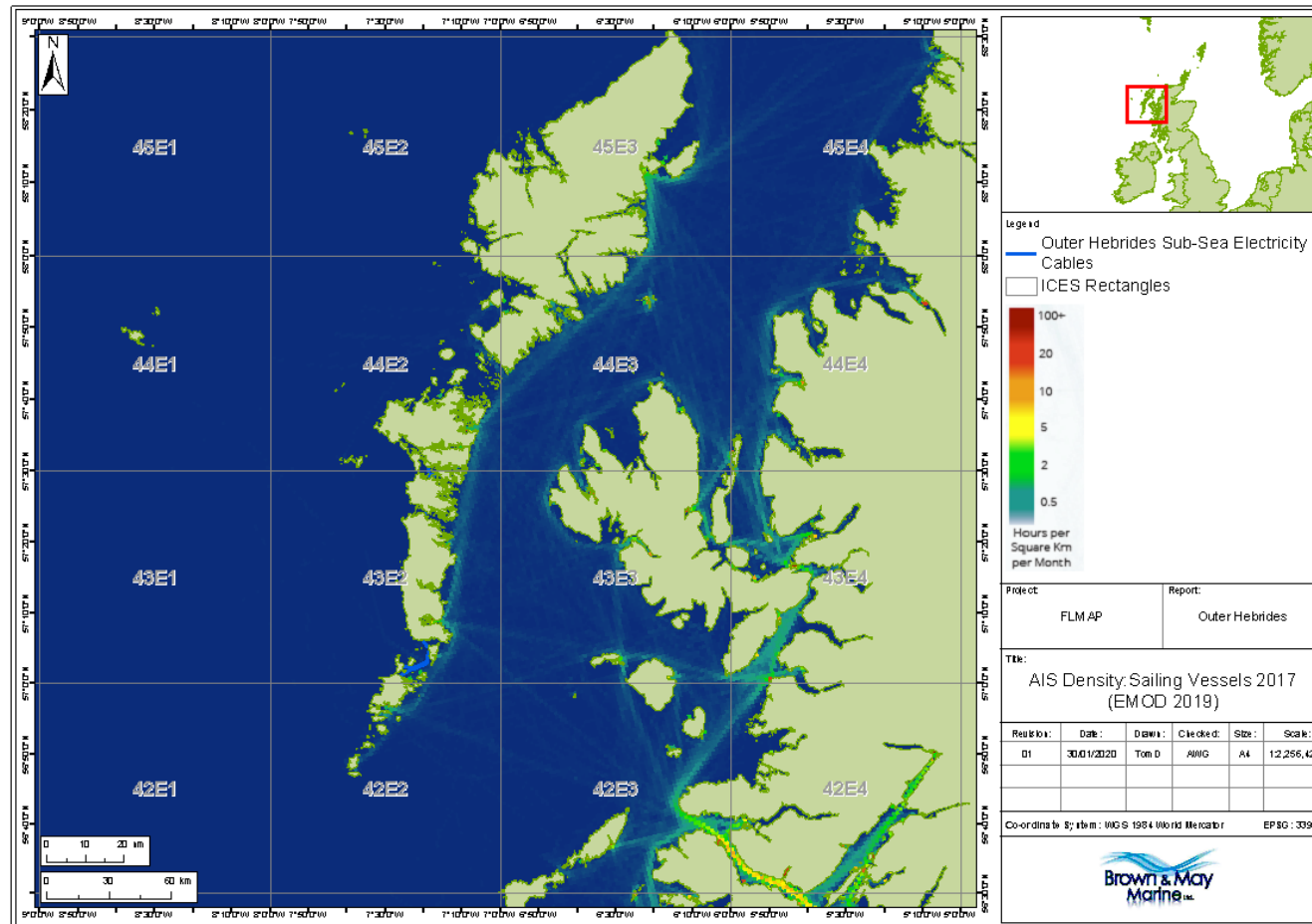


Figure 20 AIS density for sailing vessels (EMODnet, 2019)

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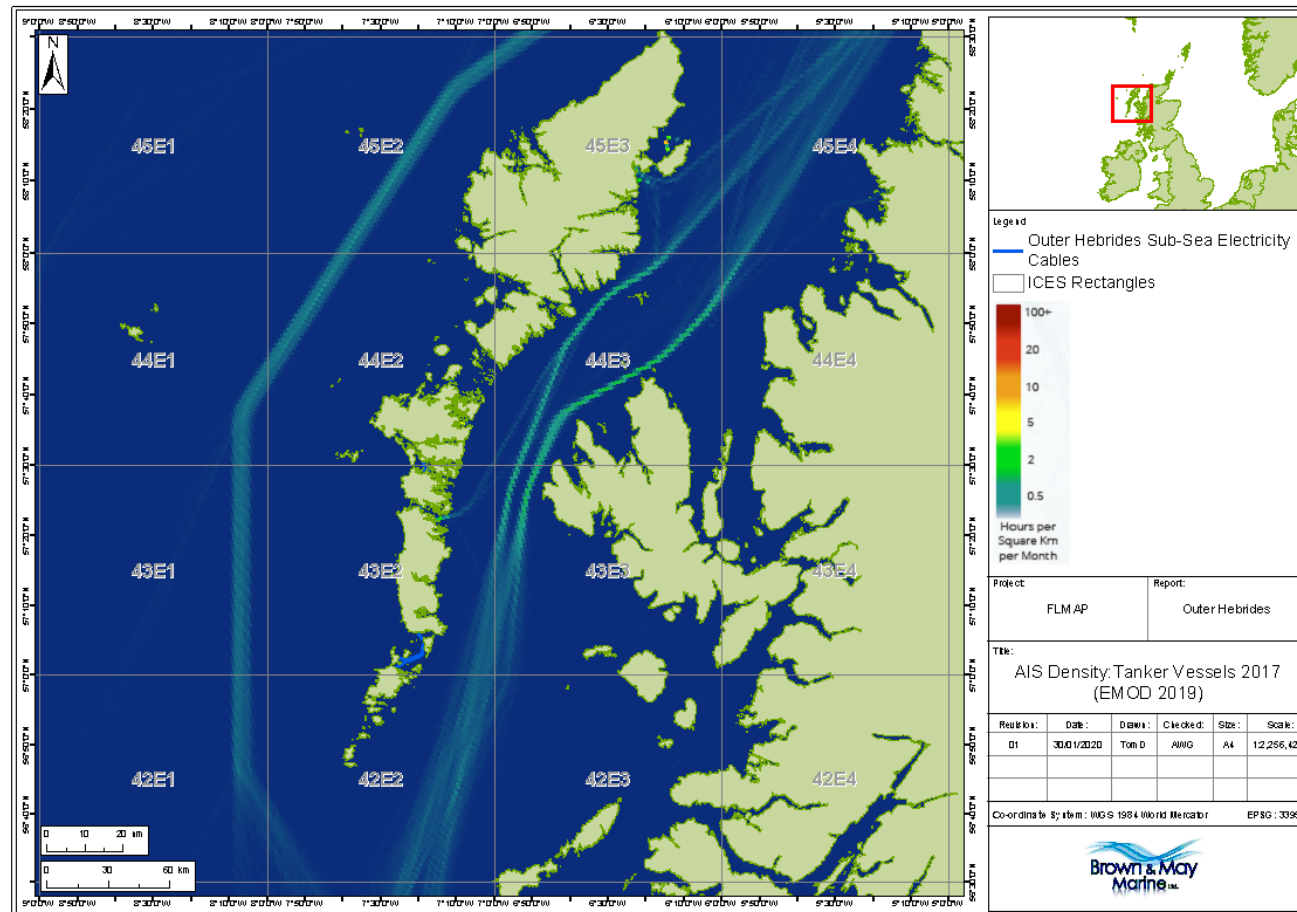


Figure 21 AIS density for tankers (EMODnet, 2019)

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			Distribution ✓	Transmission ✗
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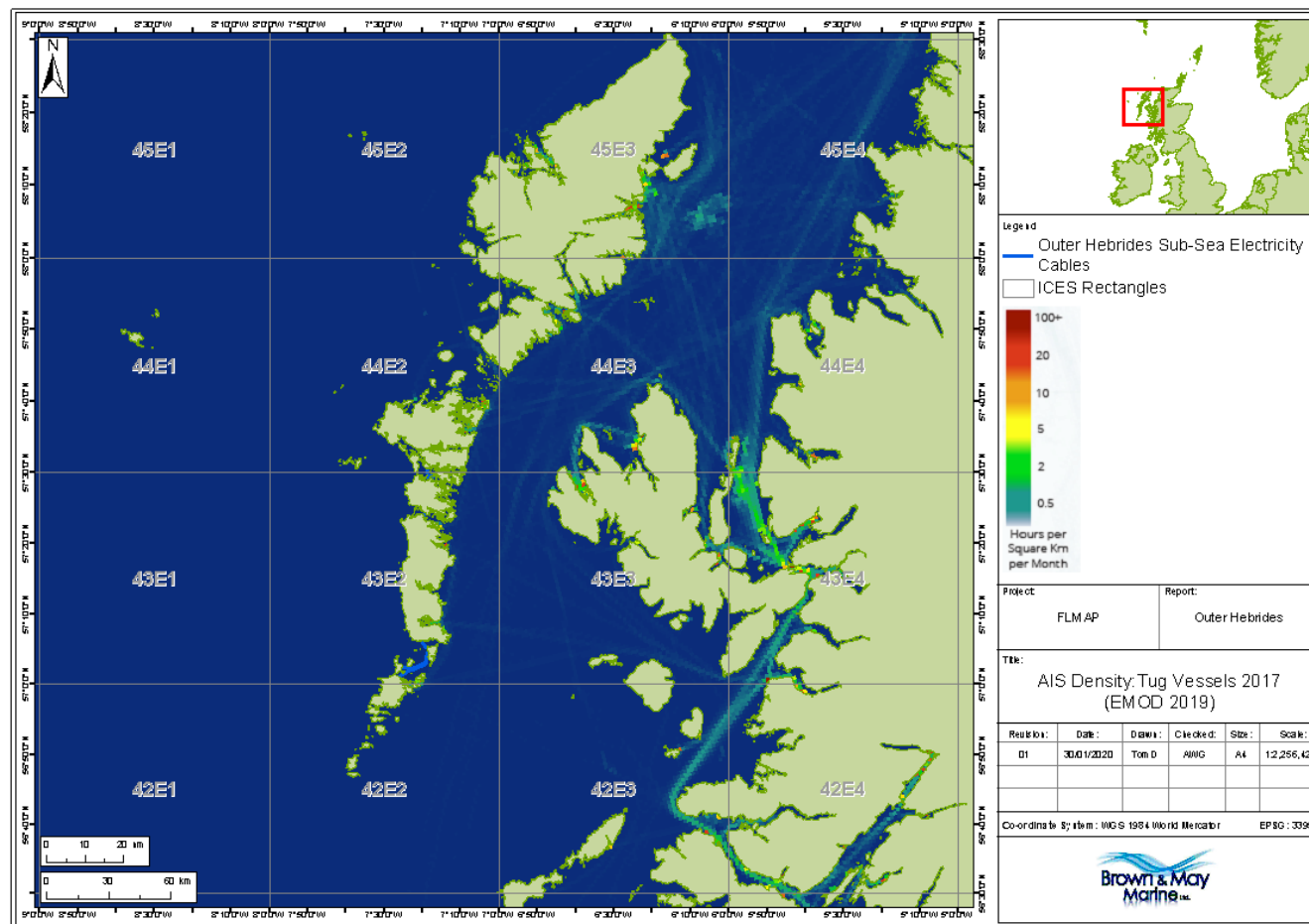


Figure 22 AIS density for tugs (EMODnet, 2019)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

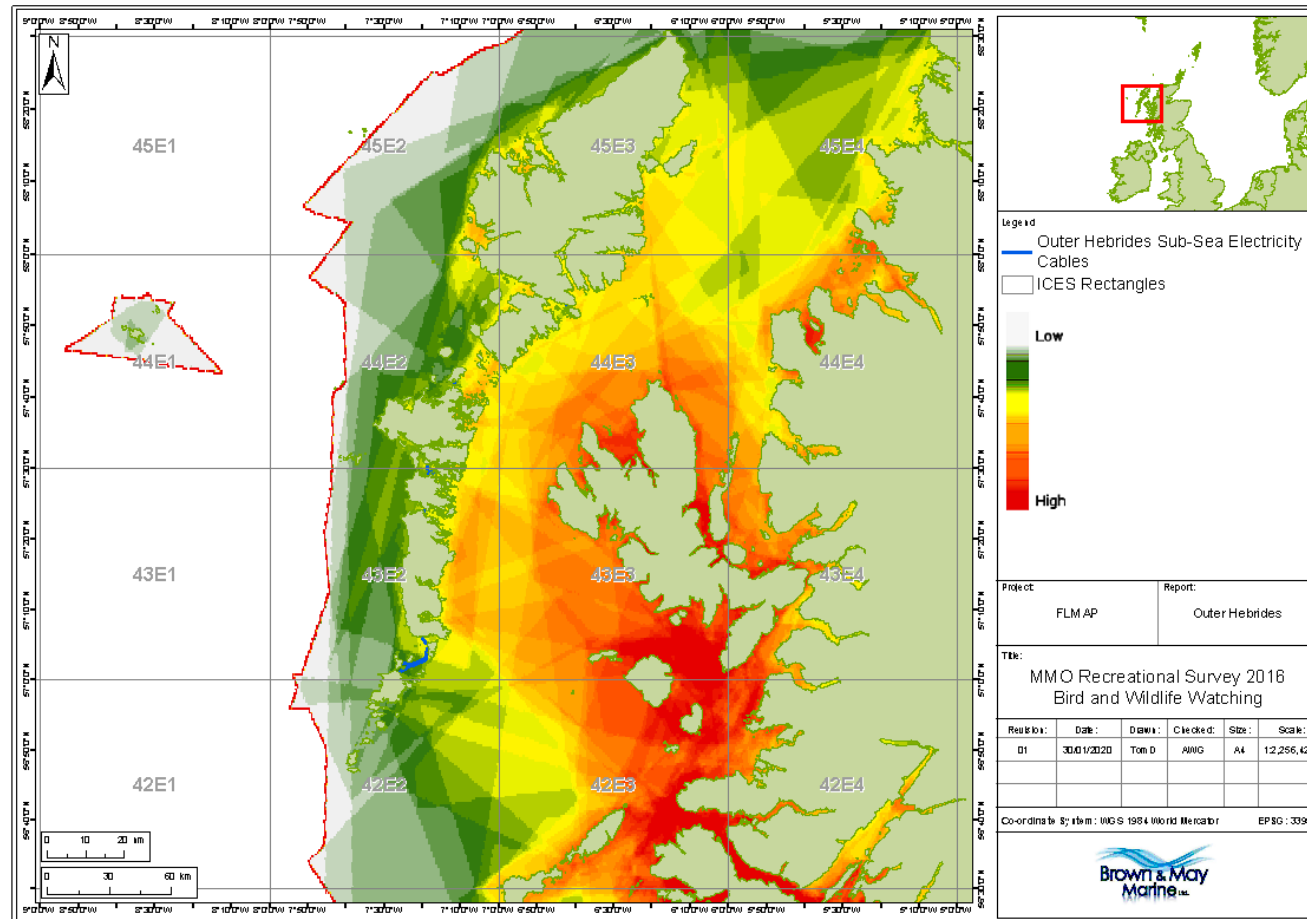


Figure 23 Bird and wildlife watching (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

