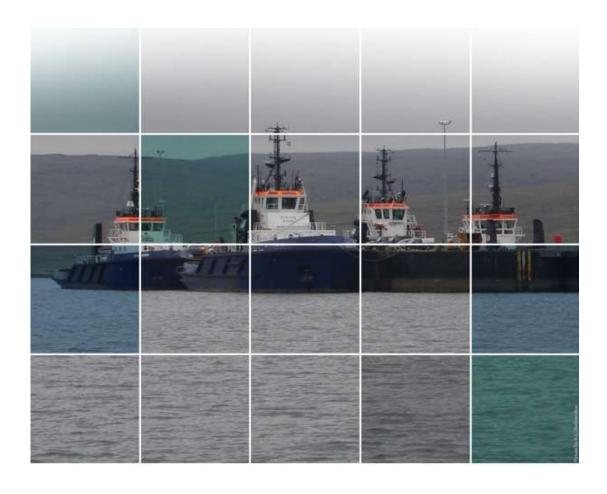




Sullom Voe Harbour Area Masterplan



Sullom Voe Harbour Masterplan

<u>Draft Version – May 2021</u>



Authors:

Rachel J. Shucksmith, Shetland UHI, Scalloway Campus Dr Richard L. Shelmerdine, Shetland UHI, Scalloway Campus Kathryn Allan, Shetland UHI, Scalloway Campus

Marine Science & Technology Department Shetland UHI – Scalloway Campus | Port Arthur | Scalloway | Shetland | ZE1 0UN

Public engagment project team:

Rachel Shucksmith, Michele Kerry, Richard Shelmerdine, Kathyrn Allan, Charlotte Slater (all NAFC Marine Centre UHI), Sarah Brown (Cradle 2 Wave)

Finalised Version – March 2022



Finalised Version:

Simon Pallant – Shetland Islands Council, Coastal Zone Manager Coastal & Marine Planning Team | Shetland Islands Council | Development Services 8 North Ness Business Park | Lerwick | Shetland | ZE1 0LZ

Contents	Page Number
Executive Summary	V
Introduction and Purpose of the Masterplan	1-6
2. Approach to Drafting the Masterplan	7-9
3. Public Engagement – Main Findings	10-11
4. Conclusions and Next Steps	12

Figures	Page Number
Figure 1 Sullom Voe Harbour Area.	1
Figure 2 Navigation Operations within the Sullom Voe Harbour Area, including the Yell ferry route	13
Figure 3 Pipes and cables within the SVHA buffered out to 250m	
Figure 4 Dredge fishing for king scallops based on inshore Vessel Monitoring System data (iVMS).	15
Figure 5 Fishing areas for static gear (crabs, lobsters, and whelks), squid, and sea angling and trout.	16
Figure 6 Whitefish fishing areas based on EU VMS data	17
Figure 7 Protected areas within the SVHA, including two SACs, two SSMO Closed Areas, and scheduled monuments	19
Figure 8 Protected features with the SVHA, icnluding seal haul-out sites and identified Priority Marine Features	20
Figure 9 Identified archaeological views, National Scenic Areas, and scenic areas within the Sullom Voe Harbour Area	21
Figure 10 Identified areas for kayaking, rowing, SCUBA diving, and surfing within the Sullom Voe Harbour Area	22
Figure 11 Potential Development Zones within the SVHA	25
Figure 12 Detailed view of Zone A off West Sandwick and the surrounding depths	26
Figure 13 Detailed view of Zone B near Ulsta and the surrounding depths	27
Figure 14 Detailed view of Zones C and D in Sullom Voe and the surrounding depths.	28
Figure 15 Detailed view of Zones E and F near Ollaberry and the surrounding depths	29
Figure 16 Detailed view of Zone G near North Roe and the surrounding depths	30
Figure 17 Cargo and passenger vessel tracks within the Sullom Voe Harbour Area based on Automatic Identification System (AIS) data.	31
Figure 18 Potential Development Zones A and B detailing Zone sections for subsurface infrastructure only (hashed area)	32
Figure 19 Potential Development Zone A detailing Zone sections for subsurface infrastructure only (hashed area) and the surrounding bathymetry	33
Figure 20 Potential Development Zone B detailing Zone sections for subsurface infrastructure only (hashed area) and the surrounding bathymetry	34

Tables	Page Number
Table 1 Data sets categorised into "Excluded from Search" and "Potentially Excluded from Search".	8
Table 2 Potentially Excluded from Search data found to be present within each Potential Development Zone	

Appendixes

Appendix A Sullom Voe Harbour Area Description of Existing Uses and Constraints 3	5
Figures from Appendix A	
Page number	r
Figure A. 1 Protected areas within the Sullom Voe Harbour Area5	1
Figure A. 2 Priority Marine Features (PMFs), excluding horse mussel beds (<i>M. modiolus</i>)	
within the Sullom Voe Harbour Area5	3
Figure A. 3 Archaeology within the Sullom Voe Harbour Area5	9
Figure A. 4 Coastal Characteristics within the Sullom Voe Harbour Area6	
Figure A. 5 Vessel tracks, based on Automatic Identification System (AIS) tracking data	
within the Sullom Voe Harbour Area6	5
Figure A. 6 Cables and pipelines (with their associated buffer) within the Sullom Voe	
Harbour Area6	7
Figure A. 7 Demersal fishing within the Sullom Voe Harbour Area69	9
Figure A. 8 Squid fishing within the Sullom Voe Harbour Area	0
Figure A. 9 Dredge fishing within the Sullom Voe Harbour Area7	2
Figure A. 10 Static fishing using creels or pots within the Sullom Voe Harbour Area73	3
Figure A. 11 Formal recreation and access points within the Sullom Voe Harbour Area 7	7
Tables from Appendix A	
Page number	<u>r</u>
Table A. 1 Special Areas of Conservation (SACs) within and adjacent to the Sullom Voe	_
Harbour Area	7
Table A. 2 Special Protected Areas (SPAs) within and adjacent to the Sullom Voe Harbour	_
Area	
Table A. 3 Designated features for the Ronas Hill-North Roe and Tingon Ramsar site 3	
Table A. 4 Sites of Special Scientific Interest (SSSIs) within the Sullom Voe Harbour Area.	
Table A. 5 Sites of Special Scientific Interest (SSSIs) adjacent to the Sullom Voe Harbour	1
Area4	1
Table A. 6 Local Nature Conservation Sites (LNCS) adjacent to the Sullom Voe Harbour	'
Area4	1
Table A. 7 SSMO Closed Areas within the Sullom Voe Harbour Area	
Table A. 8 Designated seal haul-out sites within the Sullom Voe Harbour Area	
Table A. 9 Geosites within the Sullom Voe Harbour Area	
Table A. 10 Local Landscape Areas (LLA) within the Sullom Voe Harbour Area5	
Table A. 11 Scheduled Monuments within and adjacent to the Sullom Voe Harbour Area. 5	
Table A. 12 Listed Buildings within, and adjacent to, the Sullom Voe Harbour Area 5	

Executive summary

The port of Sullom Voe is a major deep water harbour that is owned and operated by Shetland Islands Council as Harbour Authority. In recent years tanker movements to Sullom Voe Terminal have reduced and in 2018 the Council considered it an appropriate time to review the current and future use of the Sullom Voe Harbour Area (SVHA) to examine the potential for a range of future developments, including but not limited to, aquaculture, marine renewables and seaweed farming.

It was agreed that in order to guide this process a Masterplan would be produced. It would be prepared by gathering information about constraints and opportunities from the local community and stakeholders and would be subject to extensive public consultation. Shetland UHI were appointed by the Council to draft the Masterplan, its accompanying assessments and to undertake the initial stages of public consultation. The draft Masterplan, Strategic Environmental Assessment (SEA) and Habitats Regulations Appraisal (HRA) were submitted to the Council in early 2021. Following this, the Council approved a 6-week public consultation which took place in the summer of 2021. A number of responses were submitted, and in order to decide whether further amendments were appropriate the Council undertook additional 'targeted' consultation in January/February 2022.

The Finalised Masterplan now provides a clear picture of the opportunities and constraints to guide future development within the SVHA. It will have the status of non-statutory planning guidance, meaning that it can be a material consideration in future planning (aquaculture) and works licence decisions taken by the Council. The Masterplan also forms a key part of the Council's and Crown Estate Scotland's local management pilot scheme for the SVHA. It will be used to help inform future local leasing of sea bed assets for developments in the SVHA as part of this process.

It should be recognised that this is the first Masterplan of this nature to be produced in Shetland. Whilst the extent of Potential Development Zones that have been identified may appear small it must be recognised that Sullom Voe remains a strategic port for navigation related to an oil and gas industry which continues to develop and evolve. It is also identified as a strategically important area for our fishing industry. Additionally, the SVHA, port and surrounds all form a key strategic location for the ORION (Opportunity for Renewable Integration with Offshore Networks) Clean Energy Project. This project continues to gather pace and aims to develop, embracing cuttingedge technology to make Shetland carbon neutral by 2030. It is therefore important to ensure that future development in the SVHA doesn't sterilise the future potential and aims of this project which are to:

- Produce local wind-powered green hydrogen in Shetland by 2025
- Reduce emissions and set an ambition to become net zero by 2030
- Create and sustain potentially 500 net zero jobs by 2030
- Create a buoyant, diverse economy for Shetland by 2035

This Masterplan will have the ability to evolve and develop, should changes in circumstances warrant this. It shall therefore be reviewed in 5 years' time by the Council's Coastal and Marine Planning Team. Any future iterations required before this period would be subject to Council approval and further consultation.

1 Introduction and Purpose of the Masterplan

In November 2018, NAFC Marine Centre UHI (now Shetland UHI, Scalloway Campus) were appointed by Shetland Islands Council (SIC) to undertake a master planning process for the Sullom Voe Harbour Area (SVHA). The SVHA can be viewed in Figure 1 below.

Shetland UHI subcontracted aspects of the community engagement work to Sarah Brown, Cradle 2 Wave (C2W) Consulting, in order to increase capacity and deliver a high-quality engagement process.

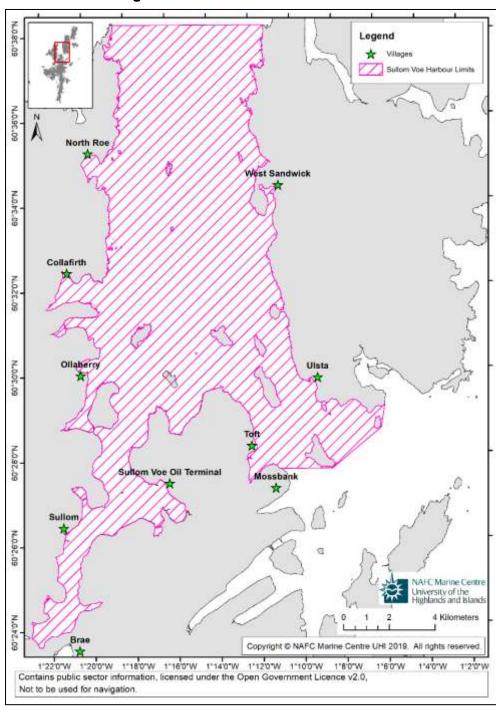


Figure 1 - Sullom Voe Harbour Area

Aim of Initial Consultation – 2019

It was agreed by the Council that the aims of the consultation process would be to:

- Test the existing policy landscape and assess if it is fit for purpose.
- Assess the level of interest for future development of the area.
- Ensure that the community and relevant stakeholders have a meaningful opportunity to input into the masterplan.
- Gather fresh information about opportunities and constraints.
- Identify community priorities which should influence future development decisions.

Purpose of the Masterplan

The SVHA Masterplan will form non-statutory planning guidance and sit alongside the Shetland Islands Regional Marine Plan, once it is adopted later in 2022. It will be a material consideration in planning decisions for marine planning (aquaculture) and works licence applications. It will also be used to inform future leasing decisions, thereby contributing to the future regulation and management of the SVHA. Additionally, any mapped outputs could be used, where appropriate, as evidence to support decision making by Shetland Islands Council when assessing developments against policy criteria within the Shetland Islands Regional Marine Plan (SIRMP) and Local Development Plan.

The key benefits of the Masterplan are as follows:

- A plan-led approach to the future management of the SVHA.
- Provision of clear information on opportunities and constraints in the SVHA.
- Integrated and informed decision making.

Existing Policy

The Zetland County Council (ZCC) 1974 Act (as amended) identifies the SVHA boundary in Schedule 1 (as amended by the 1980 HRO), this includes northern Yell Sound and Sullom Voe and confirms Shetland Islands Council as the Statutory Harbour Authority.

The only development type currently restricted within the harbour is finfish and shellfish aquaculture, with finfish and shellfish farming not, as a matter of policy, permitted anywhere within the harbour limits. This policy (G4 (a)) is contained within Shetland Islands Council Aquaculture Policy¹ which is supplementary guidance to the Shetland Islands Council Local Development Plan (2014)². The policy reads as follows:

¹ Shetland Islands Council (2017). Shetland Local Development Plan 2014- Supplementary Guidance: Aquaculture. https://www.shetland.gov.uk/downloads/download/14/local-development-plan-documents-and-maps

² Shetland Islands Council (2014). Shetland Local Development Plan. https://www.shetland.gov.uk/development-plans-policy/development-plans/1

G4 Over time, the Council has adopted policies in coastal areas of Shetland where there is a general presumption against aquaculture development. Such policies are as follows:

(a) Fish farming will not as a matter of policy be permitted anywhere within the Sullom Voe Harbour Area (as defined in the Sullom Voe Harbour Revision Order 1980) for as long as its primary purpose is to accommodate vessels engaged in the carriage of hydrocarbons or other dangerous substances;

Following adoption of the Masterplan as non-statutory planning guidance a review of the Council's Aquaculture Policy (2017) will commence by the Coastal and Marine Planning Team so that the current Sullom Voe harbour limits policy can be amended to reflect the position of the adopted Masterplan. It is intended that the review will focus on all of the policies contained within the Council's Aquaculture Policy (2017), not just the Sullom Voe harbour limits policy. Such a review of policy will be subject to future engagement and consultation with a range of organisations and consultees.

Approach to Consultation

At the project initiation during 2018/2019 a total of 18 face to face orientation meetings, and a series of phone calls were undertaken with industry stakeholders, government agencies and members of the community. This was followed by four public engagement workshops. An online survey was also made available to allow more people to engage with the process. Opportunities for additional meetings with the community councils, other community stakeholders such as elected representatives, council staff, and sectoral representatives were also taken. An additional public meeting was also held at the Northmavine Community Council.

A series of maps were created, based on best available information, for the Public Engagement – Round 1. Archaeology, coastal character types, whitefish fisheries, protected areas, recreation, and tide strength maps were created from data held within the draft Shetland Islands Regional Marine Plan (SIRMP)³. Static and mobile (scallop dredging) fishing data was sourced from the Shetland Shellfish Management Organisation (SSMO). Vessel track information, based on Automatic Identification System (AIS) data was used to create maps on the movements of oil tankers, cargo vessels, and passenger vessels (ferries and cruise ships). The vessel movement maps were used as a baseline in consultation with the Sullom Voe Harbour Master and Sullom Voe Harbour Pilots to create a Navigation Operations map.

Feedback from the Public Engagement – Round 1 included additions to the initial maps and other suggested data. Based on the level of policy or legal protection afforded to the data type all the data were then categorised into either:

- Excluded from Search
- Potentially Excluded from Search

³ Shetland Islands Marine Planning Partnership (2019). Draft Shetland Islands Regional Marine Plan. NAFC Marine Centre UHI. https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-marine-planning-partnership/sirmp-2019/

All data classed as "Excluded from Search" were combined to create **Potential Development Zones**. The data and Potential Development Zones were presented during the Public Engagement – Round 2. Feedback from those events were then incorporated into the final version of the Potential Development Zones which also included information from vessel movements, obtained through AIS fitted to certain vessel types. Following publication of the 'Phase 1 Engagement report' and draft 'Potential Development Zone' maps, presentations were made at Delting and Yell Community Councils, and to key stakeholder groups (natural heritage, fisheries, archaeology). A further three public events were held to gather feedback from affected groups and individuals.

Existing Users and Constraints

The findings highlight the importance of the SVHA to existing users. Navigational safety is the most extensive constraint to the development of other activities within the harbour area, with vessel traffic both linked to the Port and vessels travelling through Yell Sound. The area is also one of Shetland's most important inshore fishing areas, representing over 25% of Shetland's scallop landings and supports creeling and squid fisheries. Within the harbour area there are also several natural heritage designations, reflecting the abundance and diversity of wildlife.

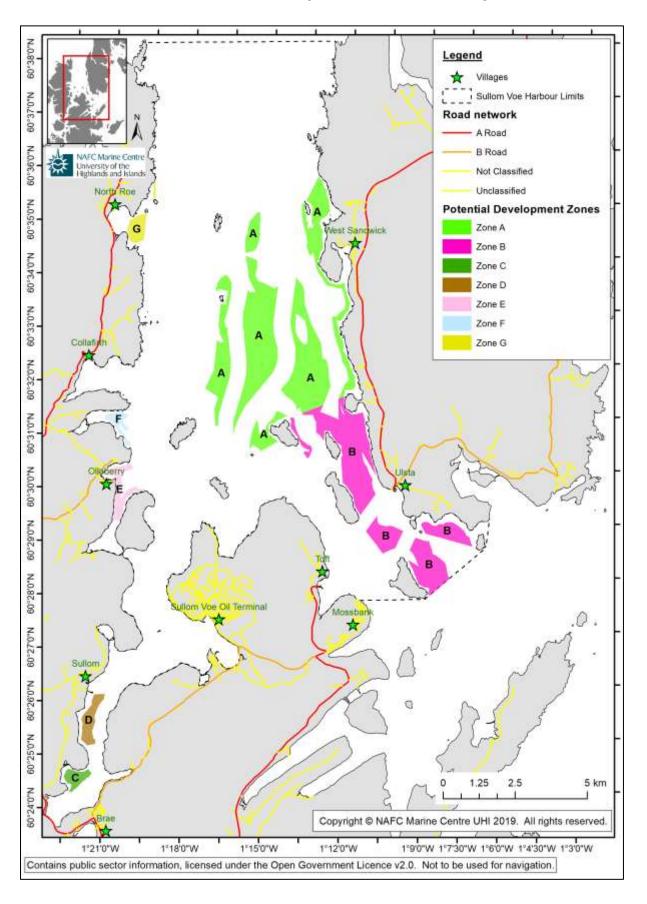
Opportunities for Development

Whilst constraints exist the SVHA offers some opportunities for development, which have been split into 'Potential Development Zones' which are shown overleaf on page 5 and page 25. There are clear opportunities for marine renewable development, especially for smaller scale tidal energy development adjacent to Ulsta. There are opportunities for aquaculture and seaweed farming across the harbour area, both within Sullom Voe and in north Yell Sound. Within Sullom Voe it is unlikely that applications would be received from the finfish sector due to low tidal flushing, and additionally, due to the specific wording relating to the natural heritage designation in the area. As such, development may not receive consent. However, new innovations, such as semi-closed containment, could possibly enable some level of finfish development in the Sullom Voe area in the future.

Community engagement indicated that there is some support for development provided that this does not impact on existing jobs (e.g. fisheries or at the Sullom Voe Terminal) or on the qualities of the area (natural heritage/scenic). It is believed that existing policy provision within the Shetland Islands Regional Marine Plan⁴ would provide adequate protection for the important users and uses within this area, provided that the supporting data is updated to reflect the data gathered during the Masterplan process e.g. important areas for navigation.

⁴ Shetland Islands Marine Planning Partnership (2019). Amended Draft Shetland Islands Regional Marine Plan. NAFC Marine Centre UHI. https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-marine-planning-partnership/sirmp-2019/

Sullom Voe Harbour Area Masterplan – Potential Development Zones



<u>Draft Masterplan – 2021 Public Consultation and Outcomes</u>

The Draft Sullom Voe Harbour Area Masterplan and accompanying assessments (SEA & HRA) were presented to Shetland Islands Council in May 2021. Following this, the Council published them for public consultation in June 2021.

A six week consultation period took place during the summer of 2021 and a number of responses were received from a variety of organisations, including the aquaculture and fishing industries, key agencies, community councils and SIC services. All comments were considered and amendments to the masterplan have been made where these were considered appropriate and necessary.

In January 2022, in response to concerns raised by the aquaculture industry to the draft Masterplan consultation over the lack of Potential Development Zones, the Council's Development Committee approved a short period of further consultation to determine whether amendments to the Masterplan, including the Potential Development Zones, should be made. This prompted further discussions with the aquaculture industry, NatureScot, the local fishing industry (SSMO & SFA), the ORION project team and the Council's Harbour Master.

Based upon these further discussions and the correspondence received, the decision was subsequently taken by the Council's Coastal Zone Manager, that the Potential Development Zones should remain unaltered at this time, but the Masterplan should be reviewed within 5 years of adoption. The option remains to review the Masterplan in a shorter period should circumstances change and the Council agree that such a review should commence.

Crown Estate Leasing - Pilot Project

Closely linked to the production of the Masterplan is the Council's participation in Crown Estate Scotland's Local Management Pilot Scheme to enhance local involvement in the management of seabed. In 2019 the Council's submission became one of a number of 'preferred projects' to be taken forward.

The pilot project set outs the case for use of the Masterplan in conjunction with local control of leasing rounds and determination of lease option agreements to develop, promote and enhance our local management and decision making over Scottish Crown Estate sea bed assets in the SVHA.

The Council has been working closely with Crown Estate Scotland to develop this Pilot Scheme and the arrangements for the future leasing of activities in the SVHA. This shall be guided by the Masterplan, in particular the areas which have been identified as Potential Development Zones will be subject to a future leasing round(s).

2 Approach to Drafting the Masterplan

Public Engagement – Round 1

By gathering publicly available information a stakeholder database was developed for the Masterplan engagement process. This includes listings of key contacts within relevant business sectors including but not limited to the fin and shellfish sectors, fishing, oil and gas, renewable energy, and community representatives. Relevant sector representatives from the fields of health and social care, transport, education, and recreation are also included.

Following a series of 18 face to face orientation meetings, and a series of phone calls, four locations for events were identified. These were:

- Workshop on Yell (North Ness Community Hall)
- Drop-in session at NAFC Marine Centre UHI in Scalloway
- Workshop in Ollaberry (Ollaberry Community Hall)
- Drop-in session at Brae (Brae Community Hall)

All events were advertised via Shetland Times; Shetland News; Radio Shetland; health centres in Brae, Hillswick, and Yell; airports at Scatsta and Sumburgh; at the Toft and Ulsta ferry terminals; via Delting, Yell, and Northmavine Community Councils; and in local shops and post offices. In addition, an online survey was made available to allow more people to engage with the process and for further insights to be gathered. Opportunities for additional meetings with the community councils, other community stakeholders such as elected representatives, council staff, and sectoral representatives were also taken. An additional public meeting was also held at the Northmavine Community Council. Further information relating to the initial engagement approach is detailed in the *Round 1 Engagement Report*.

Mapping

A series of maps were created, based on best available information, for the "Public Engagement – Round 1". Archaeology, coastal character types, whitefish fisheries, protected areas, recreation, and tide strength maps were created from data held within the Draft Shetland Islands Regional Marine Plan⁵. Static and mobile (scallop dredging) fishing data was sourced from the Shetland Shellfish Management Organisation (SSMO). Vessel track information, based on Automatic Identification System (AIS) data sourced from Department for Environment Food and Rural Affairs (DEFRA), was used to create maps on the movements of oil tankers, cargo vessels, and passenger vessels (ferries and cruise ships).

The AIS vessel movement maps were used as a baseline in consultation with the Sullom Voe Harbour Master and Sullom Voe Harbour Pilots to create a Navigation Operations map. Feedback from the "Public Engagement – Round 1" included

⁵ Shetland Islands Marine Planning Partnership (2019). Draft Shetland Islands Regional Marine Plan. NAFC Marine Centre UHI. https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-marine-planning-partnership/sirmp-2019/

additions to the initial maps and other suggested data. All the data were then categorised into either "Excluded from Search" or "Potentially Excluded from Search" (see Table 1 below), based on the level of policy or legal protection afforded to the data type.

Table 1:

Data sets categorised into "Excluded from Search" and "Potentially Excluded from Search".

Excluded from Search	Potentially Excluded from Search
Navigation - Navigation operations - Yell ferry operations	Navigation - Yell ferry route
Fishing - Scallop dredging - Squid trawling - Whitefish trawling	Fishing - Static gear - Sea angling and trout
Infrastructure - Pipes and cables	
Protected Area - Yell Sound Coast SAC - SSMO Closed Areas	Protected Area - Sullom Voe SAC
Protected Features - Horse mussels - Dune area - Important mud habitat - Saltmarsh area - Seal haul out site	Protected Features - Kelp area - Rock area - Seal haul out site 500 m buffer
	Archaeology - Scheduled monuments
	Recreation - Kayaking - Rowing - SCUBA diving - Surfing
	Views - Archaeological views - National Scenic areas - Scenic areas

All data classed as "Excluded from Search" was combined to create Potential Development Zones. The data and Potential Development Zones were presented at the "Public Engagement – Round 2". Feedback from those events were then incorporated into the final version of the Potential Development Zones which also included information from vessel movements, obtained through AIS fitted to certain vessel types (see Figure 17).

Public Engagement – Round 2

The second round of the engagement process gathered 25 responses to the survey, including nine annotated maps:

- Approximately 40% of respondents indicated they would be supportive of some development in the Sullom Voe and Yell Sound Harbour Area
- 28% did not support any development at all in the area. In particular, the
 response from people involved with fishing indicated that they felt changes to
 the level of development could have significant negative effects on their
 businesses.
- A further 32% were neutral or did not comment.