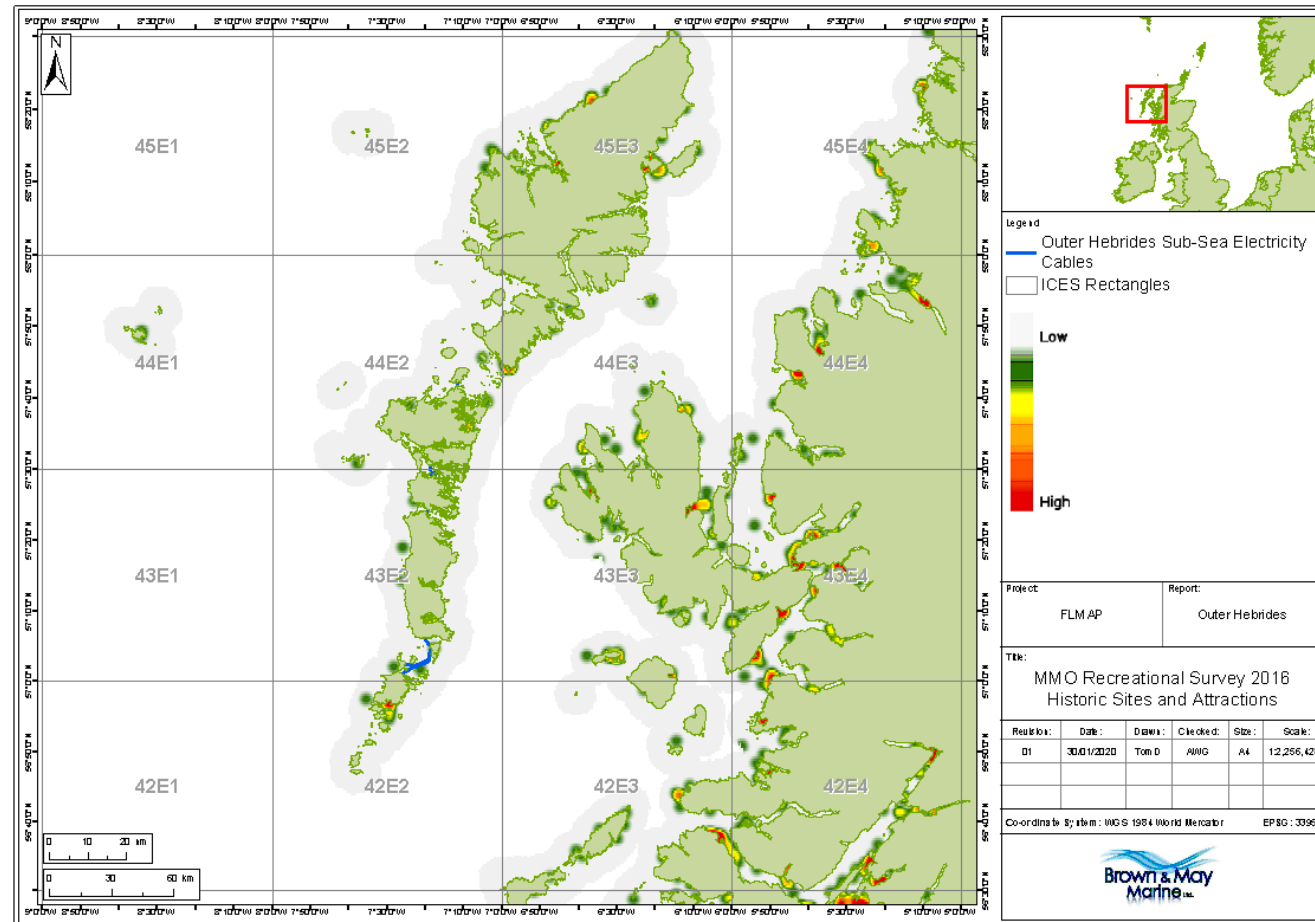


Figure 24 Historic sites and attractions (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

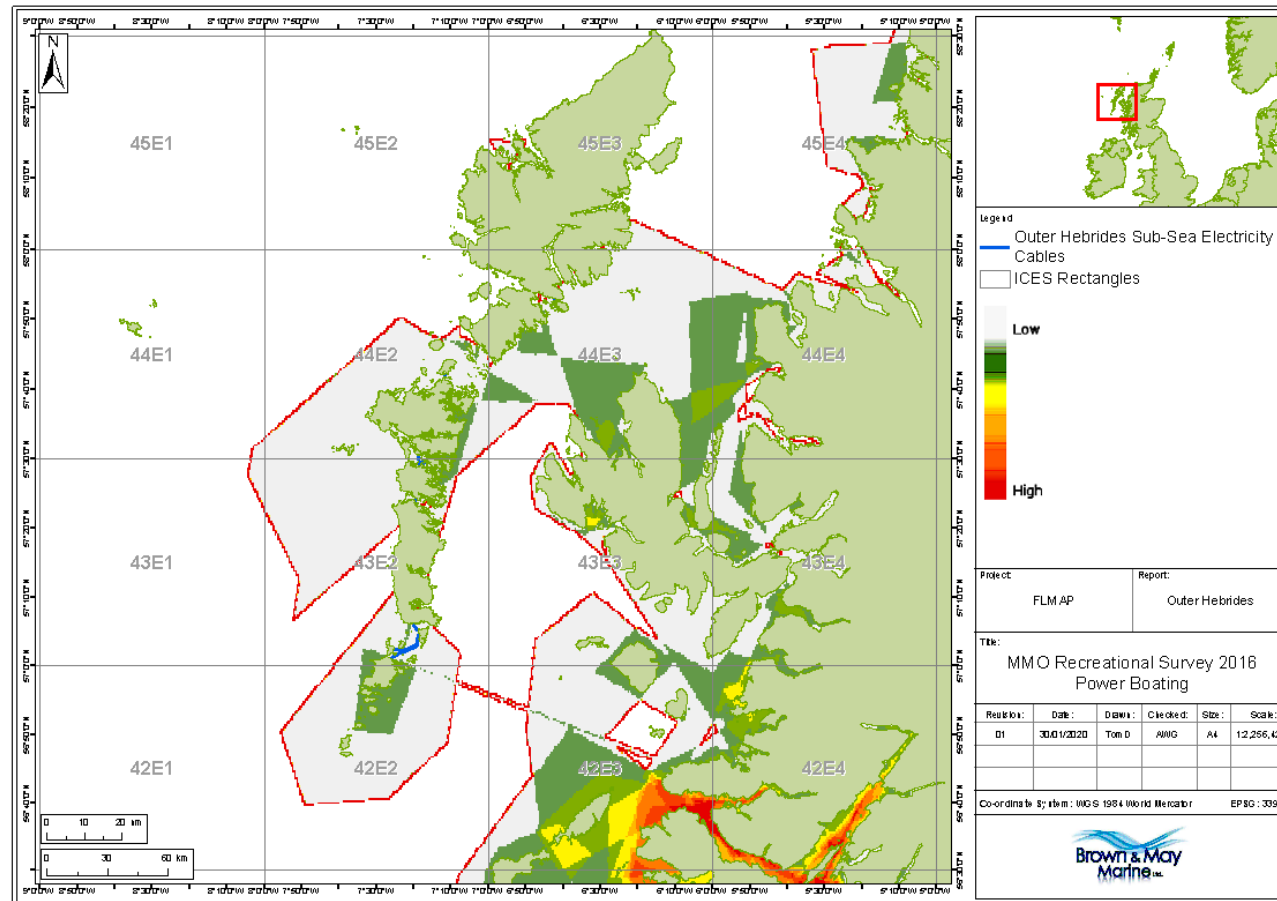


Figure 25 Power boating (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

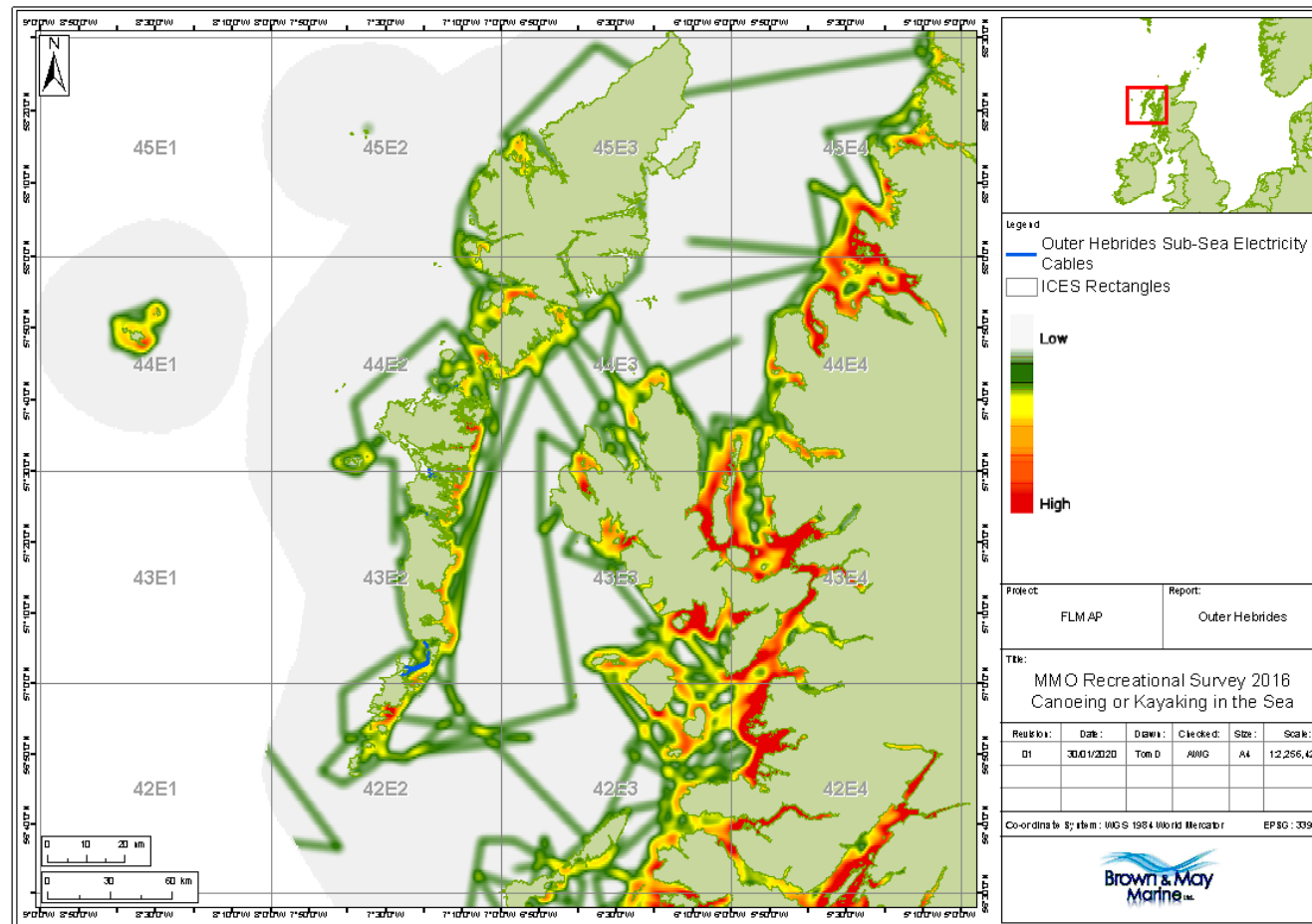


Figure 26 Canoeing and kayaking (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

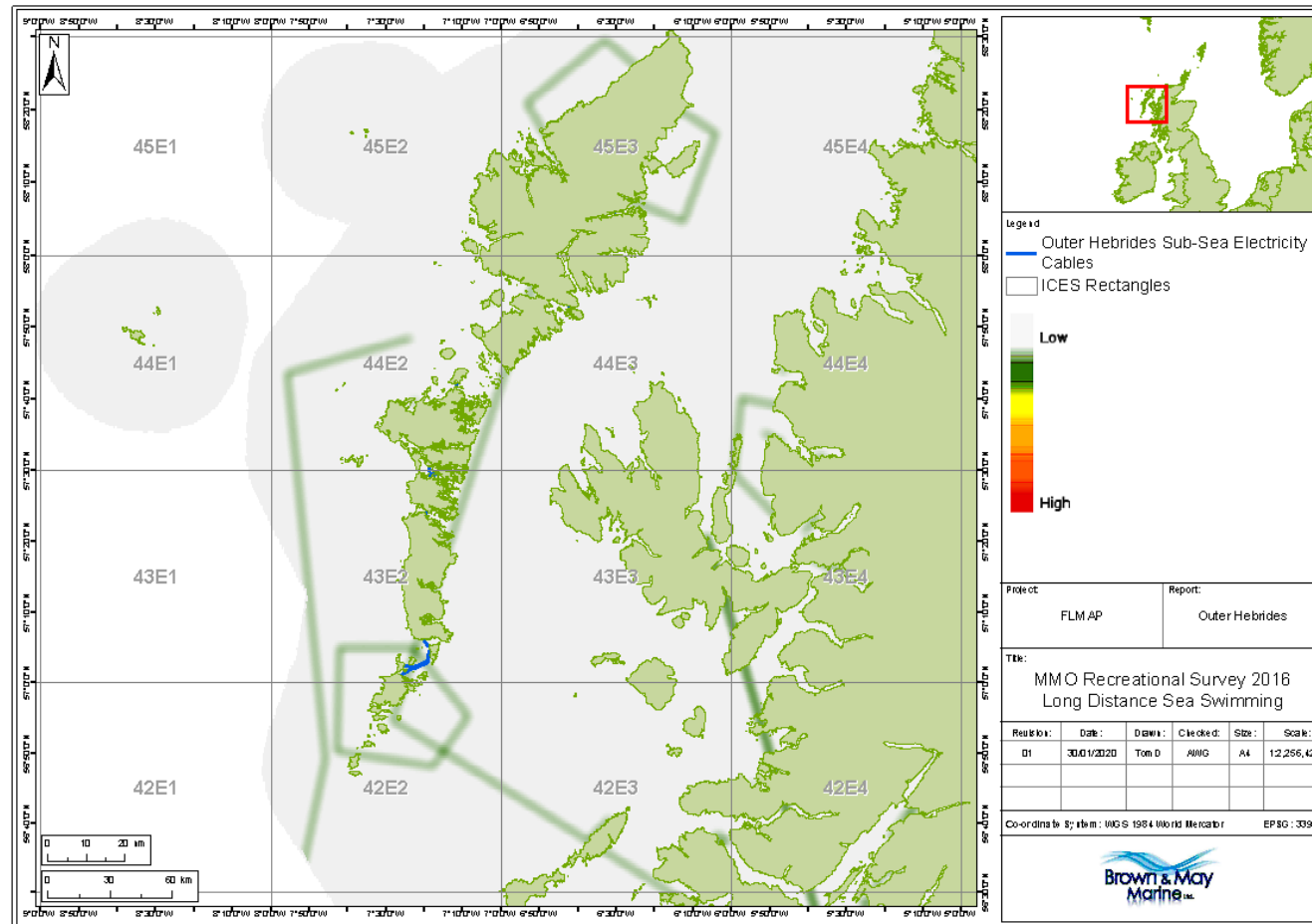


Figure 27 Long distance swimming (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