It was highlighted that protection of the natural environment and minimising impact from any future development should be high priorities for this area and the less developed feel should be maintained if possible.

Many respondents identified significant opportunities for renewable energy development in the area, both offshore monopile wind generation and sub surface tidal energy devices.

The need to enhance infrastructure in the area was identified regularly, both in connection to industrial uses (e.g. shore bases for aquaculture), and for leisure (e.g. slip ways and access points for small craft, swimming etc.).

Many respondents were clear that they felt the unique nature of the Sullom Voe and Yell Sound area should be protected and prioritised in all future management decisions.

Issues raised repeatedly were:

- The decision to exclude all mobile fishing areas from the Potential Development Zones.
- The Zones did not allow sufficient space for viable finfish aquaculture sites (bathymetry, tide, access etc) and a number of boundary reviews were requested, these either overlap with areas prioritised for navigation or for fisheries.
- Fishing interests state that their activities have not all been completely mapped and have provided information to identify additional fishing areas.

It was also felt that protection of the natural environment and minimising impact from any future development should be high priorities for this area and the less developed feel should be maintained if possible.

Further information relating to the round 2 engagement approach is detailed in the Round 2 Engagement Report.

3 Public Engagement – Main Findings

The engagement that took place during 2018/2019 gathered more than 100 responses. The engagement events logged 63 participants and an additional 53 participated in the online survey.

The process showed that approximately 30% of respondents are not supportive of any further development, however the remaining 70% are, mostly, willing to discuss possible development. However, it is clear that there are significant constraints as to where, and what type of development would be welcome.

The results show that the community responding to the questions posed want to see the environment (29% of respondents listed this as their top compelling argument), along with fulltime jobs (20%) as top priority for decision makers.

The engagement process has produced a list of opportunities and constraints which have not previously been mapped or collated, including an important map of constraints due to port operations. Participants noted that any further development of the area would, most likely, require additional infrastructure as current piers and slipways are at or near capacity, especially Collafirth.

Many respondents commented on the potential to displace jobs by allowing development within the Sullom Voe and Yell Sound area.

Many participants felt that, whilst the special aspects of the Sullom Voe Harbour Area (less developed feel, wilderness, wildlife, scenery etc.) should not be squandered, some level of sustainable development would be appropriate and that the area should not be held back in comparison to the rest of Shetland.

The desire to see a fixed link between Yell and the mainland was often repeated by participants who also discussed the related loss of jobs associated with the ferry should this happen. Many participants noted that the lack of broadband was a significantly limiting factor for residents in the area and especially on Yell. This limited options for employment and learning as well as connectivity and community development.

Further information relating to the engagement results can be found in the *Round 1* and *Round 2 Engagement Reports*.

Mapping

The Navigation Operations map (see "Sullom Voe Harbour operations and priorities" in Figure 2 created through consultation with the Sullom Voe Harbour Master and Sullom Voe Harbour Pilots, outlined six defined areas of:

- Navigation, sub-surface development only when 28 m below chart datum
- Port operations and activities only
- Navigation, pier operations only
- Priority for pollution response
- Priority for anchorage
- Priority for navigation

This map provided the starting point for identifying areas of potential development opportunity. A more complete navigation map was produced by incorporating in the Yell ferry approaches for Toft and Ulsta and AIS data to identify the spread of the Yell ferry route (Figure 2).

Five pipe and cable areas were identified within the Sullom Voe Harbour Area (Figure 3). These consisted of two hydrocarbon pipe corridors that originate in Orka Voe and exit Yell Sound to the north, two power cables connecting Yell to mainland Shetland at Toft and Mossbank, and a discharge pipe at Sella Ness. All pipes and cables were buffered out to 250 m.

Dredge fishing areas for king scallops were identified using data from inshore Vessel Monitoring Systems (iVMS) units. These report every 10 minutes and provide detailed information on dredge fishing locations in the area (Figure 4). Static fishing areas for crabs, lobsters, and buckies (whelks) were derived from fisher interviews relating their fishing grounds to depth information (Figure 5). Static gear was mostly located in the shallower coastal regions.

Landings data for inshore species were analysed from the SSMO logsheets submitted in 2018. The data highlighted the importance of Yell Sound to the inshore fleet, with landings in the harbour area comprising large proportions of total Shetland landing values including:

- 25% Shetland's king scallops
- 9-12% crab species
- 7-11% whelks
- 4-10% lobsters

Please note for static gear, values are given as ranges due to the difference in SSMO reporting square boundaries and the harbour limits.

Squid fishing areas were mapped by participants in the Public Engagement – Round 1 events and were located in the western region of Yell Sound, extending into Gluss Voe and the northern part of Sullom Voe (Figure 5). Whitefish fishing was found to be focussed in the northern part of Yell Sound, according to EU VMS data, with some low and medium activity near Collafirth and The Rumble in the southeast (Figure 6). Sea angling and sea trout areas were found to be patchy within the Sullom Voe Harbour Area but concentrated around North Roe, Collafirth, Gluss, Sullom Voe, Toft, and Ulsta (Figure 5).

4 Conclusion and Next Steps

Conclusion and Key Findings

The SVHA Masterplan has used thorough public consultation and data gathering to assess the level of interest for future development in the harbour area, whilst obtaining information on opportunities and constraints. Central to this has also been listening to communities. Taking this approach has helped ensure the Masterplan provides:

- A plan-led approach to the future management of the SVHA.
- Clear information on opportunities and constraints in the SVHA.
- The basis for integrated and informed future decision making.

In the period since the Masterplan was drafted in 2019 a number of significant developments have occurred. Notably, the Covid 19 Pandemic which has made us reconsider how we focus our attention on supporting sustainable development for future jobs, business and industry. Locally led projects such as ORION and national Sectoral Plans for offshore wind (INTOG and ScotWind) require us to think about the future role of Sullom Voe Terminal, its wider surrounds and harbour area to help plan and safeguard the potential for future development. The National Islands Plan recognises the importance of fishing and aquaculture to our Island communities. Whilst the ORION project will also provide opportunities for synergies with the aquaculture and fishing industries through cleaner fuels and oxygen by-products.

It is recognised that due to existing operations such as navigation (Figure 2) and inshore fishing (Figures 4-6) the Potential Development Zones identified in the masterplan for industry such as aquaculture are limited at this present time. It should be recognised however that the SVHA remains of paramount importance for navigational safety due to existing operations and Sullom Voe, where approximately 80 tankers call annually. This is a view shared by the Council's Harbour Master and the Council is therefore not currently minded to remove any navigational restrictions.

With regards to fishing operations, the Masterplan has identified that Yell Sound is of strategic importance to the Shetland inshore fishing industry, representing over 25% of Shetland's scallop landings, whilst supporting Shetland's main squid fishery and creeling. Within the harbour area there are also several natural heritage designations, reflecting the abundance and diversity of biodiversity and marine habitats which exist.

Next Steps

The SVHA Masterplan will now form non-statutory planning guidance to sit alongside the Shetland Islands Regional Marine Plan. It will be a material consideration in planning decisions for marine planning (aquaculture) and works licence applications. Having a Masterplan in place will also enable the Crown Estate Pilot Project for SVHA to proceed towards developing leasing arrangements and rounds for future developments in the area. The Masterplan represents opportunities and constraints at a particular point in time. We shall monitor the performance of the Masterplan and review it within 5 years of its adoption. If changes in circumstances warrant an earlier review, this shall be undertaken subject to Council approval.

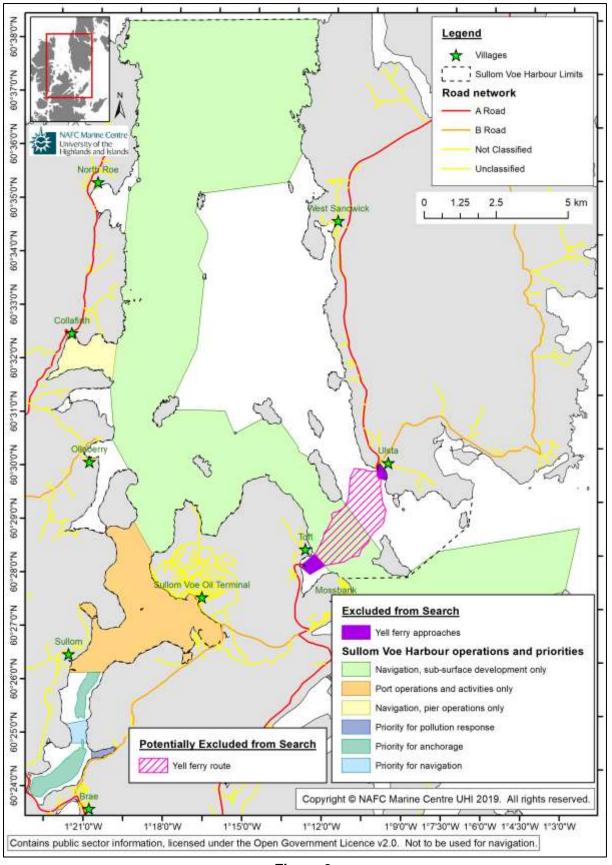


Figure 2

Navigation Operations within the SVHA including the Yell ferry route.

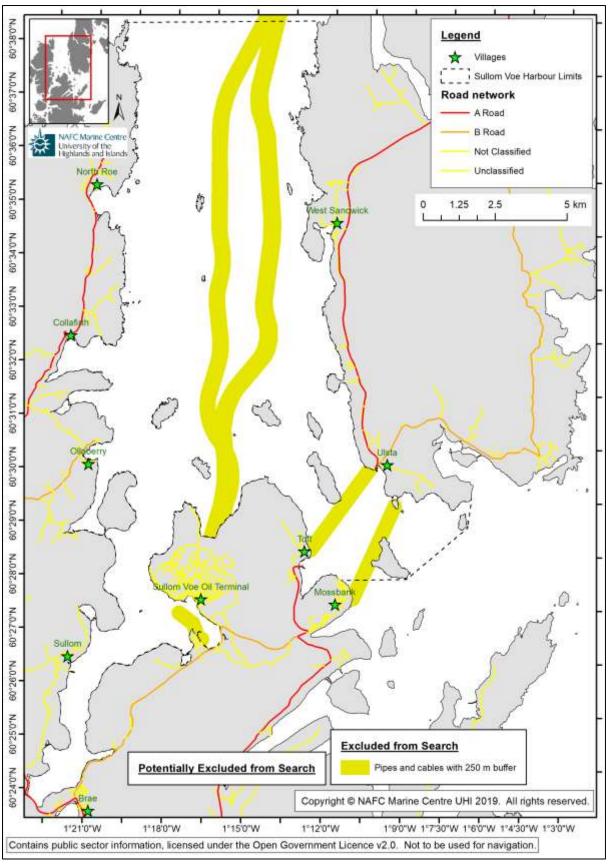


Figure 3
Pipes and cables within SVHA buffered out to 250 m.

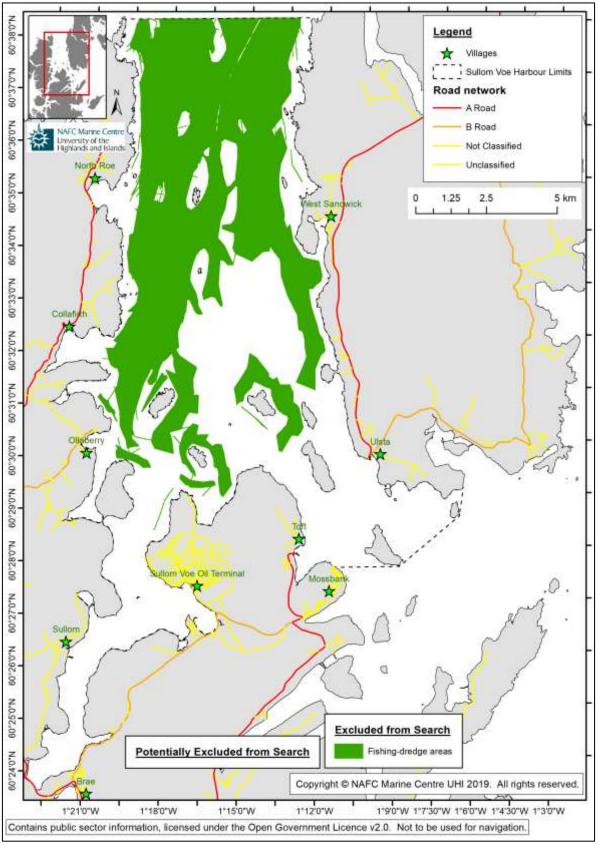


Figure 4

Dredge fishing for king scallops based on inshore Vessel Monitoring System data (iVMS).