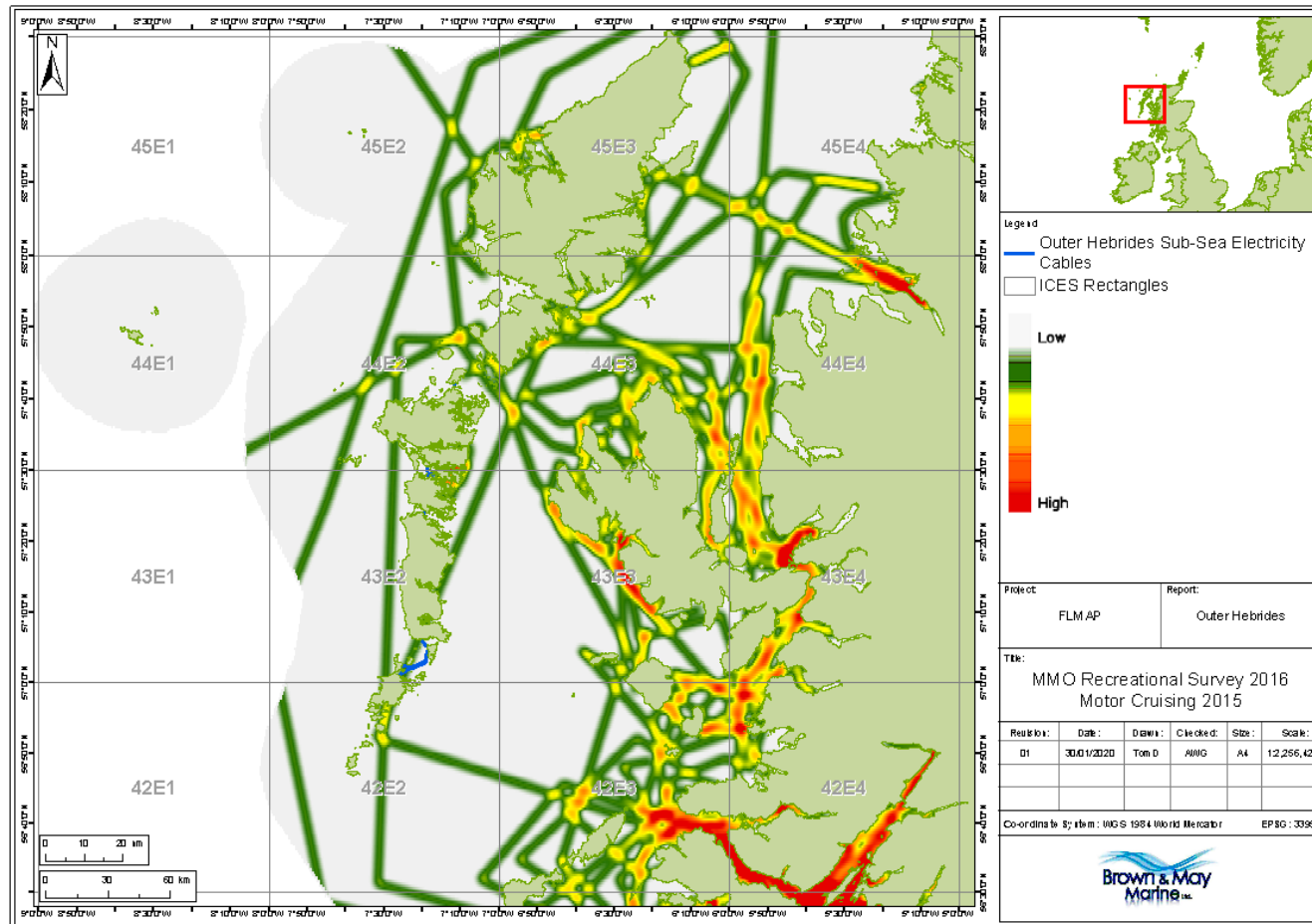


Figure 28 Motor cruising (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

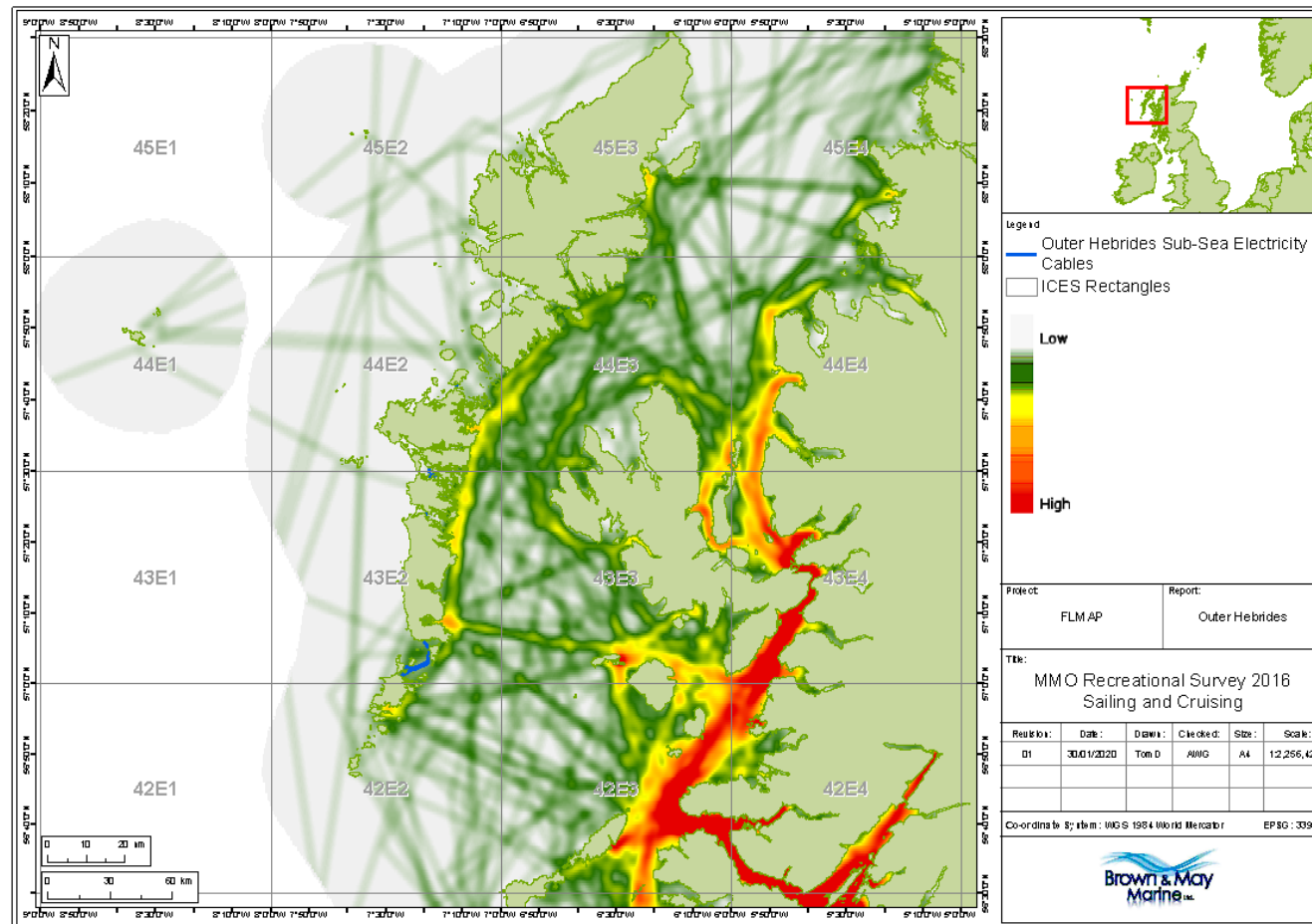


Figure 29 Sailing and cruising (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

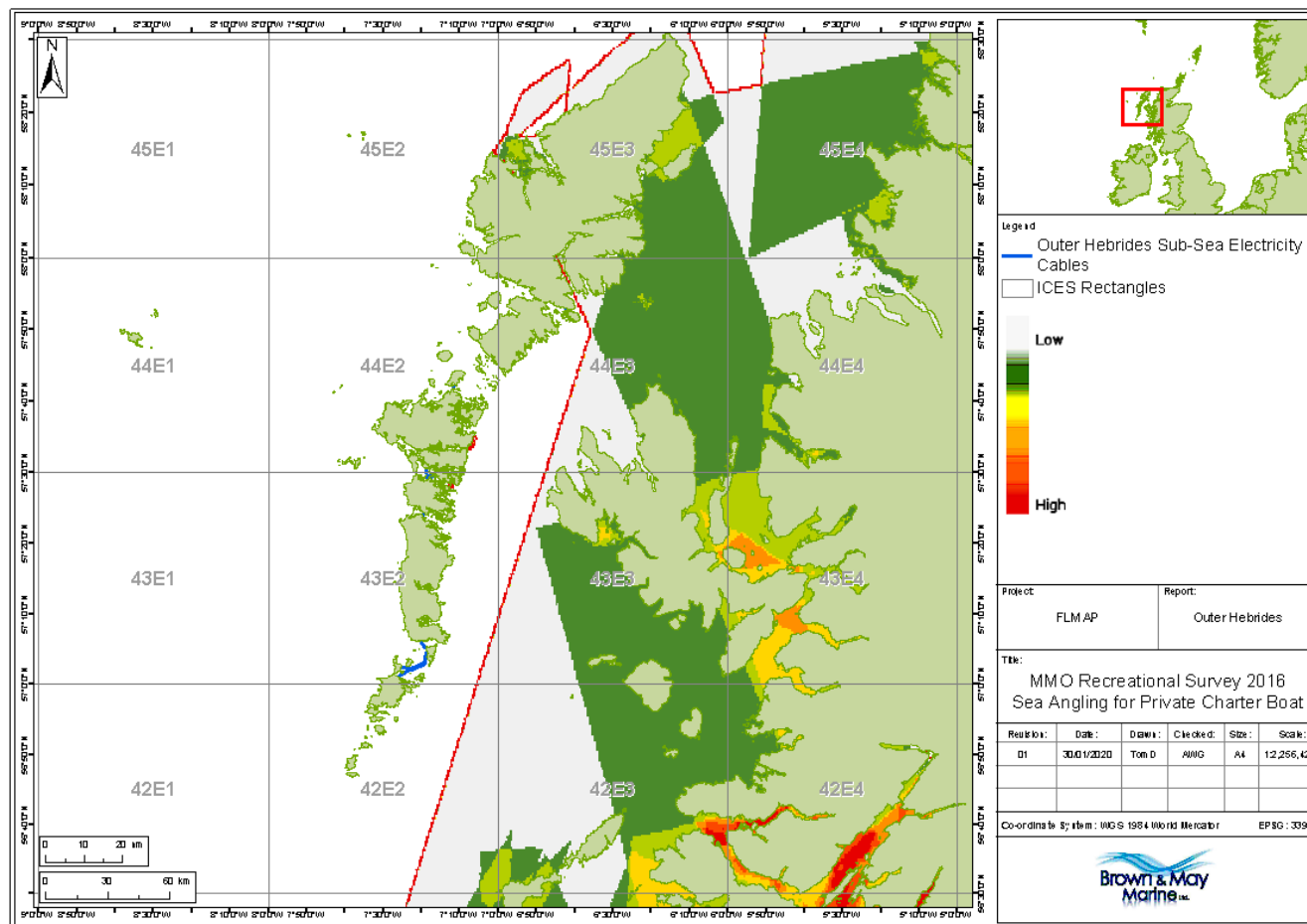


Figure 30 Chartered angling (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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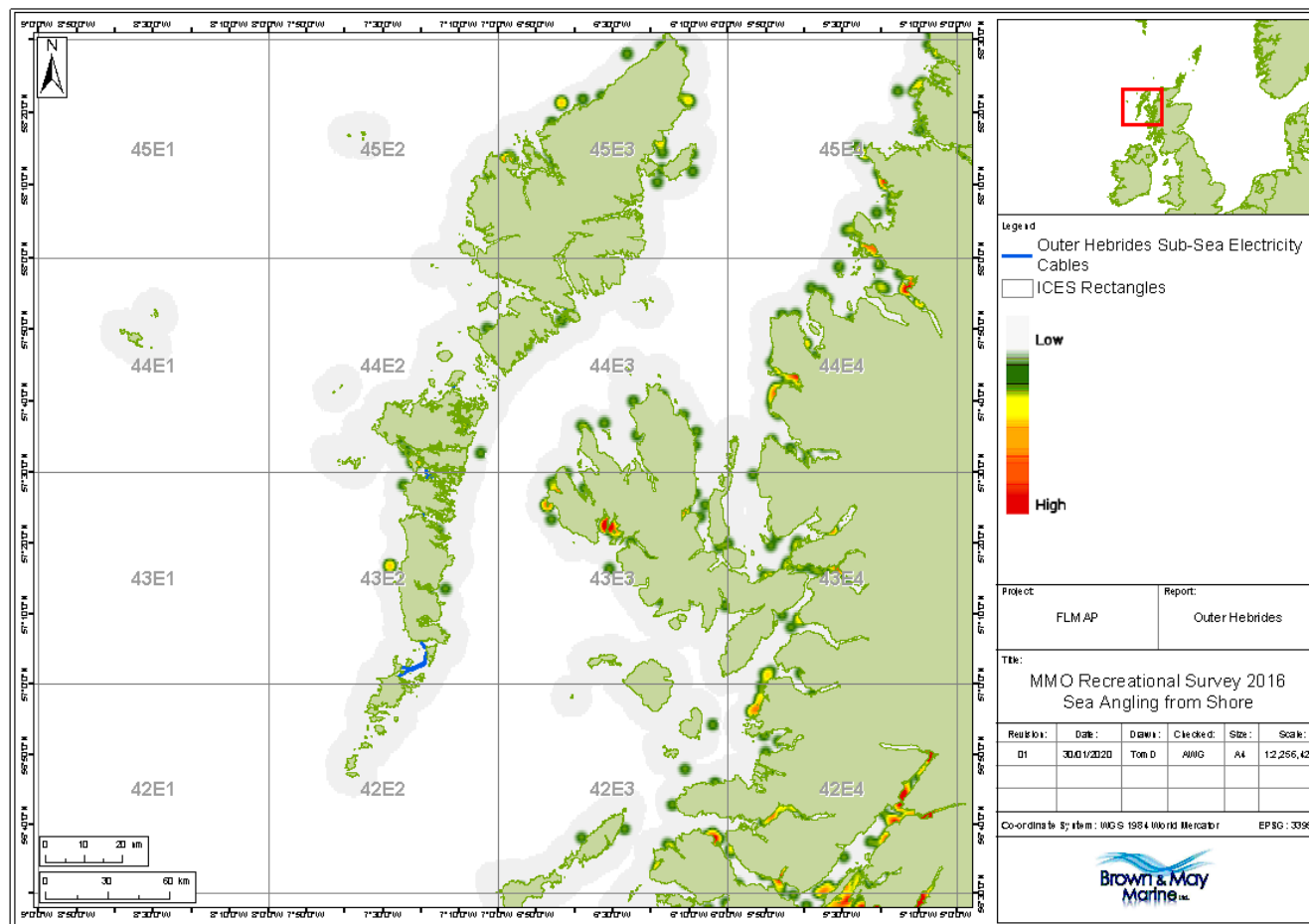


Figure 31 Sea angling from shore (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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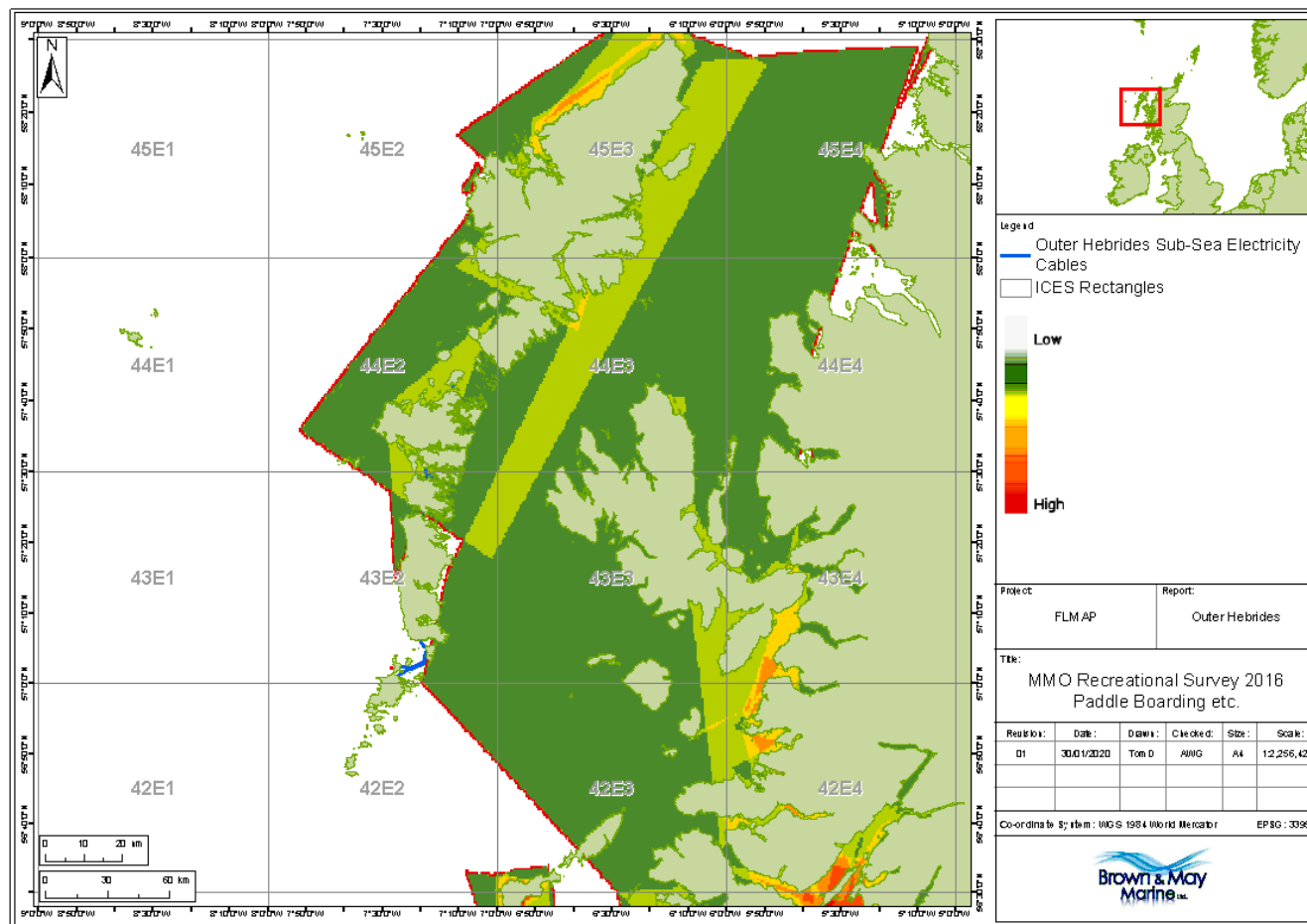


Figure 32 Surfing and paddle boarding (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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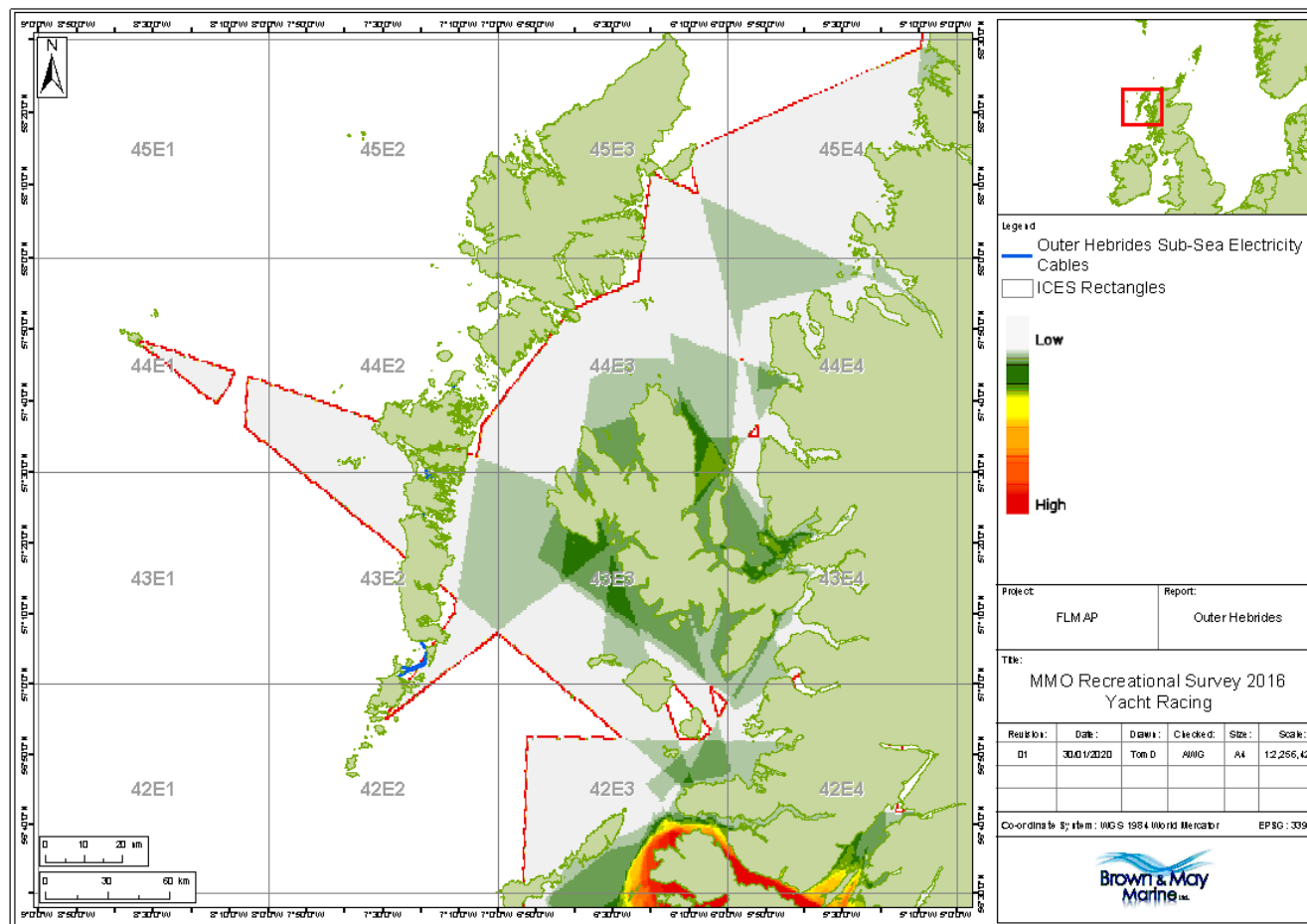


Figure 33 Yacht racing (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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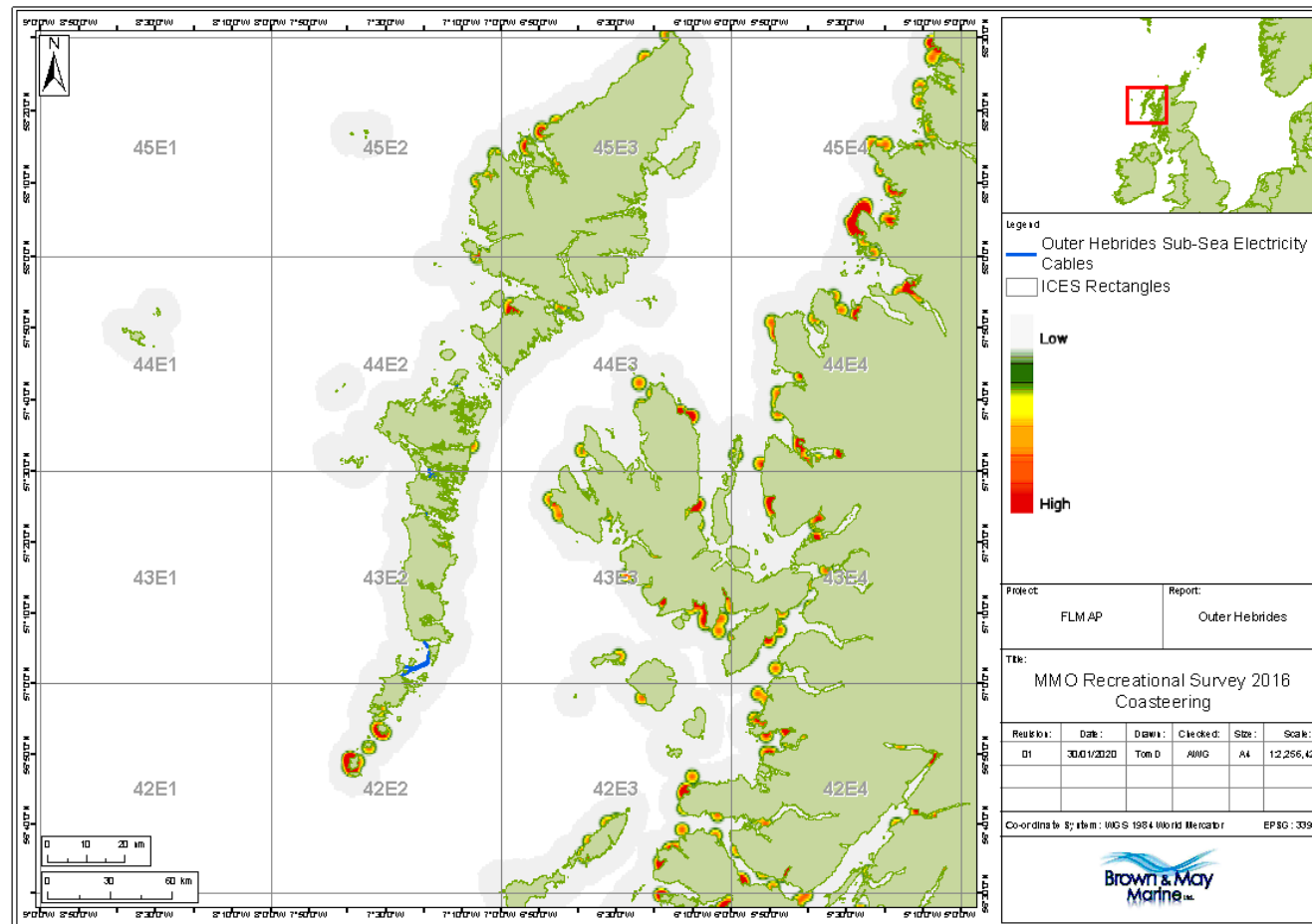


Figure 34 Coasteering (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

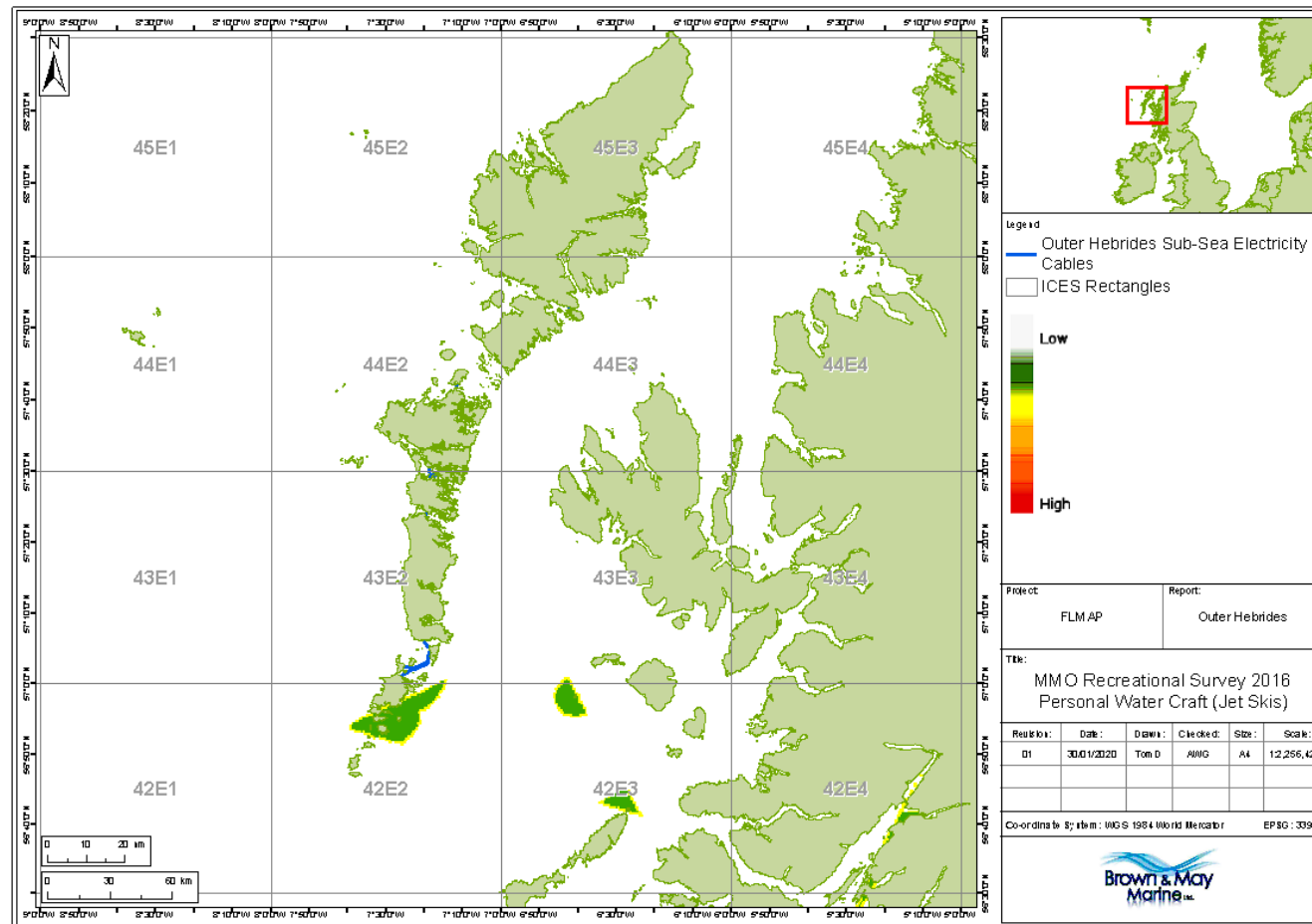


Figure 35 Personal water craft (jet skis) (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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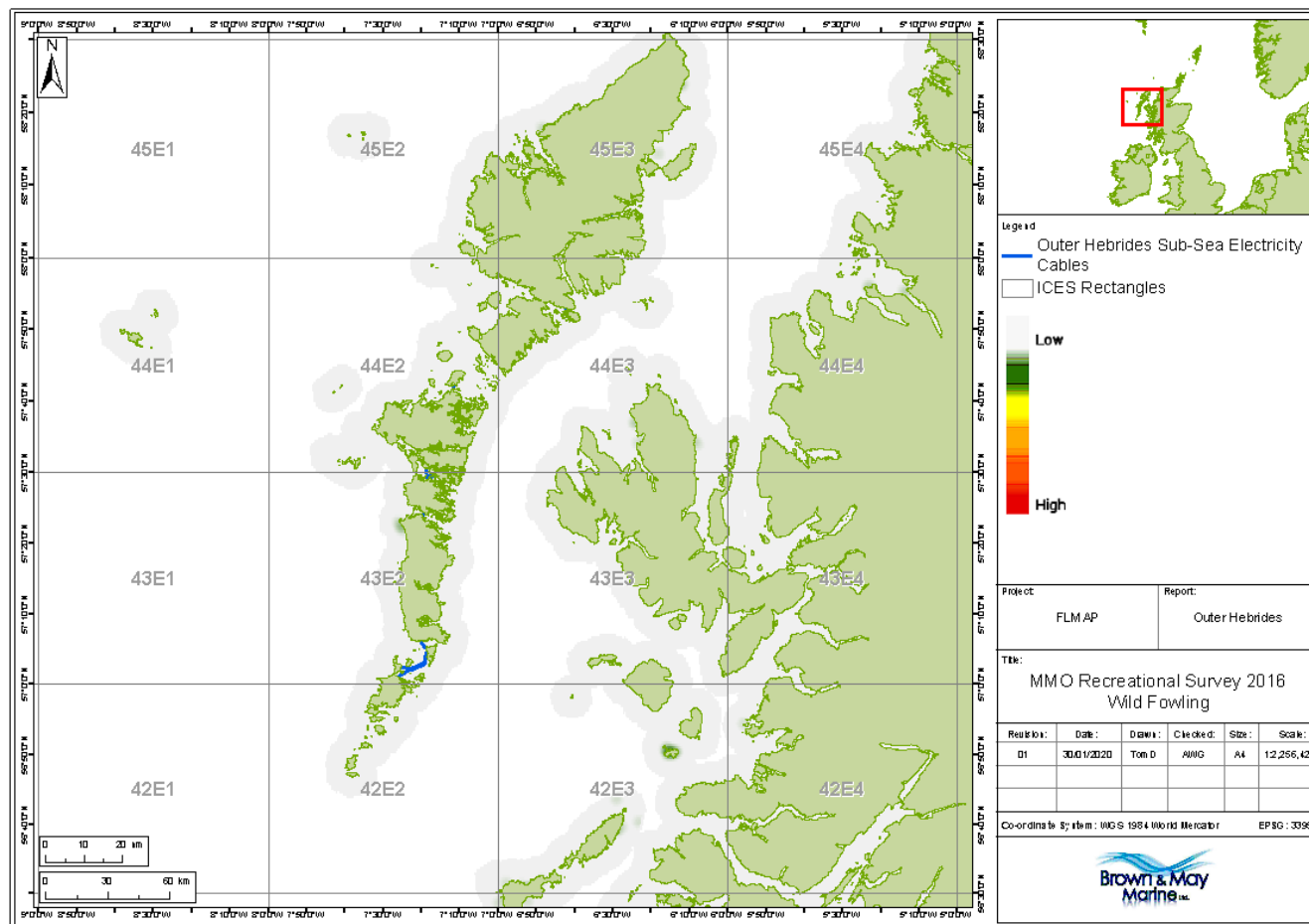