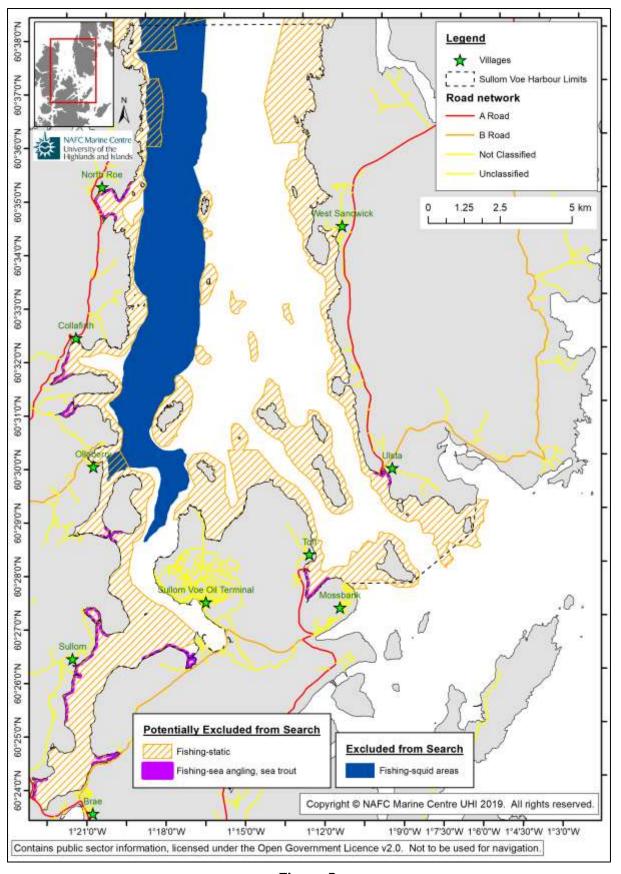


Figure 5

Fishing areas for static gear (crabs, lobsters, and whelks), squid, and sea angling and trout.

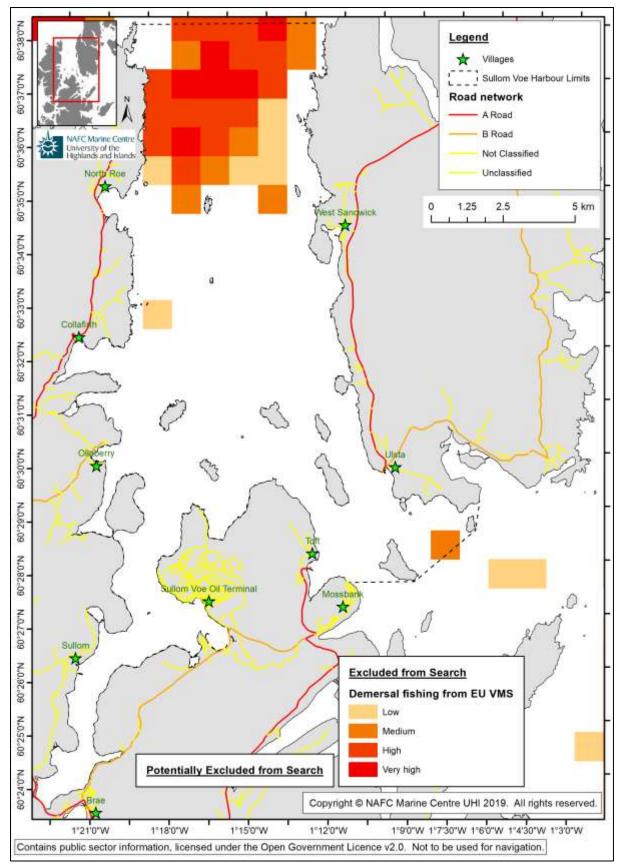


Figure 6
Whitefish fishing areas based on EU VMS data.

The two SACs and the two SSMO Closed Areas are located in the southern part of the Sullom Voe Harbour Area, south of Collafirth (Figure 7). Scheduled monuments were found throughout the area but are very localised. Identified Priority Marine Features (PMFs) were found throughout most of the Sullom Voe Harbour Area (Figure 8). Protected seal haul-out sites were shown with a 500 m buffer around each site to minimise the risk of disturbance to seals. These areas are of particular sensitivity where a more stringent assessment of impacts will be required and certain developments are less likely to be acceptable or may require stricter conditions, e.g. on frequency and routing of boat movements, avoiding activity during pupping and moulting seasons etc.

Through consultation with local stakeholders, Sullom Voe was identified as being important for the Slavonian grebe (*Podiceps auratus*) in Shetland. The most recent bird survey of Sullom Voe had a higher number (14 individuals) of Slavonian grebes around Gluss Isle and towards the central section of the voe. However, local experts did highlight that the latest survey was only based on one day of bird activity and did not accurately represent the species' distribution over time. Past surveys have recorded high numbers of Slavonian grebes further into the voe towards Mavis Grind. Based on this information, a cautionary approach was adopted with the presence of Slavonian grebe extending from Mavis Grind, throughout Sullom Voe, and north to Quey Firth/Colla Firth.

Three different view types were identified: archaeological views, National Scenic Area views, and scenic views (Figure 9). Scenic views are those identified by the community or community representatives as being of particular importance. Important archaeological views were identified between two Monastic sites in the north and four brochs/round houses in the east and southeast. Part of the National Scenic Area is located near North Roe and three scenic areas were identified by at public meetings at Collafirth, West Sandwick, and Ness of Sound.

Four main recreation types were identified and included kayaking, rowing, SCUBA diving, and surfing (Figure 10). Kayaking areas were identified along the west shore of Sullom Voe from Mavis Grind to Gluss, along the shore north of North Roe, and along the east shore of Yell Sound. Colla Firth was identified as an area used for rowing and three areas were identified for SCUBA diving: Mavis Grind, Taing of Norwick, and West Sandwick. West Sandwick and the Point of Fethaland were both identified locations for surfing.

More detailed descriptions of each of the data layers can be found in: Appendix A – Sullom Voe Harbour Area – Description of Existing Uses and Constraints.

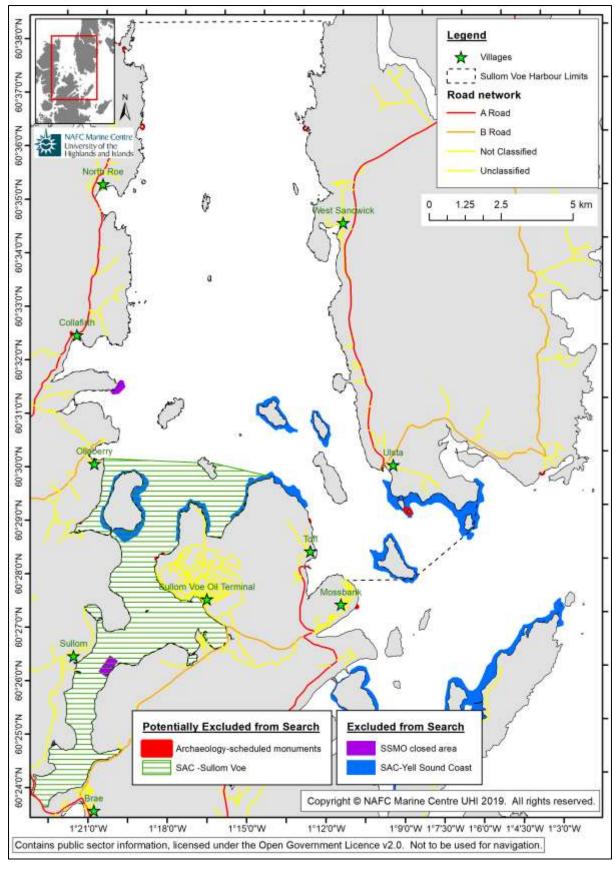


Figure 7
Protected areas within SVHA, including two SACs, two SSMO
Closed Areas, and scheduled monuments.

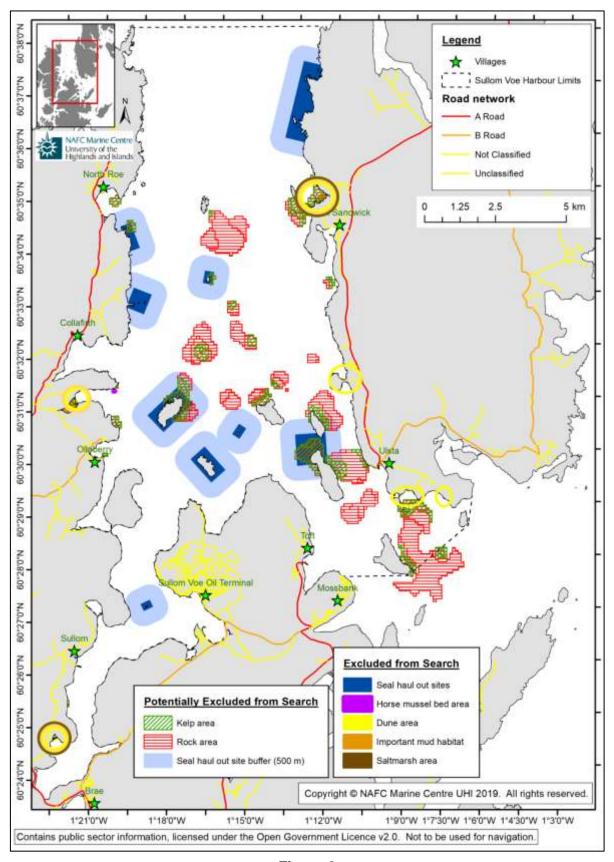


Figure 8

Protected features within SVHA, including seal haul out sites and identified Priority Marine Features (PMFs).

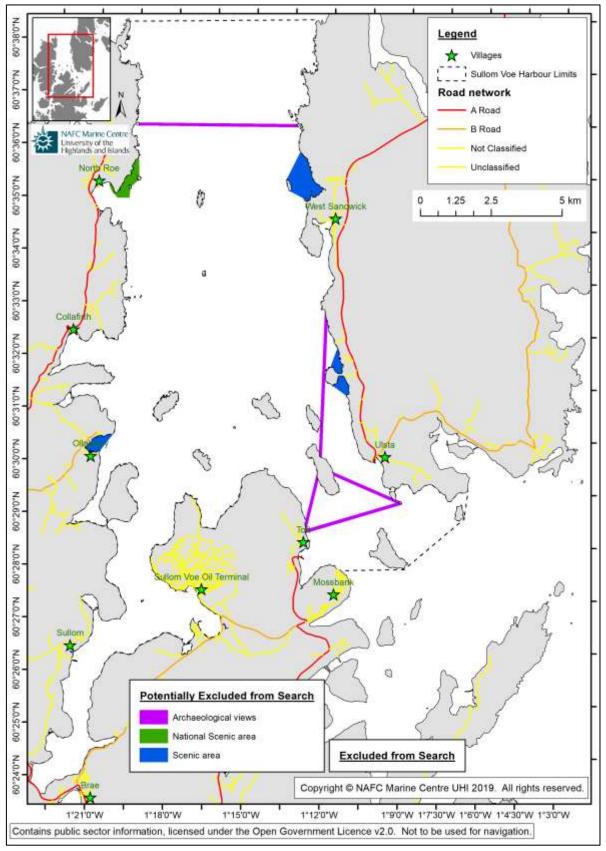


Figure 9

Identified archaeological views, National Scenic Area, and scenic areas within SVHA

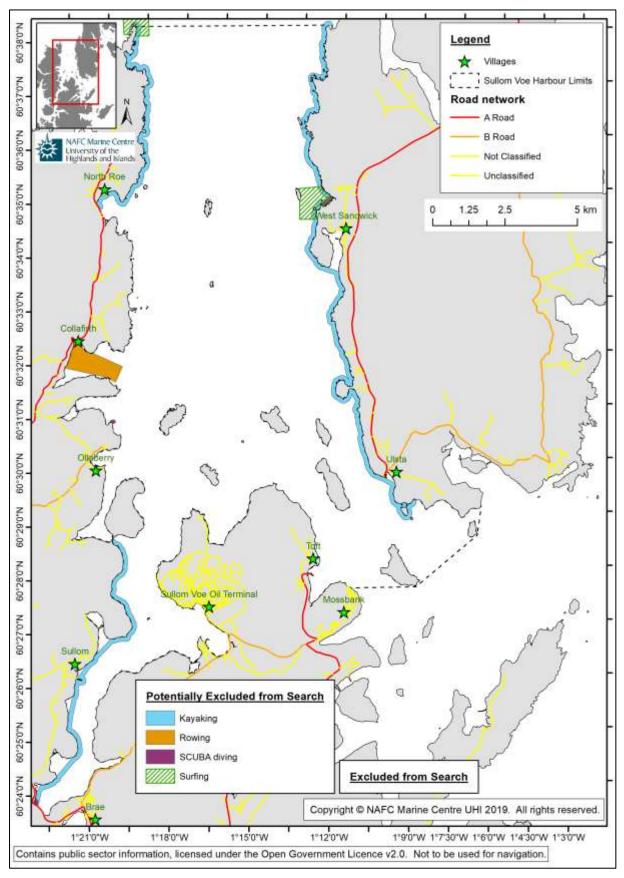


Figure 10
Identified areas for kayaking, rowing, SCUBA diving, and surfing within SVHA

Potential Development Zones

Seven Potential Development Zones (Zones A to G) have been identified once all the Excluded data from Search layers were combined.

- Zone A is located in central and eastern Yell Sound and consists of six distinct sections (Figure 12)
- Zone B* continues on from Zone A towards the southeast but in much higher tide-flow areas and consists of five separate sections (Figure 13)
- Zones C and D are located along the west shore in Sullom Voe (Figure 14).
- Zone E is located off Ollaberry and into Gluss Voe (Figure 15)
- Zone F is located north of Ollaberry at Quey Firth (Figure 15)
- Zone G consists of two separate sections off North Roe, the largest of which is located at the mouth of Burra Voe with a smaller strip along the coast to the north (Figure 16).

Data classified as Potentially Excluded from Search were recorded within each Zone and are summarised in Table 2

*NB – the northernmost part of Zone B (the largest of the four Zone B areas that is currently identified for sub-surface development only) is currently the subject of a lease option agreement that was awarded by Crown Estate Scotland to Nova Innovation in 2021.

Table 2:Potentially Excluded from Search data found to be present within each Potential Development Zone.

Zone	Category	Potentially Excluded from Search data
	Fishing	Static gear
		Kelp area
	Protected Features	Rock area
		Seal haul out site 500 m buffer
Zone A		Kayaking
	Recreation	SCUBA diving
		Surfing
	Views	Archaeological views
		Scenic area
	Fishing	Static gear
	Navigation	Yell ferry route
		Kelp area
Zone B	Protected Features	Rock area
		Seal haul out site 500 m buffer
	Recreation	Kayaking
	Views	Archaeological views
		Scenic area
	Birds	Slavonian grebe
Zone C	Fishing	Static gear
	Protected Areas	Sullom Voe SAC
	Recreation	Kayaking
	Birds	Slavonian grebe
Zone D	Fishing	Static gear
20110 15	Protected Areas	Sullom Voe SAC
	Recreation	Kayaking
	Birds	Slavonian grebe
	Fishing	Static gear
Zone E	Protected Areas	Sullom Voe SAC
	Protected Features	Kelp area
		Rock area
	Views	Scenic area
Zone F	Birds	Slavonian grebe
	Fishing	Static gear
	Recreation	SCUBA diving
	Fishing	Static gear
Zone G	Protected Features	Kelp area
		Rock area
	Recreation	Kayaking
	Views	National Scenic Area

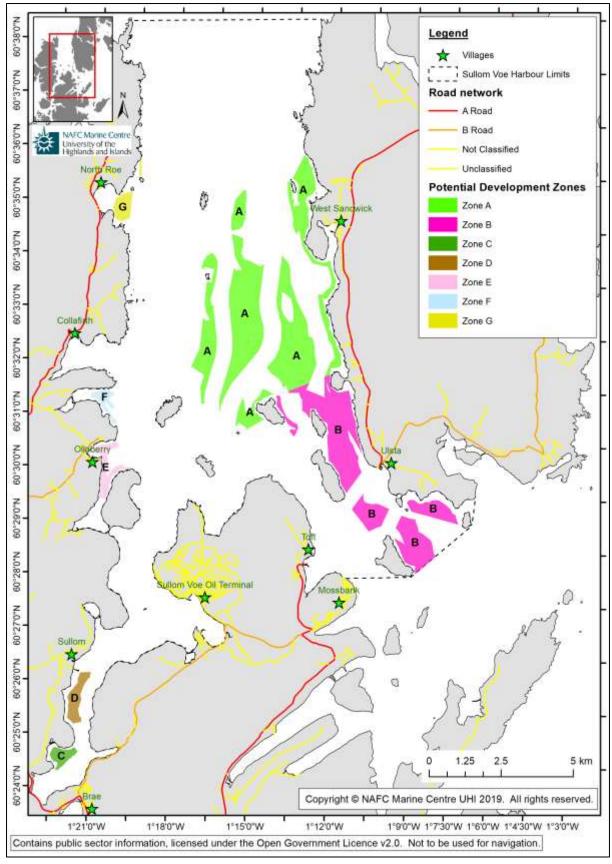


Figure 11
Potential Development Zones within SVHA

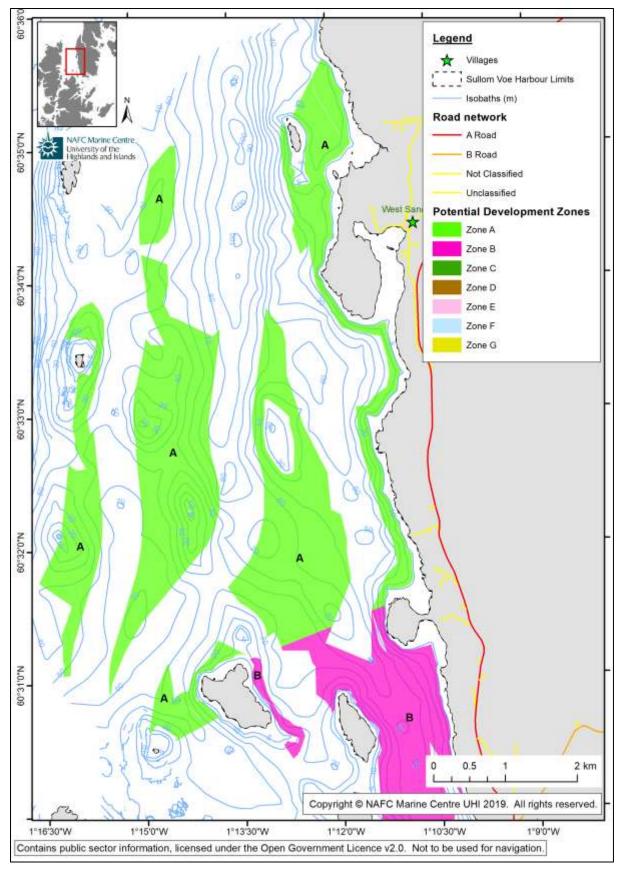


Figure 12

Detailed view of Zone A off West Sandwick and the surrounding depths.

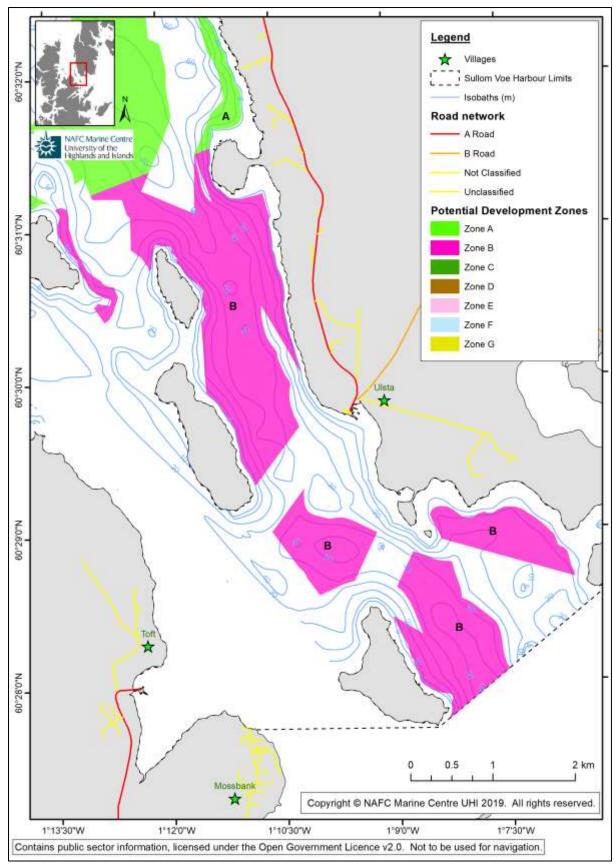


Figure 13

Detailed view of Zone B near Ulsta and the surrounding depths.

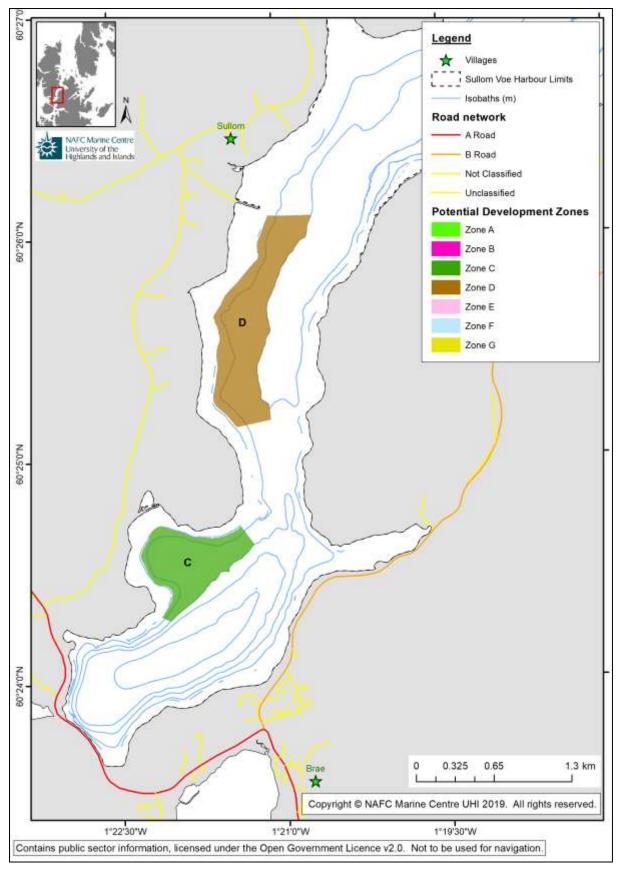


Figure 14

Detailed view of Zones C and D in Sullom Voe and the surrounding depths.

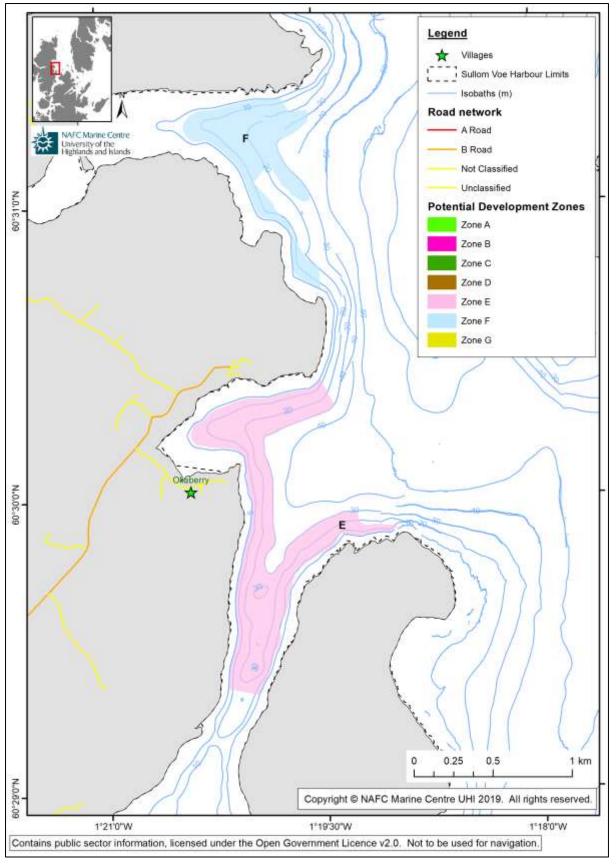


Figure 15

Detailed view of Zones E and F near Ollaberry and the surrounding depths.

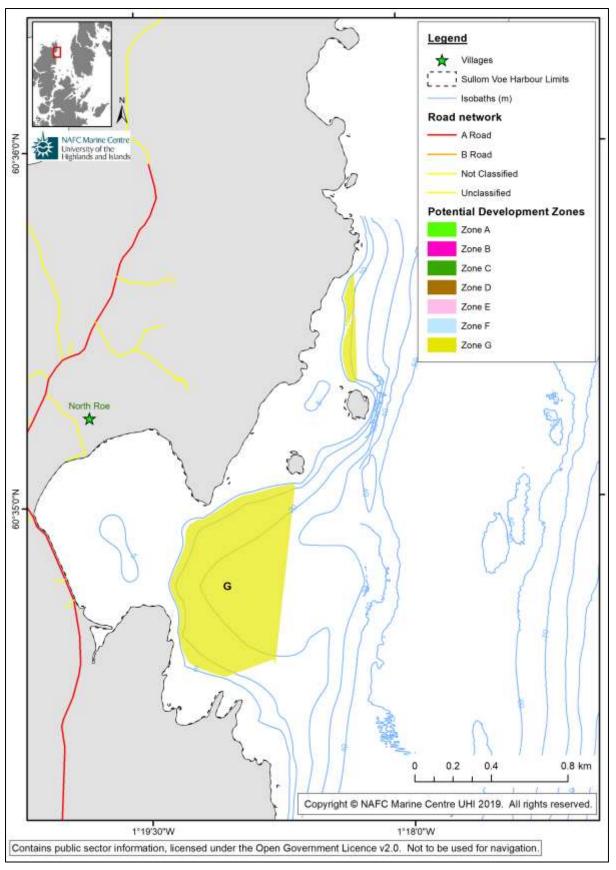


Figure 16

Detailed view of Zone G near North Roe and the surrounding depths.