Figure 36 Wild fowling (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

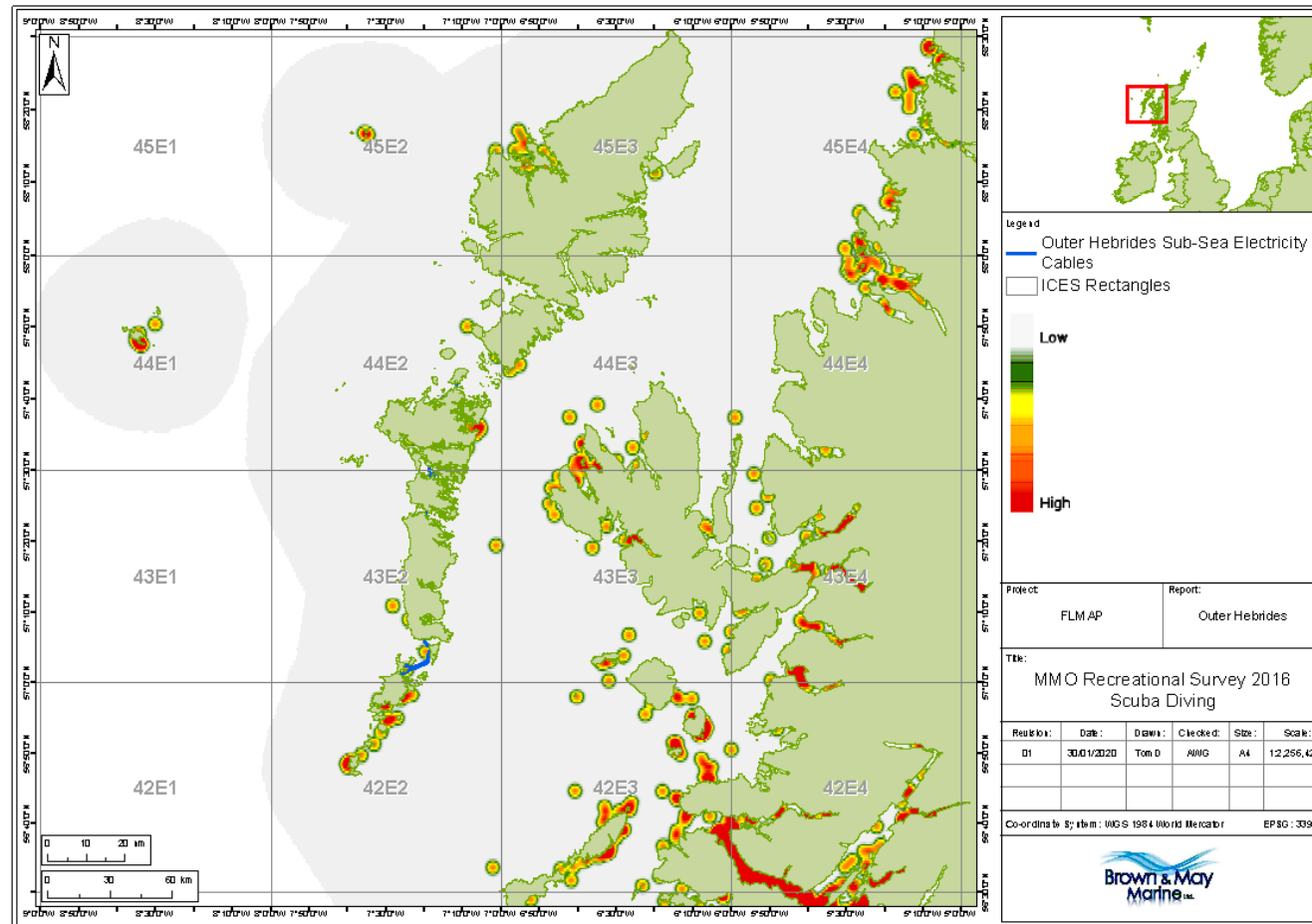


Figure 37 Scuba diving (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

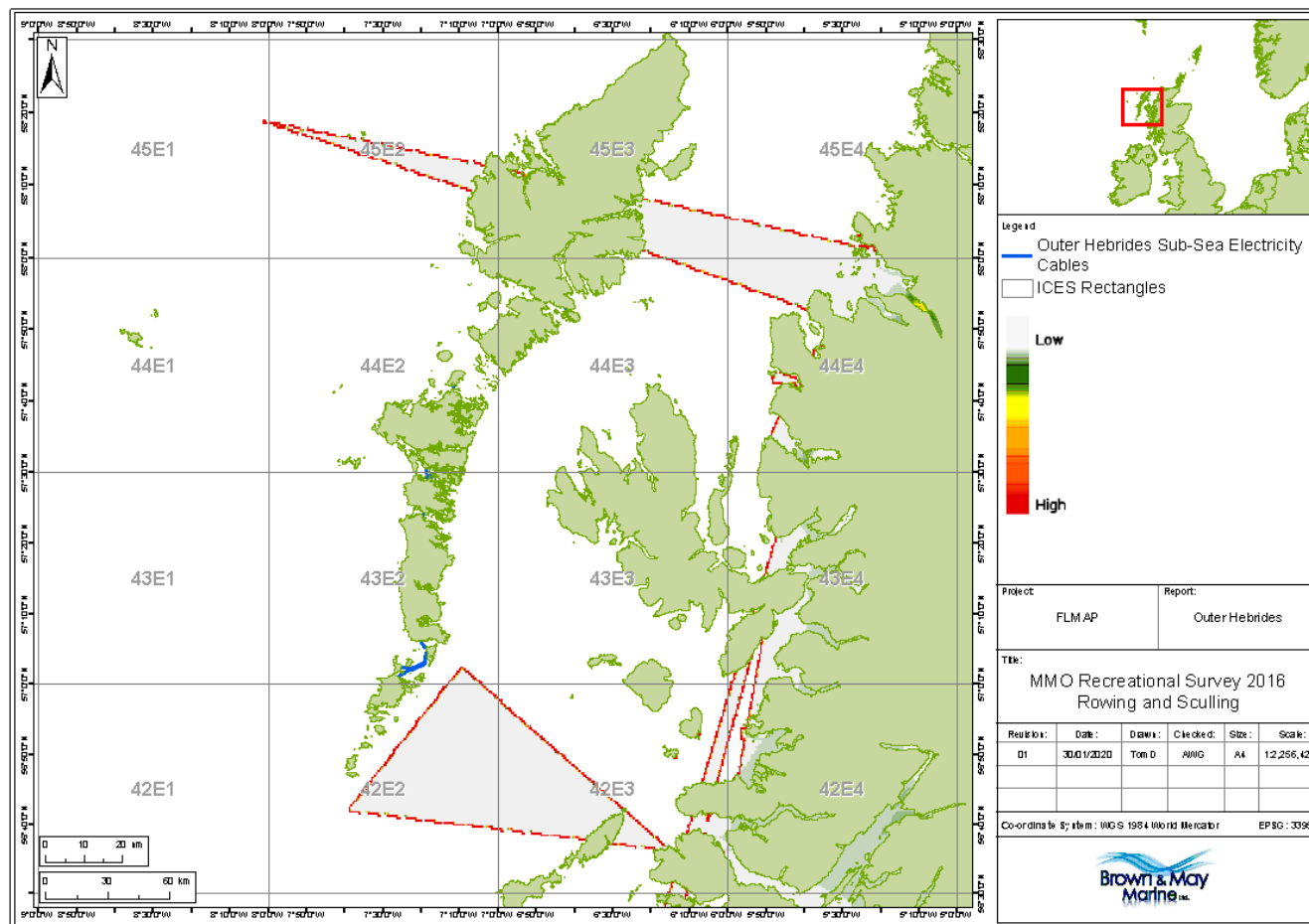


Figure 38 Rowing and sculling (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

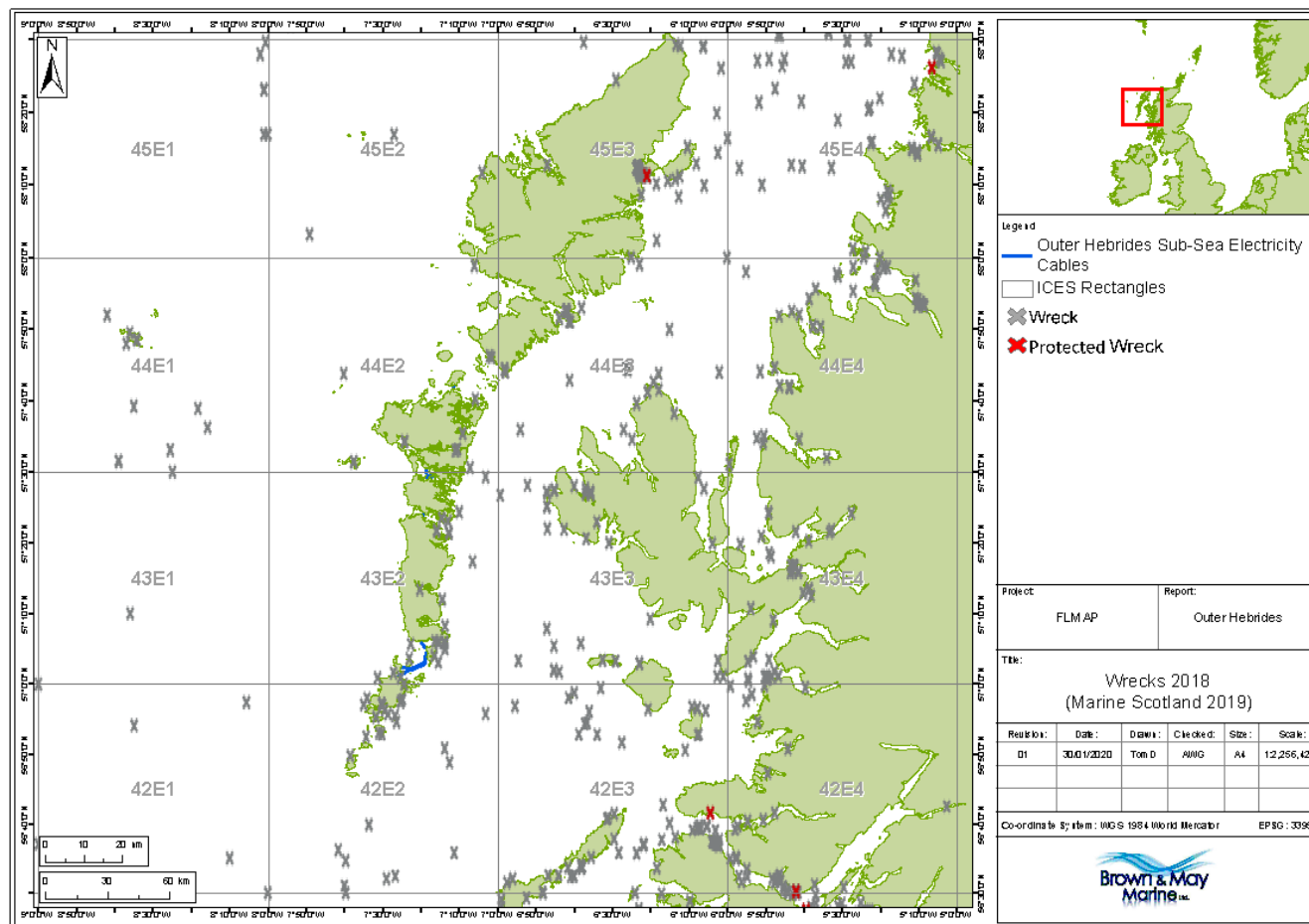


Figure 39 Known wreck sites (Marine Scotland 2019)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

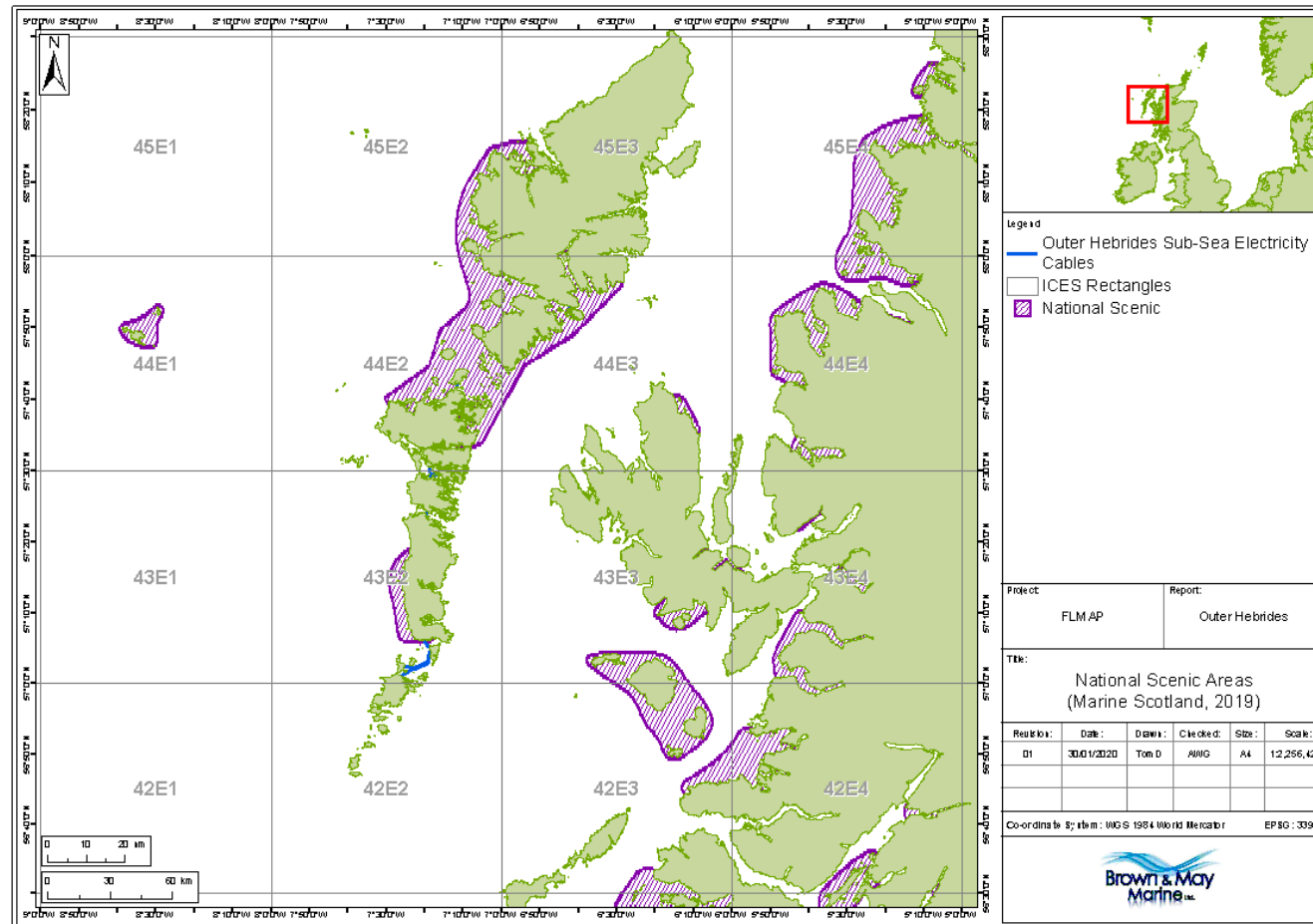


Figure 40 National Scenic Area coastal sites (Marine Scotland 2019)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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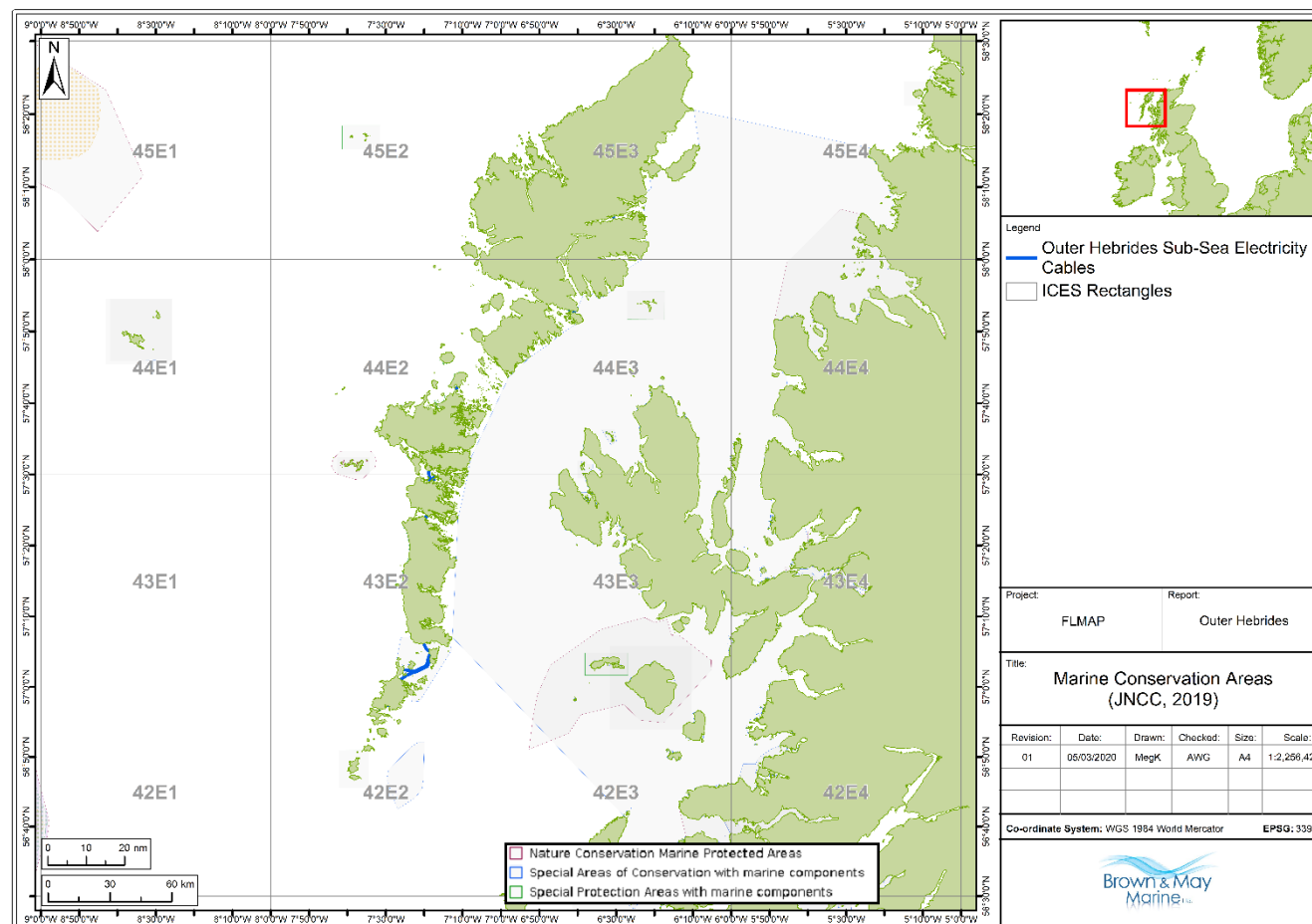