Automatic Identification System (AIS) show a wide range of different vessel types using the Yell Sound area. Both cargo and passenger vessels use Yell Sound as a transit route with two distinct navigation routes to the southeast of Yell Sound (Figure 17). The southwestern of these routes corresponds with the navigation channel required for Sullom Voe Harbour Area operations but the denser north eastern route accounted for the majority of vessel traffic. This northern route remained dense through parts of Zone B and Zone A with vessel tracks becoming more spread near South Ladie Bank east of Little Holme. Sections within Zones A and B were designated as Potential Development Zones for subsurface infrastructure only so as not to impede safe navigation along this route (Figure 18). This included one section in Zone A and three sections in Zone B (Figures 19 and 20 respectively).

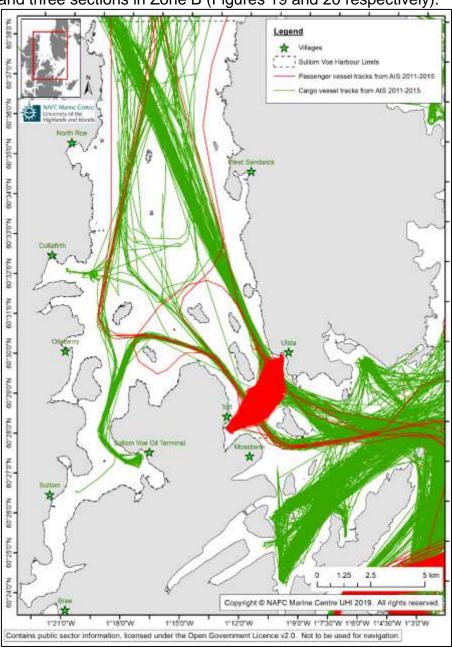


Figure 17

Cargo and passenger vessel tracks within the Sullom Voe Harbour Area based on Automatic Identification System (AIS) data.

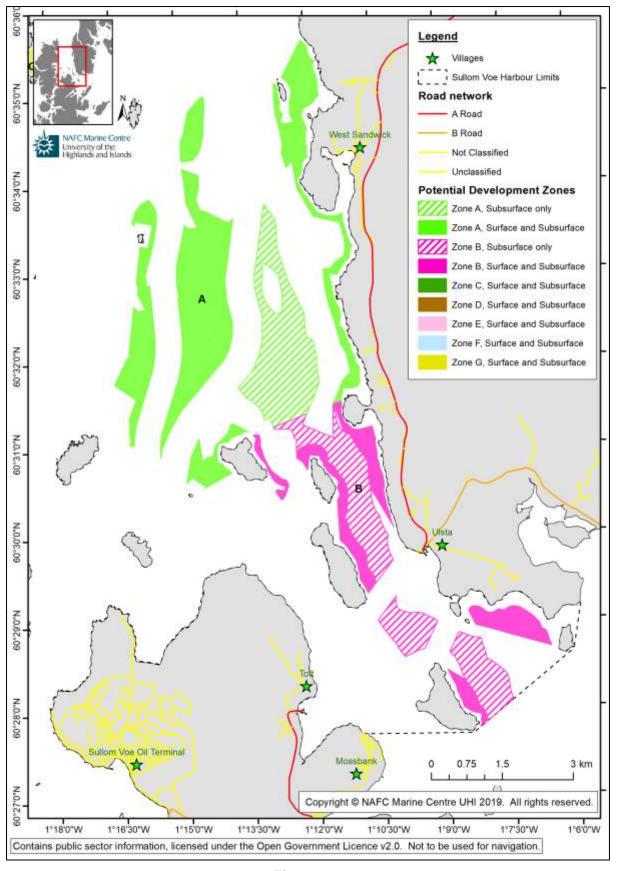


Figure 18
Potential Development Zones A and B detailing Zone sections for subsurface infrastructure only (hashed area).

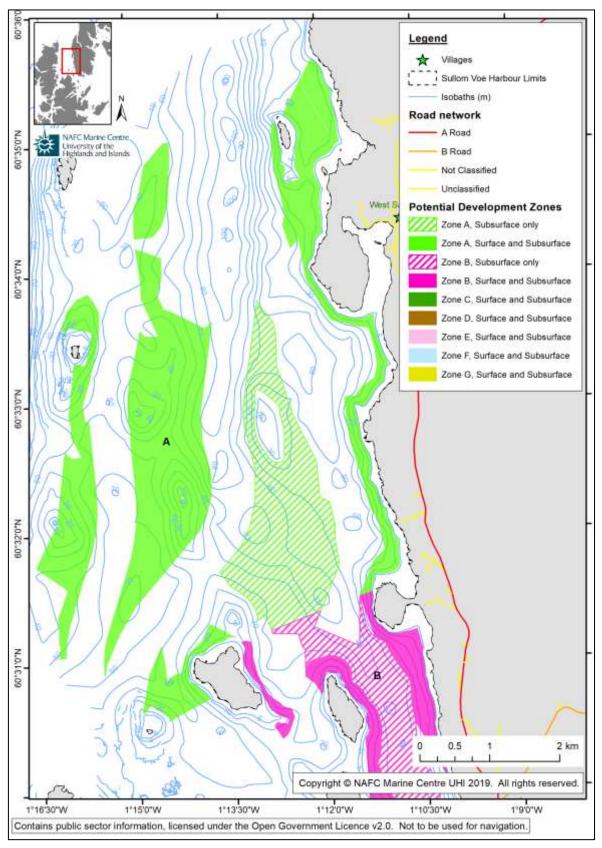


Figure 19

Potential Development Zone A detailing zone sections for subsurface infrastructure only (hashed area) and the surrounding bathymetry.

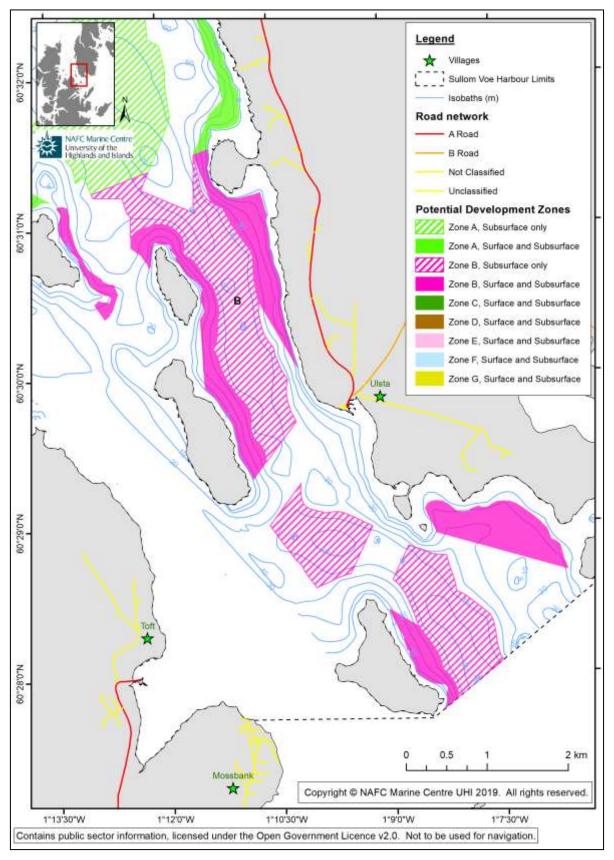


Figure 20

Potential Development Zone B detailing Zone sections for subsurface infrastructure only (hashed area) and the surrounding bathymetry.

APPENDIX A: Sullom Voe Harbour Area - Existing Uses and Constraints

A1 Constraints

A1.1 Protected areas

There are many different types of protected areas in, and adjacent to, the Sullom Voe Harbour Area (SVHA) which can include marine, coastal, and terrestrial features. They may be European, nationally, or locally designated and may protect qualifying species and habitats, important geological features, or landscape and scenic areas.

The types of designated sites within and adjacent to the SVHA include:

- Special Areas of Conservation*
- Special Protected Areas (SPAs)*
- Ramsar Site
- Sites of Special Scientific Interest
- Local Nature Conservation Sites (LNCS)
- SSMO Closed Areas
- Protected Seal Haul-Out sites
- Geosites
- National Scenic Area
- Local Landscape Areas (LLAs)
- Wildland Scotland

To determine the likelihood of significant effects of development on protected sites, it is necessary to look at the qualifying features of the site, any condition/monitoring information for the site, the conservation objectives for the site if applicable, and any current restrictions in place within the site.

A1.1.1 Special Areas of Conservation (SACs)

Special Areas of Conservation (SACs) are sites selected for particular habitats and species (both terrestrial and marine) which are listed in Annex I and II of the Habitats Directive (as amended). The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds)⁶.

There are currently thirteen designated SACs in Shetland, four of which are in, or within the vicinity of, the Sullom Voe Harbour Area. Of these four, two have been classified for their marine features and are located within the Sullom Voe Harbour Area and two are terrestrial and adjacent to the Sullom Voe Harbour Area (Table A. 1 and Figure A. 1).

^{*}Special Areas of Conservation and SPAs are collectively known as European sites.

⁶ Joint Nature Conservation Committee (JNCC) – Special Areas of Conservation (https://sac.jncc.gov.uk)

The two adjacent terrestrial SACs have been included as, although they are not within the Sullom Voe Harbour Area, and do not have marine elements, they may need to be considered if a marine development were to include coastal or terrestrial infrastructure (such as piers, sheds, roads, ground running cables, etc.).

Conservation objectives for SACs are generally structured as follows:

- To avoid deterioration of the qualifying feature (Table A. 1) thus ensuring that
 the integrity of the site is maintained, and the site makes an appropriate
 contribution to achieving favourable conservation status for each of the
 qualifying features; and
- To ensure for the qualifying feature that the following are maintained in the long term:
 - Extent of the feature within the site
 - Distribution of the feature within the site
 - Structure and function of the feature
 - Processes supporting the feature
 - Distribution of typical species of the feature
 - Viability of typical species as components of the feature
 - No significant disturbance of typical species of the feature

Please note that site-specific conservation objectives can now be viewed on sitelink: https://sitelink.nature.scot/home

 Table A. 1 Special Areas of Conservation (SACs) within and adjacent to the Sullom Voe Harbour Area.

Site name (EU Code)	SAC qualifying feature	Feature detail	Site condition
Yell Sound Coast	Mammals (Annex 1 species)	European otter (Lutra lutra)	Unfavourable, no change
(<u>UK0012687</u>)	Mammals (Annex 1 marine species)	Harbour seal (<i>Phoca vitulina</i>)	Unfavourable, declining
Sullom Voe	Inshore sublittoral rock (Annex 1 marine habitat)	Reefs	Favourable, maintained
(<u>UK0030273</u>)	Inshore sublittoral sediment (Annex 1 marine habitat)	Lagoons	Favourable, maintained
	Littoral sediment (Annex 1 marine habitat)	Shallow inlets and bays	Favourable, maintained
SACs adjacent to Sul	llom Voe Harbour Area		
East Mires and Lumbister (<u>UK0019795</u>)	Raised bogs and mires and fens (Annex 1 terrestrial habitat)	Blanket bog	Favourable, maintained
	Freshwater habitats (Annex 1 terrestrial habitat)	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>	Favourable, maintained
	,	Natural dystrophic lakes and ponds	Favourable, maintained
Dance I III North	Temperate heath and scrub (Annex 1 terrestrial habitat)	Alpine and Boreal heaths	Unfavourable, recovering
Ronas Hill-North Roe (<u>UK0019797</u>)	Raised bogs and mires and fens (Annex 1 terrestrial habitat)	Blanket bogs	Unfavourable, declining
	Town exets booth and sexub	North Atlantic wet heaths with Erica tetralix	Unfavourable, recovering
	Temperate heath and scrub	European dry heaths	Unfavourable, no change
	Rocky habitats and caves	Siliceous scree of the montane to snow levels	Favourable, maintained

A list of all SAC EU Codes can be found at https://sac.jncc.gov.uk/site

A1.1.2 Special Protected Areas (SPAs)

Special Protected Areas (SPAs) with marine components are defined as those sites with qualifying Birds Directive Annex I species, or regularly occurring migratory species that are dependent on the marine environment for all or part of their life cycle, where these species are found in association with intertidal or subtidal habitats⁷. These marine SPA habitats are:

- marine areas and sea inlets;
- tidal rivers, estuaries, mud flats, sand flats, and lagoons (including salt work basins); and
- salt marshes, salt pastures, and salt steppes.

There are fifteen SPAs in Shetland, seven of which are designated SPAs with marine components and an additional five coastal SPAs. Within the Sullom Voe Harbour Area there is one SPA with a marine component, two adjacent SPAs with marine components, and one adjacent coastal SPA (Table A 2 and Figure A. 1).

The adjacent SPAs have been included as, although they are not within the Sullom Voe Harbour Area, they do contain marine and coastal elements which include aggregations of breeding birds and, as such, they may need to be considered if a marine development were to include coastal infrastructure (such as piers, sheds, roads, ground running cables, etc.) or marine infrastructure that runs from the Sullom Voe Harbour Area into the wider marine and coastal environment.

Table A 2 Special Protected Areas (SPAs) within and adjacent to the Sullom Voe Harbour Area.

Site name (code)	Feature category	Feature	Site condition
Otterswick and Graveland (UK9002941)	Birds- aggregations of breeding birds	Red-throated diver (Gavia stellate), breeding	Unfavourable, declining
SPAs adjacent to Sull	om Voe Harbour Are	a	
Ramna Stacks and Gruney(UK9002021)	Birds- aggregations of breeding birds	Leach's petrel (Oceanodroma leucorhoa), breeding	Favourable, maintained
East Mainland Coast (UK9020311)	Birds- aggregations of breeding/non- breeding birds	BreedingRed-throated diver Non-breeding (Gavia stellate) -Great northern diver (Gavia immer) -Slavonian grebe (Podiceps guritus)	Condition not assessed
Ronas Hill- North Roe and Tingon (UK9002041)	Birds- aggregations of breeding birds	Great skua (Stercorarius skua), breeding Red-throated diver (Gavia stellate), breeding	Favourable, maintained Favourable, declining

⁷JNCC-Special Protected Areas (http://archive.jncc.gov.uk/page-4559)

_

Conservation objectives for SPAs are generally structured as follows:

- To avoid deterioration of the habitats of the qualifying species (Table A. 3) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and
- To ensure for the qualifying species that the following are maintained in the long term:
 - Population of the species as a viable component of the site
 - Distribution of the species within the site
 - Distribution and extent of habitats supporting the species
 - Structure, function, and supporting processes of habitats supporting the species
 - No significant disturbance of the species

A1.1.3 Ramsar Sites

Wetland areas are protected by the Convention of Wetlands, called the Ramsar Convention. It is an intergovernmental treaty that provides a framework for national action and international cooperation for the conservation and wise use of wetlands. Designated wetland areas are placed on the List of Wetlands of International Importance, also known as the Ramsar list⁸.

Shetland has one Ramsar site which comprises terrestrial and coastal areas adjacent to the Sullom Voe Harbour Area; Ronas Hill- North Roe and Tingon⁹ (site number 916), illustrated in Figure A. 1. The site has been designated under two criteria detailed in Table A. 3. This is predominately a terrestrial site but does extend to the coast and supports species reliant on the marine environment such as harbour seals, European otters, and bird species such as red-throated divers.

Table A. 3 Designated features for the Ronas Hill-North Roe and Tingon Ramsar site.

Ramsar criteria	Features
Criterion 1	 The site is internationally important because it supports the following Habitats Directive Annex 1 wetland features: H3130 – Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorellatea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> H3160 – Natural dystrophic lakes and ponds H4010 – Northern Atlantic wet heaths with <i>Erica tetralix</i> H7130 – Blanket bogs
	Nationally important flora species occurring on the site: • Shetland endemic <i>Hieracia</i>
Criterion 2	Nationally important fauna species occurring on the site: • Harbour seal (<i>Phoca vitulina</i>) • European otter (<i>Lutra lutra</i>) • Arctic water flea (<i>Eurycercus glacialis</i>) Species regularly supported during the breeding season: • Red-throated diver (<i>Gavia stellate</i>) • Northern fulmar (<i>Fulmarus glacialis</i>)

⁸ Ramsar (https://www.ramsar.org)

⁹ Ronas Hill- North Roe and Tingon (https://rsis.ramsar.org/ris/916)

- Whimbrel (Numenius phaeopus islandicus)
- Arctic skua (Stercorarius parasiticus)
- Great skua (Catharacta skua)
- Black guillemot (Cepphus grylle)

A1.1.4 Protecting SACs, SPAs, and Ramsar Sites

Special Areas of Conservation, SPAs, and Ramsar sites are protected under policy *MP MPA1: Plans or projects that may affect SACs, SPAs (collectively known as European sites) and Ramsar Sites* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021¹⁰ (pages 43-47)¹¹.

Policy MP MPA1: Plans or projects that may affect SACs, SPAs (collectively known as European sites) and Ramsar Sites

Developments or uses that might affect a European site (including proposed sites) must comply with legal requirements for these protected areas and must be subject to a Habitats Regulations Appraisal (HRA) undertaken by a competent authority (normally the licensing or consenting authority/body). Proposals which may adversely affect the site's integrity (i.e. compromise any of the conservation objectives for the site), either alone or incombination, as determined by Appropriate Assessment (AA), will not normally be permitted. Where a competent authority may wish to consent a proposal despite the potential for an adverse effect on the site's integrity, the competent authority must first show that there are no alternative solutions, and that it is imperative, and of over-riding public interest to grant consent.

A1.1.5 Sites of Special Scientific Interest (SSSI)

Sites of Special Scientific Interest (SSSIs) are sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. Sites of Special Scientific Interest can be privately owned or managed by public bodies or non-government organisations. The sites may extend into intertidal areas and out to mean low water spring tides.

Sites are designated by NatureScot under the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010 and are evaluated against the JNCC criteria¹².

There are 78 designated SSSIs in Shetland, 13 of which are within or adjacent to the Sullom Voe Harbour Area. Four are directly within the Sullom Voe Harbour Area and have marine or coastal features (Table A. 4 and Figure A. 1). A further eight SSSIs are adjacent to the Sullom Voe Harbour Area (Table A. 5 and Figure A. 1) and have been included as; three SSSIs have assemblages of breeding seabirds which may

¹⁰ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021(https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

¹¹ Policy *MSP HER1* within the 4th Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014).

¹²NatureScot-SSSIs (<u>www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/national-designations/sites-special-scientific-interest</u>)

need to be considered when looking at marine developments in the Sullom Voe Harbour Area; and six terrestrial/coastal SSSIs adjacent to the Sullom Voe Harbour Area which may need to be considered if a marine development were to include coastal or terrestrial infrastructure (such as piers, sheds, roads, ground running cables, etc.).

Table A. 4 Sites of Special Scientific Interest (SSSIs) within the Sullom Voe Harbour Area.

Site	SSSI type	Features	Condition
Yell Sound Coast	Biological (marine	European otter (Lutra	Unfavourable,
(1686)	element)	lutra)	no change
Graveland (8110)	Biological (marine element)	Red-throated diver (Gavia stellate), breeding	Unfavourable, declining
Uyea- North Roe Coast (1586)	Geological (coastal)	Moine	Favourable, maintained
Voxter Voe and Valayre Quarry (1591)	Geological (coastal)	Moine	Favourable, maintained

Table A. 5 Sites of Special Scientific Interest (SSSIs) adjacent to the Sullom Voe Harbour Area.

Site	SSSI type	Features	Condition
Otterswick (8109)	Biological (marine element)	Red-throated diver (Gavia stellate), breeding	Unfavourable, declining
Ramna Stacks		Guillemot (<i>Uria aalge</i>), breeding	Unfavourable, declining
& Gruney (1328)	Biological (marine element)	Leach's petrel (Oceanodroma leucorhoa), breeding	Unfavourable, declining
(1020)		Seabird colony, breeding	Unfavourable, declining
Dales Voe (486)	Biological (coastal)	Saltmarsh	Favourable, maintained
Burn of Valayre (277)	Biological (terrestrial)	Scrub-woodland	Unfavourable, no change
North Roe Meadow (1239)	Biological (terrestrial)	Vascular plant assemblage	Unfavourable, declining
East Mires and	Dialogical (towns strict)	Blanket bog	Favourable, maintained
Lumbister (587)	Biological (terrestrial)	Breeding bird assemblage	Favourable, maintained
The Ayres of Swinister (1528)	Geological (coastal)	Coastal Geomorphology of Scotland	Favourable, maintained
Clothister Hill Quarry (367)	Geological (terrestrial)	Mineralogy of Scotland	Favourable, maintained
		Blanket bog	Unfavourable, recovering
Ronas Hill- North Roe (1370)	Mixed (terrestrial with	Red-Throated Diver	Favourable, declining
	a marine element)	Scrub	Favourable, maintained
		Geomorphology	Favourable, maintained

	Montane assemblage	Favourable, maintained
	Arctic water flea (Eurycercus	Favourable,
	glacialis)	maintained
	Breeding bird assemblage	Favourable,
	breeding bird assemblage	maintained

North Roe SSSI is notified for geomorphology, breeding red-throated diver and scrub in addition to the features listed.

A1.1.6 Protecting SSSIs

Sites of Special Scientific Interest are protected under policy *MP COAST1: Developments in or near SSSIs* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021¹³ (pages 53-56)¹⁴.

Policy MP COAST1: Developments in or near SSSIs

Development likely to have an effect on a Site of Special Scientific Interest (SSSIs) or will only be permitted:

- a) if there is no adverse impact on the special interest of the site or it can be subject to conditions that will prevent damaging impacts on those interests; and
- b) where there is no reasonable alternative or less ecologically damaging location and the reasons for the development clearly outweigh the value of the site by virtue of social or economic benefits of national importance.

A1.1.7 Local Nature Conservation Sites (LNCS)

The Shetland Islands Council identified a network of 49 Local Nature Conservation Sites (LNCS) to highlight sites with important natural heritage features deserving of protection that are not designated under legislation. They are non-statutory sites selected at the local level for biodiversity and/or geodiversity features of interest¹⁵.

A LNCS should:

- recognise places of substantive importance for biodiversity and/or geodiversity;
- contribute to the quality of the local environment;
- provide opportunities for local people to find out about, and take pride in, their local biodiversity and geodiversity;
- be an area where biodiversity and/or geodiversity can be conserved; and
- provide opportunities for informal recreation.

There are six LNCS within the Sullom Voe Harbour Area which are all adjacent, terrestrial sites (Table A. 6 and Figure A. 1). Three of the sites are directly on the coast, two are within 400 metres of the coast, and one adjacent site is designated for breeding Schedule I bird species which rely on the marine environment. Although

¹³ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

¹⁴ Policy *MSP HER2* within the 4TH Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

¹⁵ Shetland Islands Council – Natural Heritage (<u>www.shetland.gov.uk/developmentplans/SIC-NaturalHeritage.asp</u>)

none of these sites contain marine elements, they may still need to be considered if a marine development were to include coastal or terrestrial infrastructure (such as piers, sheds, roads, ground running cables, etc.) or where a marine development could have an effect on how marine reliant breeding birds used the adjacent marine areas.

A1.1.8 Protecting LNCS

Local Nature Conservation Sites are protected under policy *MP COAST2:* Developments on or near to a Local Nature Conservation Site (LNCS) within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021¹⁶ (pages 54-56)¹⁷.

Policy MP COAST2: Developments on or near to a Local Nature Conservation Site (LNCS)

Development that affects a Local Nature Conservation Site (LNCS) will only be permitted where:

- a) it will not adversely affect the integrity of the area or the qualities or purposes for which it has been identified; and
- b) any such effects are clearly outweighed by social, environmental, or economic benefits.

¹⁶ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

¹⁷ Policy *MSP HER2* within the 4th Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

 Table A. 6
 Local Nature Conservation Sites (LNCS) adjacent to the Sullom Voe Harbour Area.

Site	Primary Interest	Relevance	Features	Condition
West Sandwick (28)	Habitat	Coastal	Dunes/Dunes grasslands supporting - Bulbous buttercup (Ranunculus bulbosus) - Autumn gentian (Gentianella amarella) - Curved sedge (Carex maritima)	Favourable, although some eutrophication in parts due to feeding with black bale silage
Ollaberry Meadow (10)	Habitat	Coastal	 An unimproved, herb-rich, neutral meadow One of two sites in Shetland where quaking grass (<i>Briza media</i>) is found 	Unfavourable, grazing levels too heavy during spring/summer
Maggie Kettle's Loch (46)	Geology	Coastal	 An exposure of tsunami deposit in the peat that is related to the Storegga Slide 	Favourable
Bordigarth (41)	Species	Marine reliant species	 Breeding Schedule 1 bird species – whimbrel Secondary Interest – Breeding Schedule 1 bird species – red-throated diver 	Whimbrel population in decline but habitat in favourable condition
Burn of Twa- Roes (34)	Species	<400 metres from the coast	 Banks of burn planted with native trees and hawkweeds (<i>Hieracium breve</i>) which is a UK Biodiversity Action Plan (UKBAP) species Good examples of juniper (<i>Juniperus communis</i>) and greater sundew (<i>Drosera anglica</i>) 	Favourable
Voxter Wood (39)	Habitat	<400 metres from the coast	 Plantation woodland that is a valuable education resource and is already used for educational and recreational purposes 	Favourable but limited conservation interest

A1.1.9 SSMO Closed Areas

The Shetland Shellfish Management Organisation (SSMO)¹⁸ has worked closely with the inshore fishing industry to protect areas of the seabed that support sensitive species and habitats. These include horse mussel beds (*Modioulus modiolus*), seagrass beds (*Zostra* species), and maerl beds that have been closed to scallop dredging gear. The areas have been surveyed by the NAFC Marine Centre UHI to ensure the spatial extent of the habitats are known and appropriate measures can be put in place.