Figure 41 Marine Protected Areas, Special Protection Areas with marine components and Special Areas of Conservation with marine components (JNCC 2019)
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	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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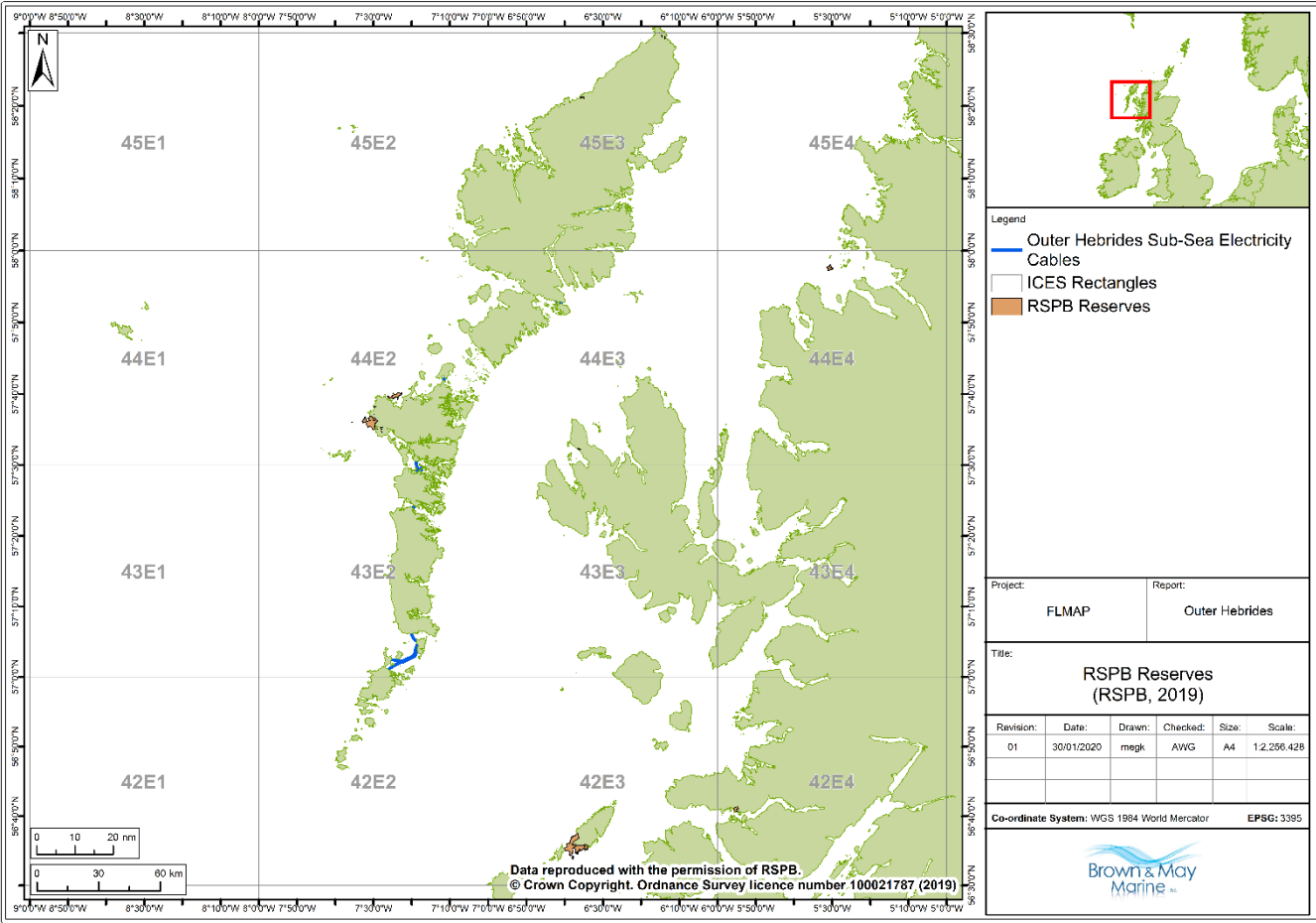


Figure 42 RSPB reserves (Royal Society for the Protection of Birds 2019)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

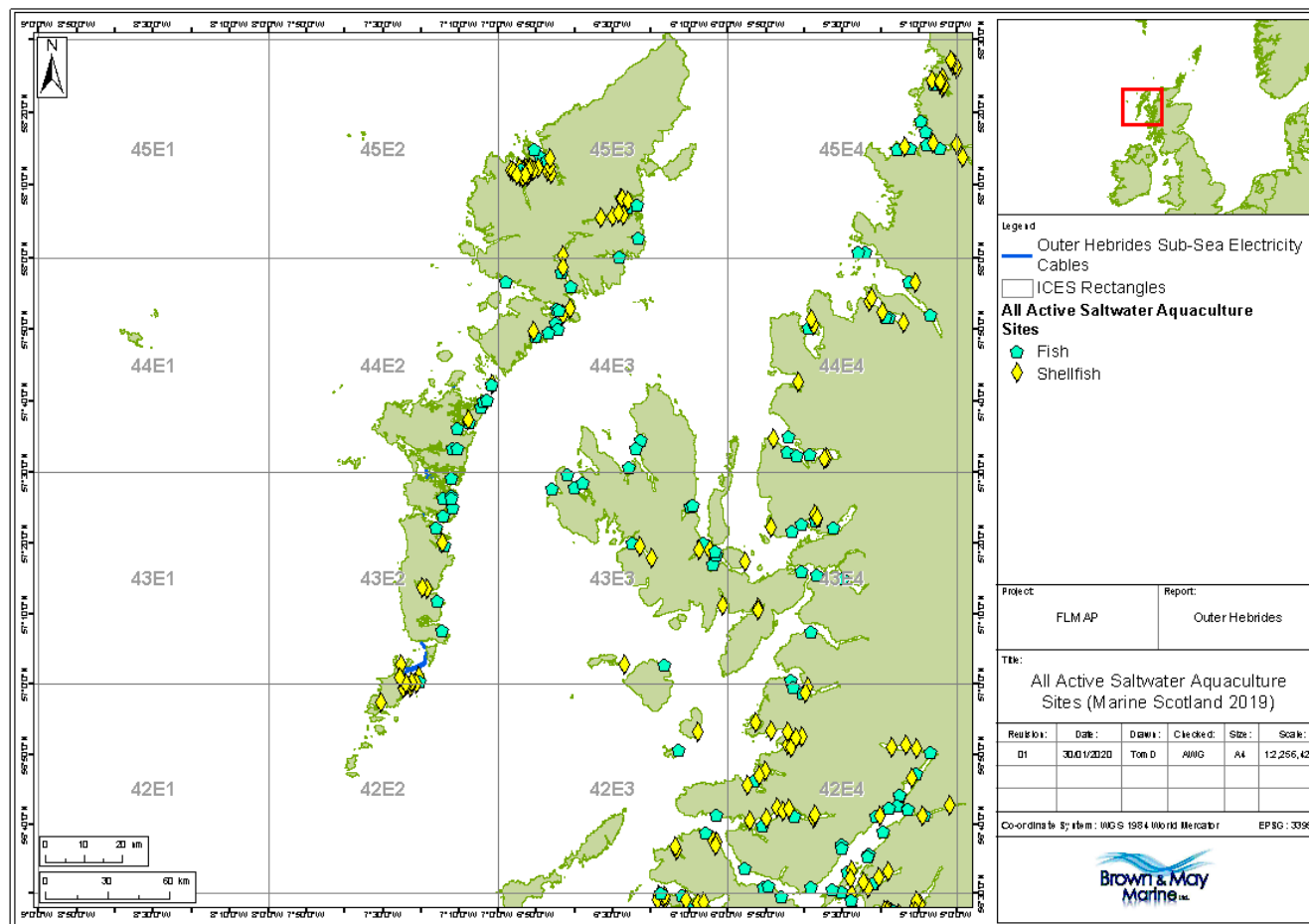


Figure 43 Active saltwater aquaculture sites (Marine Scotland 2019)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

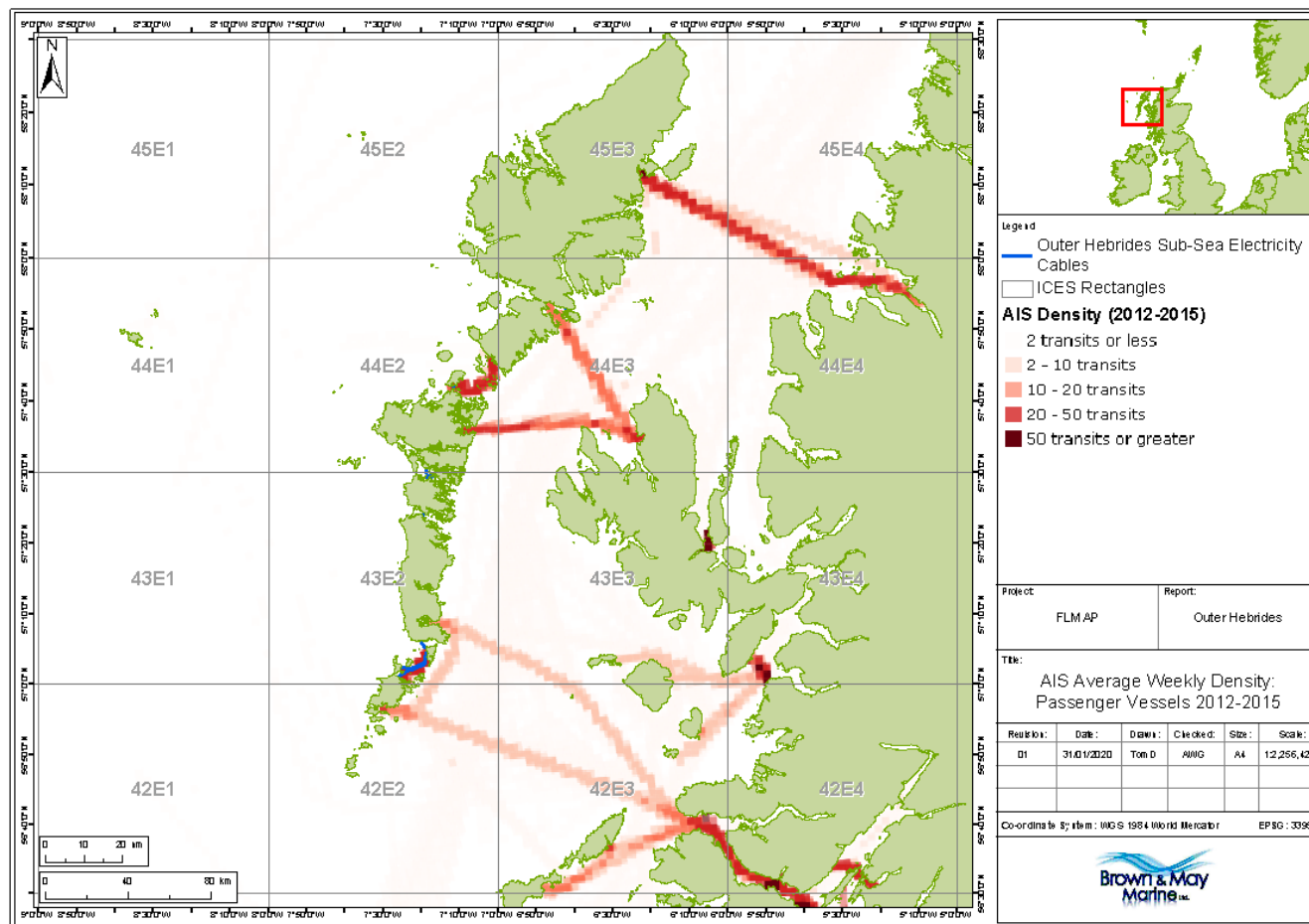


Figure 44 Passenger vessels – ferries (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

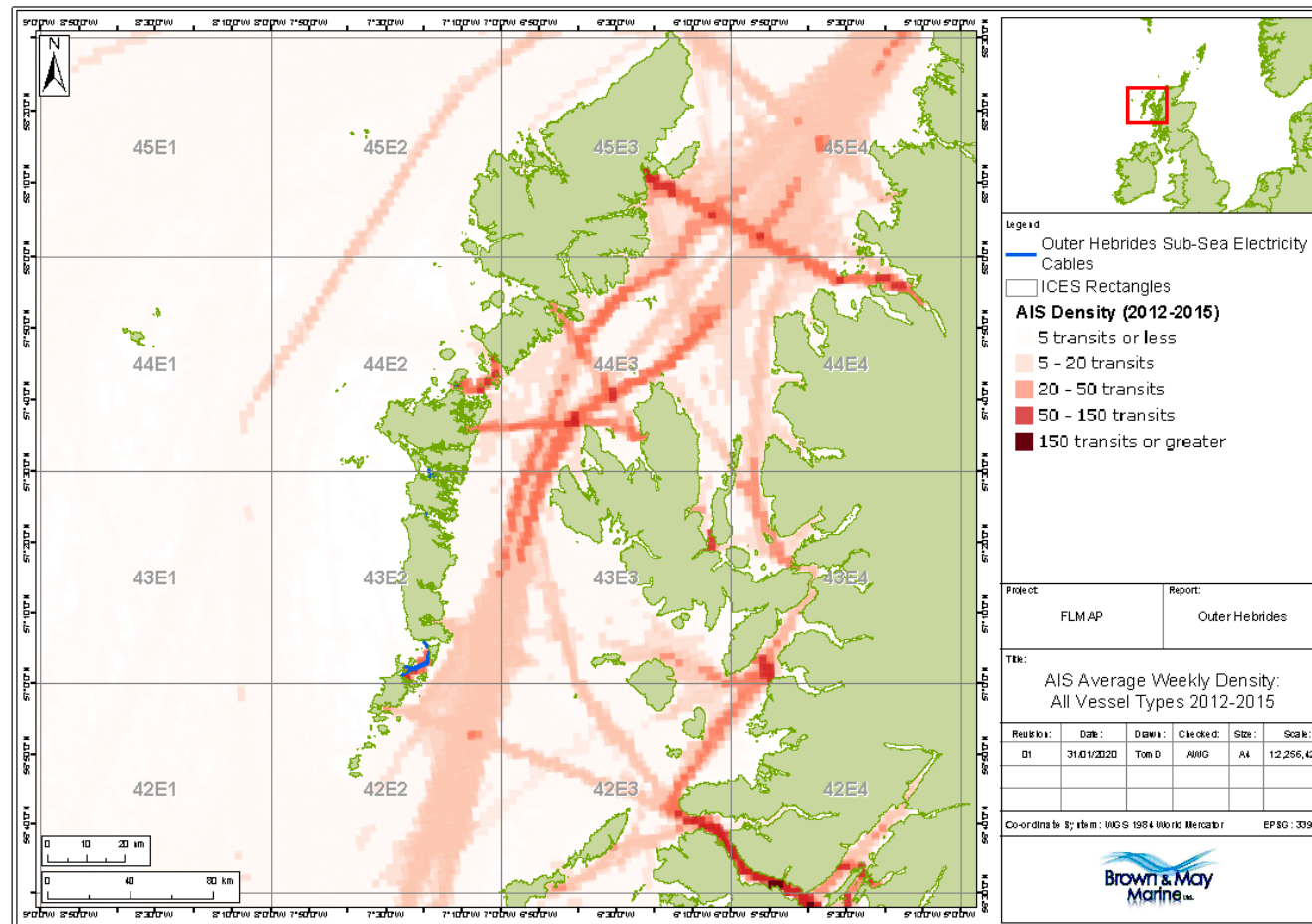


Figure 45 AIS all vessel types 2012-2015 (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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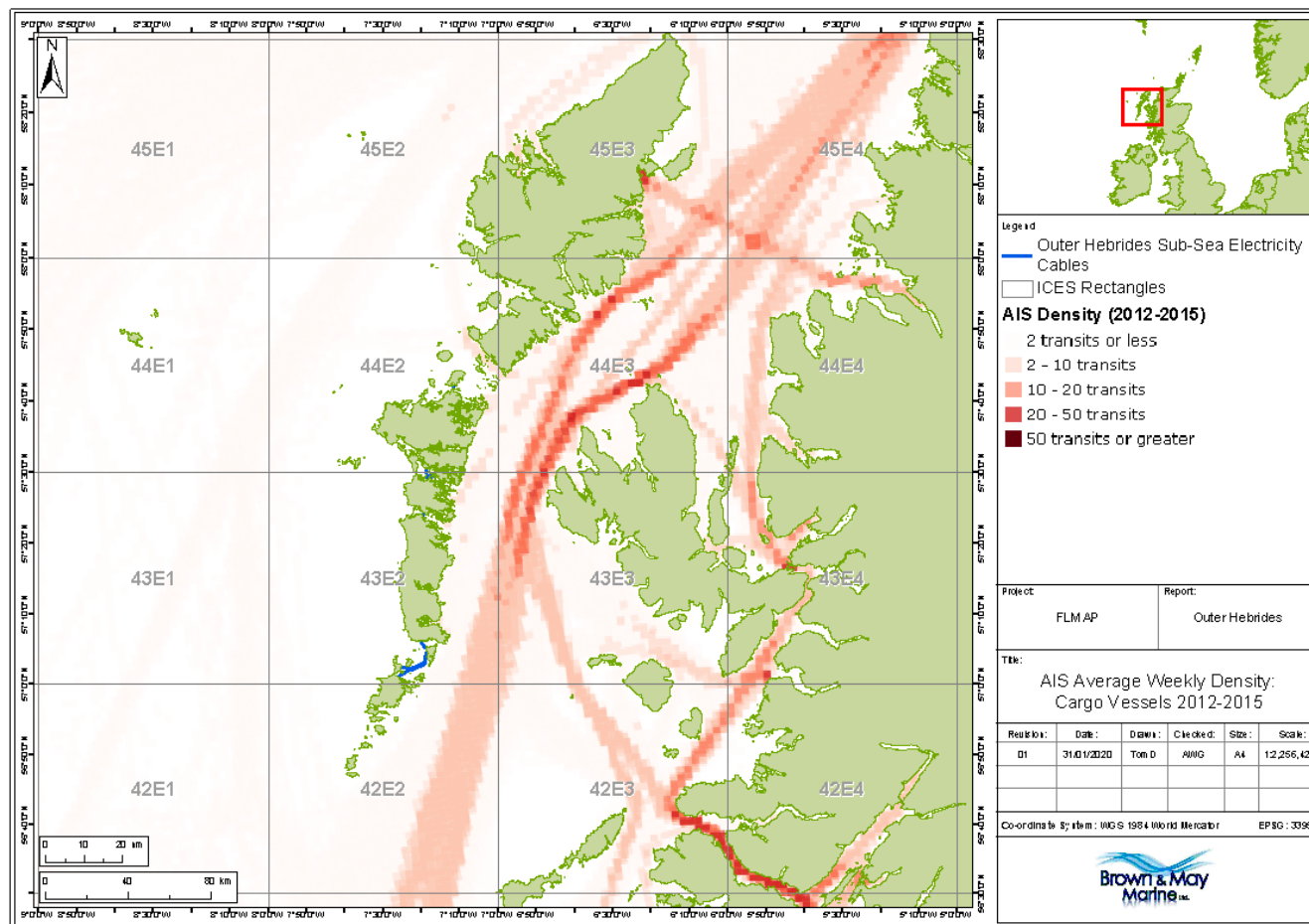


Figure 46 AIS cargo vessels 2012-2015 (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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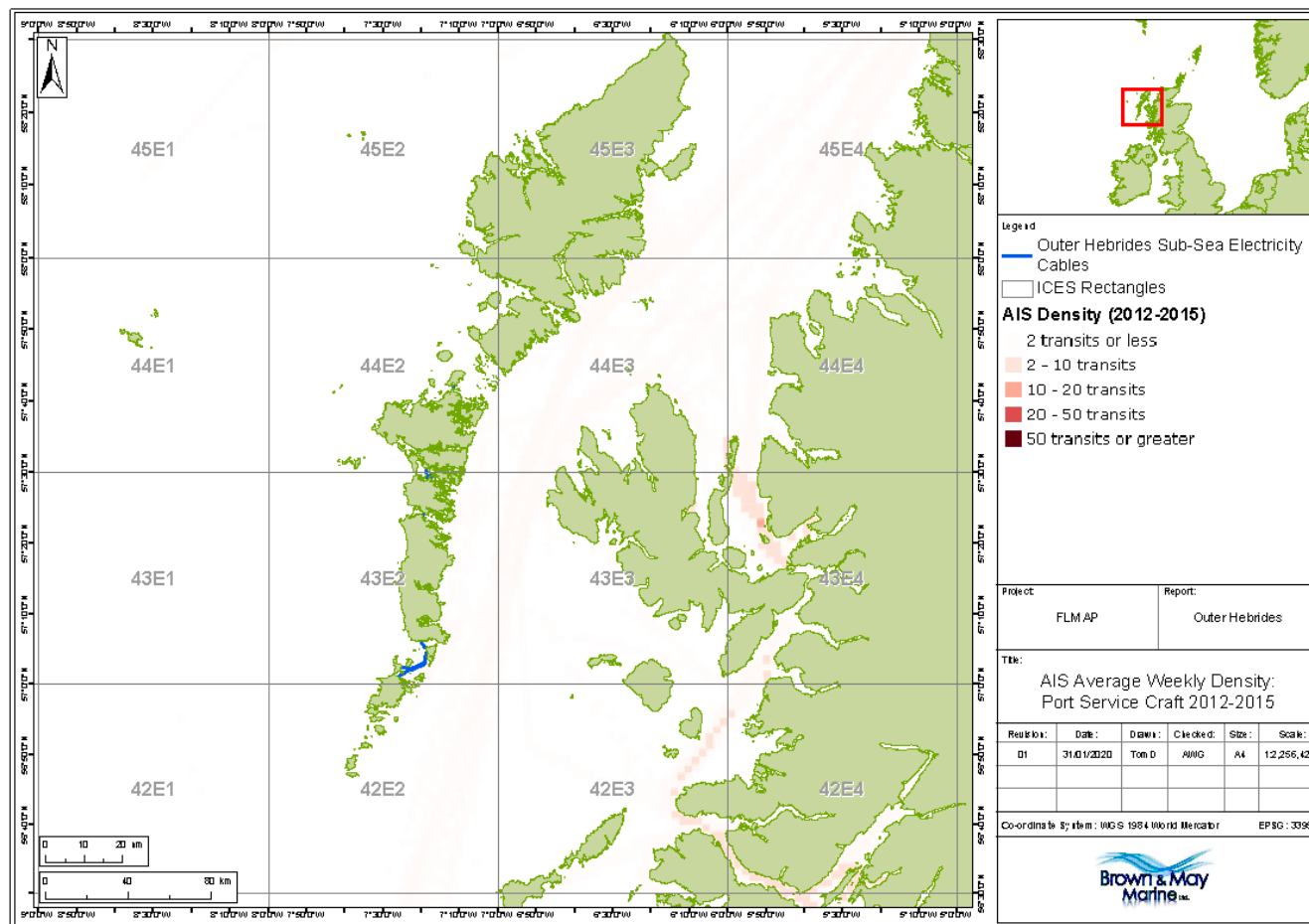


Figure 47 Port service craft 2012-2015 (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
Revision: 1.00	Internal Use	Issue Date:	Review Date:	

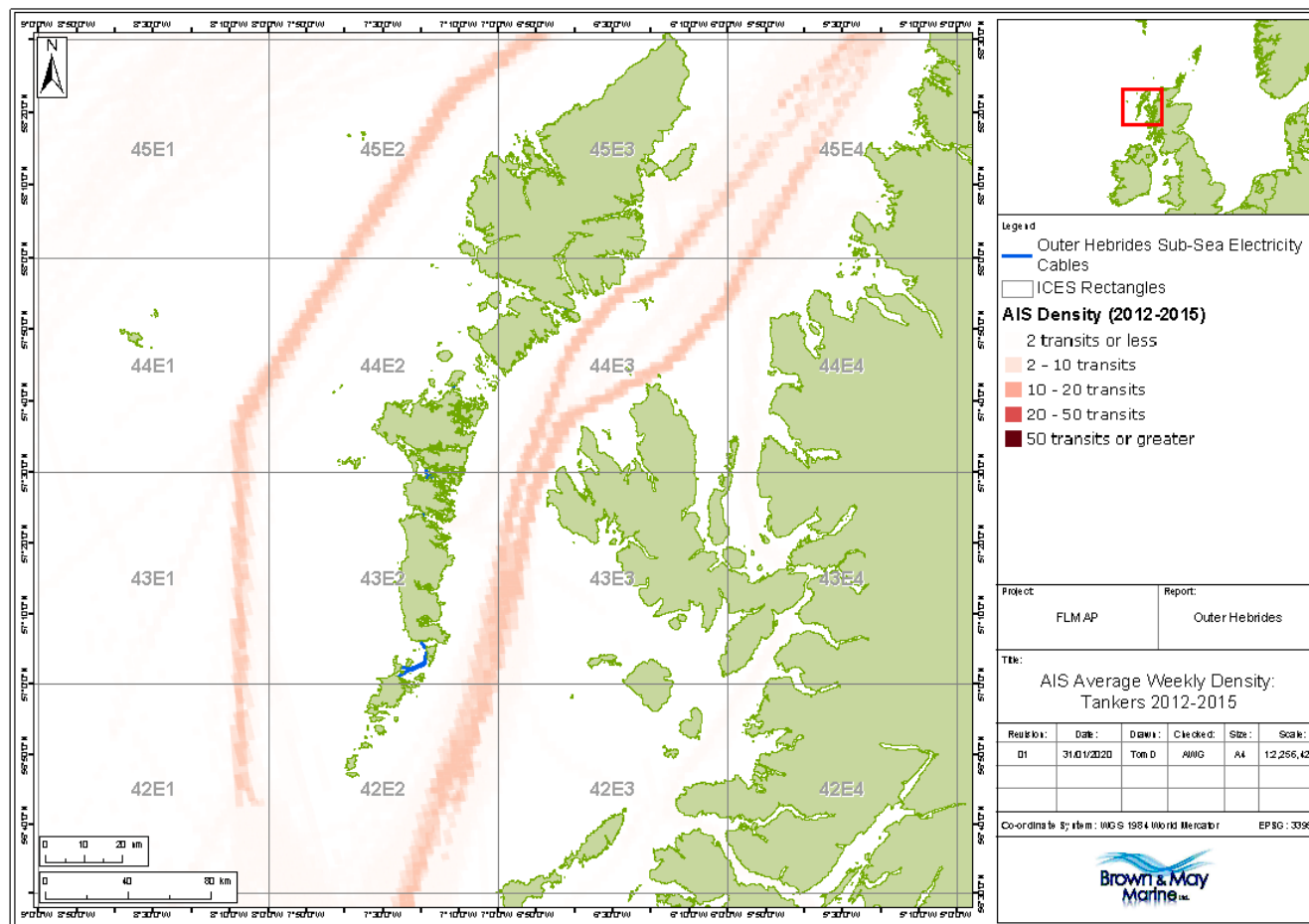


Figure 48 AIS tankers 2012-2015 (Marine Scotland 2018)

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Appendix E Cable-Specific Interactions

Table 32 Interactions for Cables North Uist-Benbecula East, West, Centre and Centre 2

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	No	Within 10km radius there is a single potter/whelker sighting.
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	(straddles ICES rectangles 43E2 and 44E2) Average of £1,288,486 landings value per year for 44E2, with pots making up over three quarters of these landings, followed by boat dredges. The largest proportion of vessels returning these landings are under 10m, with a roughly even split between 10m-15m and >15m vessels. The largest proportion of landings value comes from lobsters, followed by Nephrops and scallops. Average of £2,900,223 landings value per year for 43E2, with almost three quarters of this from pots, followed by boat dredges. The largest proportion of vessels returning these landings are <10m, with a roughly even split between 10m-15m and >15m vessels. The largest proportion of landings value comes from Nephrops, followed by lobsters.
MMO VMS effort (hours) 2014-2018	No	
MMO VMS landings value (£) 2014-2018	No	
EMODnet AIS vessel density (fishing) 2017	Yes	Average of <2 hours of AIS activity per square km per month.
Bird and wildlife watching	Yes	Low to moderate levels of activity over the cables.
Visits to historic sites or to attractions	Yes	Very low levels of activity over the cables.
Power boating	Yes	Very low levels of activity over the cables.
Canoeing and kayaking	Yes	Very low levels of activity over the cables, though there is an area of low activity adjacent to the east of the cables.
Long distance swimming	Yes	Very low levels of activity over the cables.
Motor cruising	Yes	Very low levels of activity over the cables. There is a hotspot of higher activity approximately 3.2km east of the cables.

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Activity	Interaction	Notes
Sailing and cruising	Yes	Very low levels of activity over the cables.
Chartered angling	No	
Sea angling from shore	Yes	Very low levels of activity over the cables, though there is a hotspot of activity approximately 2.4km north west of the cables.
Surfing and paddle boarding	Yes	Low levels of activity over the cables.
Yacht racing	Yes	Very low levels of activity over the cables.
Coasteering	Yes	Very low levels of activity over the cables.
Personal water craft (jet skis)	No	
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	Very low levels of activity over the cables.
Rowing and sculling	No	
Marine archaeology	No	
Conservation designations	No	
Aquaculture sites	No	
Ferry routes	No	
Local ports	No	Nearest harbour is Kallin, approximately 11.6km south west of the cables. This hosts a sizeable fishing fleet targeting shellfish and flatfish. A number of vehicles from southern Europe use the harbour to pick up produce for markets and restaurants in Spain or Italy.

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Table 33 Interactions for Cable South Uist-Eriskay

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	Possible	Within 10km radius there are low levels of potter/whelker, scallop dredger (French/Newhaven type) and pelagic trawler activity.
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	Average of £2,900,223 landings value per year, with almost three quarters of this from pots, followed by boat dredges. The largest proportion of vessels returning these landings are <10m, with a roughly even split between 10m-15m and >15m vessels. The largest proportion of landings value comes from Nephrops, followed by lobsters.
MMO VMS effort (hours) 2014-2018	No	
MMO VMS landings value (£) 2014-2018	No	
EMODnet AIS vessel density (fishing) 2017	Yes	Average of ≤2 hours of AIS activity per square km per month.
Bird and wildlife watching	Yes	Moderate levels of activity over the cable.
Visits to historic sites or to attractions	Yes	Very low to low levels of activity over the cable.
Power boating	Yes	Very low levels of activity over the cable.
Canoeing and kayaking	Yes	Low to moderate to high levels of activity over the cable.
Long distance swimming	Yes	Very low levels of activity over the cable.
Motor cruising	Yes	Very low to low levels of activity over the cable.
Sailing and cruising	Yes	Low levels of activity over the cable.
Chartered angling	No	
Sea angling from shore	Yes	Very low levels of activity over the cable.
Surfing and paddle boarding	No	
Yacht racing	No	
Coasteering	Yes	Very low levels of activity over the cable.

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Activity	Interaction	Notes
Personal water craft (jet skis)	No	
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	Very low to low levels of activity directly over the cable, though there is a hotspot of moderate-high activity directly adjacent to the south of the cable.
Rowing and sculling	No	
Marine archaeology	No	No wreck sites in the immediate vicinity, but the nearest is 2.9km away.
Conservation designations	Yes	Sound of Barra SAC – covers entirety of the cable. South Uist Machair NSA – Covers South Uist landfall of the cable.
Aquaculture sites	No	
Ferry routes	No	No ferry routes directly over the cable, but the ferry route from Barra to Eriskay, operated by CalMac Ferries, runs approximately 1.7km south of the cable.
Local ports	Possible	Nearest piers are Ludag and Haun, 1km from the South Uist and 2.1km from the Eriskay landfalls respectively. Both are used primarily for fishing and leisure purposes.

Table 34 Interactions for Cables Eriskay-Barra 1 and 2

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	Yes	Low levels of potter/whelker, scallop dredger (French/Newhaven type), Norwegian pelagic trawler and Irish pair trawler activity in the vicinity of the cables.
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	Average of £2,900,223 landings value per year, with almost three quarters of this from pots, followed by boat dredges. The largest proportion of vessels returning these landings are <10m, with a roughly even split between 10m-15m and >15m vessels. The largest proportion of landings value comes from Nephrops, followed by lobsters.
MMO VMS effort (hours) 2014-2018	Yes	Average fishing effort of 50-100 hours for dredging and mobile gear over the central portion of the cable route.
MMO VMS landings value (£) 2014-2018	Yes	Average landings value of up to £20,000 per year for dredging and mobile gear.

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Activity	Interaction	Notes
EMODnet AIS vessel density (fishing) 2017	Yes	Average of ≤2 hours of AIS activity per square km per month.
Bird and wildlife watching	Yes	Low to moderate levels of activity over the cables.
Visits to historic sites or to attractions	Yes	Very low to low levels of activity over the cables.
Power boating	Yes	Very low to low levels of activity over the cables.
Canoeing and kayaking	Yes	Low to moderate to high levels of activity over the cables. There is a small spot of high activity approximately 2.6km south of the cables.
Long distance swimming	Yes	Very low to low levels of activity over the cables.
Motor cruising	Yes	Very low to low levels of activity over the cables.
Sailing and cruising	Yes	Low levels of activity over the cables.
Chartered angling	No	
Sea angling from shore	Yes	Very low levels of activity over the cables.
Surfing and paddle boarding	No	No activity directly over the cables, though there is an area of low activity adjacent to the east of the cables.
Yacht racing	Yes	Very low levels of activity over the cables.
Coasteering	Yes	Very low levels of activity over the cables.
Personal water craft (jet skis)	No	
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	Moderate-high levels of activity at both cable landfalls, with very low activity elsewhere along the route.
Rowing and sculling	No	
Marine archaeology	Yes	Possible interaction with wreck sites.
Conservation designations	Yes	Sound of Barra SAC – covers entirety of the cables.
Aquaculture sites	Yes	Two shellfish aquaculture sites lie adjacent to the Barra landfalls of each cable – Sounds of Barra (1), operated by Traigh Mhor Oysters and Ard Mhor (2), also operated by Traigh Mhor Oysters. There are a number of other shellfish aquaculture sites and one finfish site within 5km of the cables.
Ferry routes	Yes	The Barra-Eriskay ferry route overlaps with the cables.

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Activity	Interaction	Notes
Local ports	Yes	The harbours of Isleornsay and Ceann a' Gharaidh lie adjacent to the cables. Isleornsay is used mainly by fishing boats and as a landing point for yachts moored in the harbour. Ceann a' Gharaidh operates as a ferry terminal for the Barra services.

Table 35 Interactions for Cable Kismul Castle

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	No	
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	Average of £2,510,303 landings value per year, with the highest proportion of this from pots, followed by bottom otter trawls. The largest proportion of vessels returning these landings are over 15m, followed by <10m vessels and then 10m-15m vessels. The largest proportion of landings value comes from Nephrops, followed by edible crabs and then lobsters.
MMO VMS effort (hours) 2014-2018	No	
MMO VMS landings value (£) 2014-2018	Yes	Average landings value of <£1,000 per year for mobile gear.
EMODnet AIS vessel density (fishing) 2017	Yes	Average of 0.5 hours of AIS activity per square km per month.
Bird and wildlife watching	Yes	Low levels of activity over the cable.
Visits to historic sites or to attractions	Yes	High levels of activity over the cable.
Power boating	Yes	Low levels of activity over the cable.
Canoeing and kayaking	Yes	High levels of activity over the cable.
Long distance swimming	Yes	Very low levels of activity over the cable.
Motor cruising	Yes	Moderate levels of activity over the cable.
Sailing and cruising	Yes	Moderate levels of activity over the cable.

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Activity	Interaction	Notes
Chartered angling	No	
Sea angling from shore	Yes	Very low levels of activity over the cable.
Surfing and paddle boarding	No	
Yacht racing	No	
Coasteering	Yes	Very low levels of activity over the cable.
Personal water craft (jet skis)	Possible	There is an area of low activity adjacent to the south east of the cable.
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	High levels of activity over the cable.
Rowing and sculling	No	
Marine archaeology	Yes	Possible interaction with wreck sites.
Conservation designations	No	
Aquaculture sites	Possible	Nearest shellfish aquaculture site is Biadh na Gradh (operated by Biadh na Gradh), approximately 1.3km west of the cable.
Ferry routes	Yes	The Barra-Kismul ferry service, operated by Historic Scotland, runs adjacent to the east of the cable. The Oban-Barra service (operated by CalMac Ferries) runs approximately 120m west of the cable.
Local ports	Yes	Castlebay lies adjacent to the west of the Barra cable landfall, and is used as a ferry terminal for the Oban-Barra service.

Table 36 Interactions for Cable Laxay-Kershader 2

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	No	

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Activity	Interaction	Notes
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	Average of £4,562,060 landings value per year, with the highest proportion of this from bottom otter trawls, followed by pots. The largest proportion of vessels returning these landings are over 15m, followed by <10m vessels and then 10m-15m vessels. The largest proportion of landings value comes from Nephrops, followed by edible crabs.
MMO VMS effort (hours) 2014-2018	No	
MMO VMS landings value (£) 2014-2018	No	
EMODnet AIS vessel density (fishing) 2017	No	
Bird and wildlife watching	Yes	Moderate levels of activity over the cable.
Visits to historic sites or to attractions	Yes	Very low levels of activity over the cable.
Power boating	No	
Canoeing and kayaking	Yes	Very low levels of activity over the cable.
Long distance swimming	Yes	Very low levels of activity over the cable.
Motor cruising	Yes	Very low to low levels of activity over the cable.
Sailing and cruising	Yes	Very low levels of activity over the cable.
Chartered angling	Yes	Very low levels of activity over the cable.
Sea angling from shore	Yes	Very low levels of activity over the cable.
Surfing and paddle boarding	Yes	Low levels of activity over the cable.
Yacht racing	No	
Coasteering	Yes	Very low levels of activity over the cable.
Personal water craft (jet skis)	No	
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	Very low levels of activity over the cable.

	Fishing Liaison Mitigation Action Plan for Outer Hebrides		Applies to	
			Distribution ✓	Transmission ✗
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Activity	Interaction	Notes
Rowing and sculling	Yes	Very low levels of activity over the cable.
Marine archaeology	No	
Conservation designations	No	
Aquaculture sites	Yes	There are four shellfish aquaculture sites in the vicinity of the cable; Gob Glass (700m east), Keose (2.5km east), Sgeir nan Each (32.km east) and Rubh a Chleirich (2.4km west). These are operated by Western Isles Mussels, Raven Rock Sea Products Ltd., Lewis Mussels and Western Isles Mussels respectively.
Ferry routes	No	
Local ports	No	Keose is located approximately 3km east of the cable.

Table 37 Interactions for Cable North Uist-Berneray

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	No	Within 10km radius there are low levels of potter/whelker activity.
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	Average of £1,288,486 landings value per year, with pots making up over three quarters of these landings, followed by boat dredges. The largest proportion of vessels returning these landings are under 10m, with a roughly even split between 10m-15m and >15m vessels. The largest proportion of landings value comes from lobsters, followed by Nephrops and scallops.
MMO VMS effort (hours) 2014-2018	No	
MMO VMS landings value (£) 2014-2018	No	
EMODnet AIS vessel density (fishing) 2017	No	
Bird and wildlife watching	Yes	Moderate levels of activity over the cable.
Visits to historic sites or to attractions	Yes	Very low levels of activity over the cable.

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Activity	Interaction	Notes
Power boating	Yes	Very low levels of activity over the cable.
Canoeing and kayaking	Yes	Low to moderate levels of activity over the cable.
Long distance swimming	Yes	Very low levels of activity over the cable.
Motor cruising	Yes	Very low to low levels of activity over the cable.
Sailing and cruising	Yes	Very low levels of activity over the cable.
Chartered angling	No	
Sea angling from shore	Yes	Very low levels of activity over the cable.
Surfing and paddle boarding	Yes	Low levels of activity over the cable.
Yacht racing	No	
Coasteering	Yes	Very low levels of activity over the cable.
Personal water craft (jet skis)	No	
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	Very low levels of activity over the cable.
Rowing and sculling	No	
Marine archaeology	No	
Conservation designations	Yes	North Uist Machair and Islands SPA – does not intersect the cable, but lies adjacent to the west of the Berneray landfall. South Lewis, Harris and North Uist NSA – Covers the entirety of the cable.
Aquaculture sites	No	
Ferry routes	Possible	The North Uist-Harris ferry service, operated by CalMac Ferries, departs from Berneray approximately 580m east of the cable.
Local ports	Yes	Orasaigh lies approximately 210m east of the North Uist cable landfall. Eoligarry lies approximately 1.1km east of the Berneray landfall, and is used primarily by fishing vessels.

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Table 38 Interactions for Cable Barra-Vatersay

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	No	Within 10km radius there is a single potter/whelker sighting.
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	Average of £2,510,303 landings value per year, with the highest proportion of this from pots, followed by bottom otter trawls. The largest proportion of vessels returning these landings are over 15m, followed by <10m vessels and then 10m-15m vessels. The largest proportion of landings value comes from Nephrops, followed by edible crabs and then lobsters.
MMO VMS effort (hours) 2014-2018	No	
MMO VMS landings value (£) 2014-2018	No	
EMODnet AIS vessel density (fishing) 2017	Yes	Average of 10 hours of AIS activity per square km per month.
Bird and wildlife watching	Yes	Low levels of activity over the cables.
Visits to historic sites or to attractions	Yes	Low to moderate levels of activity over the cable. There is a hotspot of high activity adjacent to the east of the cable.
Power boating	Yes	Low levels of activity over the cable.
Canoeing and kayaking	Yes	Low levels of activity directly over the cable, though there is an area of high activity approximately 850m east of the cable.
Long distance swimming	Yes	Very low levels of activity over the cable.
Motor cruising	Yes	Very low to low levels of activity over the cable.
Sailing and cruising	Yes	Low levels of activity directly over the cable, though there is an area of moderate activity adjacent to the east of the cable.
Chartered angling	No	
Sea angling from shore	Yes	Very low levels of activity over the cable.
Surfing and paddle boarding	No	
Yacht racing	No	

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Activity	Interaction	Notes
Coasteering	Yes	Moderate to high levels of activity over the cable.
Personal water craft (jet skis)	Possible	There is an area of low activity adjacent to the south east of the cable.
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	High levels of activity over the cable.
Rowing and sculling	No	
Marine archaeology	No	No wreck sites in the immediate vicinity, but the nearest is 1.7km away.
Conservation designations	No	
Aquaculture sites	Possible	Nearest shellfish aquaculture site is Biadh na Gradh (operated by Biadh na Gradh), approximately 2.6km north east of the cable.
Ferry routes	No	No ferry routes directly over the cable, but the ferry route from Barra to Kismul runs approximately 1.9km east of the cable.
Local ports	Yes	Vatersay lies approximately 760m east of the Barra cable landfall, and is used by a small number of fishermen.

Table 39 Interactions for Cables Harris-Scalpay East and West

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	No	Within 10km radius there are moderate levels of scallop dredging (French/Newhaven type) and single sightings of a demersal trawler and a pair trawler.
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	Average of £4,560,828 landings value per year, with the highest proportion of this from pots, followed by bottom otter trawls and then boat dredges. The largest proportion of vessels returning these landings are over 15m, with a roughly even split between <10m vessels and 10m-15m vessels. The largest proportion of landings value comes from Nephrops, followed by scallops.
MMO VMS effort (hours) 2014-2018	Yes	Average fishing effort of 50-100 hours for dredging and mobile gear over the west cable, and 1-5 hours over the east cable.
MMO VMS landings value (£) 2014-2018	Yes	Average landings value of up to £6,000 per year for dredging and mobile gear.

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Activity	Interaction	Notes
EMODnet AIS vessel density (fishing) 2017	Yes	Average of 20+ hours of AIS activity per square km per month over the west cable, and 5-10 hours over the east cable.
Bird and wildlife watching	Yes	Moderate levels of activity over the cables.
Visits to historic sites or to attractions	Yes	Low levels of activity over the cables.
Power boating	Yes	Very low levels of activity over the cables.
Canoeing and kayaking	Yes	Low levels of activity over the cables, though there is an area of moderate activity adjacent to the west of the cables.
Long distance swimming	Yes	Very low levels of activity over the cables.
Motor cruising	Yes	Very low to low levels of activity over the cables.
Sailing and cruising	Yes	Low levels of activity over the cables.
Chartered angling	No	
Sea angling from shore	Yes	Low levels of activity over the cables.
Surfing and paddle boarding	Yes	Low levels of activity over the cable.
Yacht racing	Yes	Very low levels of activity over the cables.
Coasteering	Yes	Very low levels of activity directly over the cables, though there is a hotspot of activity adjacent to the west of the cables.
Personal water craft (jet skis)	No	
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	Very low levels of activity over the cables.
Rowing and sculling	No	
Marine archaeology	Possible	Possible interaction with wreck sites in close proximity to the cables.
Conservation designations	No	Inner Hebrides and the Minches SAC – does not intersect the cables, but lies adjacent to the east. South Lewis, Harris and North Uist NSA – Covers the entirety of the cables.

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Activity	Interaction	Notes
Aquaculture sites	Yes	The shellfish aquaculture site Sound of Scalpay operated by Alisdair Cunningham lies directly over the eastern cable. Two finfish sites, Raineach and Scotasay (both operated by Mowi Scotland Ltd.) are approximately 1.7km and 2.4km west of the western cable respectively.
Ferry routes	No	No ferry routes directly over the cables, but the ferry route from Skye to Harris (operated by CalMac Ferries) runs approximately 3.2km west of the western cable.
Local ports	Possible	Kyles Scalpay lies approximately 410m west of the eastern cable, though it is no longer in use. Scalpay is located approximately 1.6km south of the western cable, and is used mainly by local fishing boats.

Table 40 Interactions for Cables Benbecula-South Uist East and West

Activity	Interaction	Notes
MMO Surveillance sightings, 2014-2018	No	Within 10km radius there are single sightings of a potter/whelker and a scallop dredger (French/Newhaven type).
MMO landings value (£) 2014-2018 by species, gear type and gear length	Yes	Average of £2,900,223 landings value per year, with almost three quarters of this from pots, followed by boat dredges. The largest proportion of vessels returning these landings are <10m, with a roughly even split between 10m-15m and >15m vessels. The largest proportion of landings value comes from Nephrops, followed by lobsters.
MMO VMS effort (hours) 2014-2018	No	
MMO VMS landings value (£) 2014-2018	No	
EMODnet AIS vessel density (fishing) 2017	No	
Bird and wildlife watching	Yes	Moderate levels of activity over the cables.
Visits to historic sites or to attractions	Yes	Very low levels of activity over the cables.
Power boating	Yes	Very low levels of activity over the cables.
Canoeing and kayaking	Yes	Very low to low levels of activity over the cables.

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Activity	Interaction	Notes
Long distance swimming	Yes	Very low levels of activity over the cables.
Motor cruising	Yes	Very low levels of activity over the cables.
Sailing and cruising	Yes	Very low levels of activity over the cables.
Chartered angling	No	
Sea angling from shore	Yes	Very low levels of activity over the cables.
Surfing and paddle boarding	Yes	Low levels of activity over the cables.
Yacht racing	Yes	Very low levels of activity over the cables.
Coasteering	Yes	Very low levels of activity over the cables.
Personal water craft (jet skis)	No	
Wild fowling	Yes	Very low levels of activity over the cables.
Scuba Diving	Yes	Very low levels of activity over the cables.
Rowing and sculling	No	
Marine archaeology	No	
Conservation designations	No	
Aquaculture sites	No	
Ferry routes	No	
Local ports	No	Nearest harbour is Petersport, approximately 9km south west of the cables. It is used by a small number of fishing boats.