There are currently three SSMO Closed Areas within the Sullom Voe Harbour Area (Table A. 7 and Figure A. 1).

Table A. 7 SSMO Closed Areas within the Sullom Voe Harbour Area.

Site	Species	Status
Ness of Queryfirth, Yell Sound (Area 04)	Horse mussel bed (Modiolus modiolus)	Statutory closure
Sullom Voe (Area 05)	Horse mussel bed (Modiolus modiolus)	Statutory closure
Haggrister (Area 19)	Seagrass bed	Statutory closure

A1.1.10 Protecting SSMO Closed Areas

SSMO Closed Areas are protected under policy *MP MPA4: Habitat Protected Areas* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021¹⁹ (page 49).

Policy MP MPA4: Habitat Protected Areas

Developments or activities likely to have a significant effect on features protected within an SSMO closed area* will only be permitted where it can be demonstrated that:

- a) there will be no adverse direct or indirect effect to the feature's integrity or important physical features; or
- b) mitigation measures are included to minimise the impacts to the priority marine habitat or species including species behaviour such as breeding, feeding, nursery, or resting; or
- c) there is no reasonable alternative or less ecologically damaging location; and
- d) the reasons for the development clearly outweigh the value of the feature by virtue of social or economic benefits of national importance.

(*Those which were in place by December 2019)

A1.1.11 Seal Haul-Out Sites

Under Section 117 of the Marine (Scotland) Act 2010, Scottish Ministers, consulting with the Natural Environment Research Council (NERC), are permitted to designate specific seal haul-out sites to provide protection for seals from intentional or reckless harassment. Seal haul-out sites are locations on land where seals come ashore to rest, moult, or breed. In 2014, the Scottish Government identified 194 seal haul-out

¹⁸ Shetland Shellfish Management Organisation (SSMO; <u>www.ssmo.co.uk</u>)

¹⁹ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2019 (www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

sites which were designated through The Protection of Seals (Designation of Haul-Out Sites) (Scotland) Order 2014²⁰.

There are 47 designated seal haul-out sites in Shetland, nine of which are within the Sullom Voe Harbour Area (Table A. 8 and Figure A. 1).

Table A. 8 Designated seal haul-out sites within the Sullom Voe Harbour Area.

Site Number	Site
SH-020	Point of Bugarth
SH-032	Head of Calsta
SH-028	Little Holm
SH-019	Skea Skerries (Yell Sound)
SH-007	Lamba
SH-022	Tinga Skerry
SH-009	Sligga Skerry and North End of Bigga
SH-008	Little Roe
SH-006	Ungam

A1.1.12 Protecting Seal Haul-Out Sites

Designated seal haul-out sites are protected under policy *MP SPCON3: Development and Designated Seal Haul-Outs* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021²¹ (page 70).

Policy MP SPCON3: Development and Designated Seal Haul-Outs

Developments or uses which would result in an activity that harasses*, pesters, torments,, troubles, or attacks a seal on a designated haul-out site, or causes a significant proportion of seals on a haul-out site to leave that site either more than once or repeatedly, will not be permitted.

*See Marine Scotland guidance on seal haul-outs (see footnote 15)

A1.1.13 Geosites

The geological diversity in the Shetland Islands has been recognised by achieving European and UNESCO Global Geopark status in recognition of its internationally important geological heritage. In 2018 there were 71 Geoparks in the European Geopark Network and 140 in the Global Network²². An important aspect of the Shetland Geopark is its diversity of Geosites; sites important for their geology or geomorphology²³. Of the 107 Geosites in the Shetland Islands, 47 are geological SSSIs or part of a geological SSSI and a further five are on biological SSSIs.

²⁰ Scottish Government – seal haul-out sites (<u>www2.gov.scot/Topics/marine/marine-environment/species/19887/20814/haulouts</u>)

²¹ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

²² UNESCO Global Geoparks (www.unesco.org/new/en/natural-sciences/environment/earth-sciences/unesco-global-geoparks)

²³ Geopark Shetland (www.shetlandamenity.org/geopark-shetland)

Within the Sullom Voe Harbour Area there are nine Geosites of coastal geological or geomorphological significance. There are an additional two Geosites located within 270 metres of the Sullom Voe Harbour Area (Table A. 9 and Figure A. 1).

Table A. 9 Geosites within the Sullom Voe Harbour Area.

Site	Feature	Significance	Status	
West Sandwick- Yell (29)	Sand dune and machair	Local	N/A	
Ness of Sound (30)	Double tombolo Nesting Fault	Local	N/A	
Ell Wick (104)	Red leucocratic Eastern Granite has been faulted against diorite	Local	N/A	
Back of Ollaberry (40)	Exposure of Walls Boundary Fault Best shear fault exposure in UK	National	N/A	
Maggie Kettle's Loch (46)	Tsunami deposit in peat related to Storegga Slide	International	LNCS	
Quoys of Garth, Garths Voe (47)	Pollen record Tsunami deposit in peat related to Storegga Slide	International	SSSI, GCR*	
Houb of Scatsta (49)	Tsunami deposit in peat related to Storegga Slide	International	N/A	
Valayre Quarry and Burn of Valayre (51)	Valayre Gneiss (boundary between Moine and Dalradian supergroups in Shetland)	National	SSSI, GCR*	
Brig of Collafirth (36)	Ronas Hill granophyre and andesite xenoliths	Local	N/A	
Geosites adjacent to Sullom Voe Harbour Area				
Fethaland (32)	Steatite and magnetite	National	SSSI, GCR*	
Virdins Quarry (53)	Possibly globally unique features of magma mixing	International	N/A	

^{*}Geological Conservation Review

A1.1.14 Protecting Geosites

Shetland's marine and coastal geodiversity, including Geosites, are protected by policy *MP GEOD1: Safeguarding Marine Geodiversity* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021²⁴ (pages 79-81)²⁵.

²⁴ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

partnership/sirmp-2019)
²⁵ Policy *MSP HER8* within the 4th Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the Local Development Plan 2014.

Policy MP GEOD1: Safeguarding Marine Geodiversity

Development will only be permitted where appropriate measures are taken to protect or enhance important marine and coastal geological and geomorphological resources and sites, including protected features of SSSIs and MPAs, Geological Conservation Review sites, and Geosites identified by Geopark Shetland for their educational or research value.

Proposals that would have an unavoidable effect on marine geodiversity will be permitted only where it has been demonstrated that:

- a) the development will have benefits of over-riding public interest, including those of a social or economic nature, that outweigh the local, national, or international contribution of the affected area in terms of its geodiversity; and
- b) any loss of marine geodiversity is reduced to acceptable levels by mitigation, and a record is made prior to any loss.

A1.1.15 National Scenic Areas (NSAs)

National Scenic Areas (NSAs) are designated under the Town and Country Planning (National Scenic Areas) (Scotland) Designation Directions 2010. The legislation defines NSAs as areas "of outstanding scenic value in a national context" for which special protection measures are required²⁶.

Seven separate areas of coastal landscape in Shetland have been designated as an NSA. One of these seven areas includes Fethaland at the north end of the Sullom Voe Harbour Area"

A1.1.16 Local Landscape Areas (LLAs)

Local Landscape Areas (LLAs), following Scottish Government policy, is the term used for local landscape designations.

All local landscape designations:

- Help to protect a landscape from inappropriate development
- May encourage positive landscape management
- Play an important role in developing an awareness of the landscape qualities that make a particular area distinctive
- Promote a community's sense of pride in its surroundings²⁷

Proposed LLAs (pLLAs) have been introduced locally to help protect and enhance some of Shetlands' unique environment. There are 17 pLLAs in Shetland, three of which run along the coastal areas within the Sullom Voe Harbour Area and one outside, but adjacent to it (Table A. 10 and Figure A. 1). These are terrestrial areas designated for their exceptional landscape which may include coastal landscapes and views of the coast or seas (sometimes referred to as 'seascape'). Site 12, Lunna Ness and Lunning, is outside of but adjacent to the Sullom Voe Harbour Area, and has been included as the pLLA is, in part, designated for its visual amenity with the site offering views towards the southern boundary of the Sullom Voe Harbour Area.

²⁶ NatureScot-National Scenic Areas (www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/national-designations/national-scenic-areas/national-scenic-areas)

²⁷ NatureScotLocal Landscape Areas (<u>www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/local-designations/local-landscape-areas</u>)

 Table A. 10
 Local Landscape Areas (LLA) within the Sullom Voe Harbour Area.

Site	Features	Development Guidelines ²⁸
West Sandwick to Gloup Holm (17)	 Highly isolated Wide views Limited active settlement, isolated pockets of historic settlement Cultural heritage 	 Encourage sustainable and responsible recreational access Seek to retain the unsettled isolation of this area, retaining its cultural and natural views
Ronas Hill (1)	 Shetland Landmark, highest point of the islands Distinctive red granite geology Largely empty, uninhabited hills and moors Rocky plateau, steep cliffs 	 Ronas Hill and north shore of Ronas Voe should remain an area of very limited human influence Carefully consider the siting and design of any proposed development along south shore of Ronas Hill Seek to ensure that new and existing fish farms and particularly the associated onshore components can be assimilated into the landscape Encourage sustainable and responsible recreational access into the landscape
Nibon and Mangaster (2)	 Rugged landscape of rocky coastal hills interspersed with numerous lochans Sequence of long views along voes and sudden opening of wide panoramas Intricate coastal edge Panoramic views across St Magnus Bay 	 Seek to retain undeveloped wildness character: any development should be at the smallest scale, and should be sensitively sited and designed Encourage sustainable and responsible recreational access into this landscape Maintain the wider setting of the NSA through control of development
Lunna Ness and Lunning (12)	 Attractive settlements around Vidlin Voe with a distinctive pattern Long, narrow and remote headland of Lunna Ness Rugged moorland hills around Lunna Ness Historic features and associations at Lunna, including the ancient kirk and the Shetland Bus 	 Seek to preserve the distinctive character of the settlement around Vidlin Voe Ensure that any development is appropriate in scale, siting, and design and that it complements the landscape character of the area Protect the undeveloped nature of Lunna Ness, while continuing to promote responsible access to sites in the area

-

²⁸ Shetland Islands Council (2012). Draft Supplementary Guidance: Local Landscape Areas. Shetland Local Development Plan 2012.

A1.1.17 Protecting NSAs and LLAs

National Scenic Areas and LLAs are protected under policy *MP VIS1: Safeguarding the National Scenic Area (NSA) and Local Landscape Areas (LLAs)* within the Shetland Islands Regional Marine Plan (SIRMP) 2021²⁹ (page 82)³⁰.

Policy MP VIS1: Safeguarding the National Scenic Area (NSA) and Local Landscape Areas (LLAs)

Developments that affect the NSA or a LLA will only be permitted where:

- a) it will not adversely affect the integrity of the area or the qualities or protected features for which it has been designated, or
- b) any such adverse effects are clearly outweighed by social, environmental, or economic benefits of national importance for the NSA and local importance for LLAs.

A1.1.18 Wild Land Areas

Wild Land Areas, identified by NatureScot, describe the most extensive areas of high wildness.

NatureScot describe wild land as:

- Being a big part of Scotland's identity
- Bringing significant economic benefits attracting visitors and tourists
- Offering people psychological and spiritual benefit
- Providing increasingly important havens for Scotland's wildlife³¹

There is one area in Shetland designated as a Wild Land Area, Ronas Hill and North Roe (42), which does not include the coastal boundary of, but is adjacent to, the Sullom Voe Harbour Area, (see Figure A. 1) and has been included as the site offers panoramic views of the surrounding area, including the Sullom Voe Harbour Area.

A1.1.19 Protecting Wild Land Areas

The visual amenity within areas of high wildness, including the Wild Land Area, is protected under policy *MP VIS2: Safeguarding Seascape Character and Visual Amenity* within the Shetland Islands Regional Marine Plan (SIRMP) 2021 (page 83).

Policy MP VIS2: Safeguarding Seascape Character and Visual Amenity

Any development or activity must demonstrate:

a) how the proposal takes into account existing character and quality of local landscape/ seascape; how highly it is valued; and its capacity to accommodate change specific to any development.

b) a high standard of design, in terms of siting, scale, colour, materials and form to ensure the various types of development or coastal use change might best be accommodated within particular landscape and seascape types.

²⁹ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

Policy *MSP HER9* within the 4th Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

³¹ NatureScot Landscape policy: wild land (<u>www.nature.scot/professional-advice/landscape/landscape-policy-and-guidance/landscape-policy-wild-land</u>)

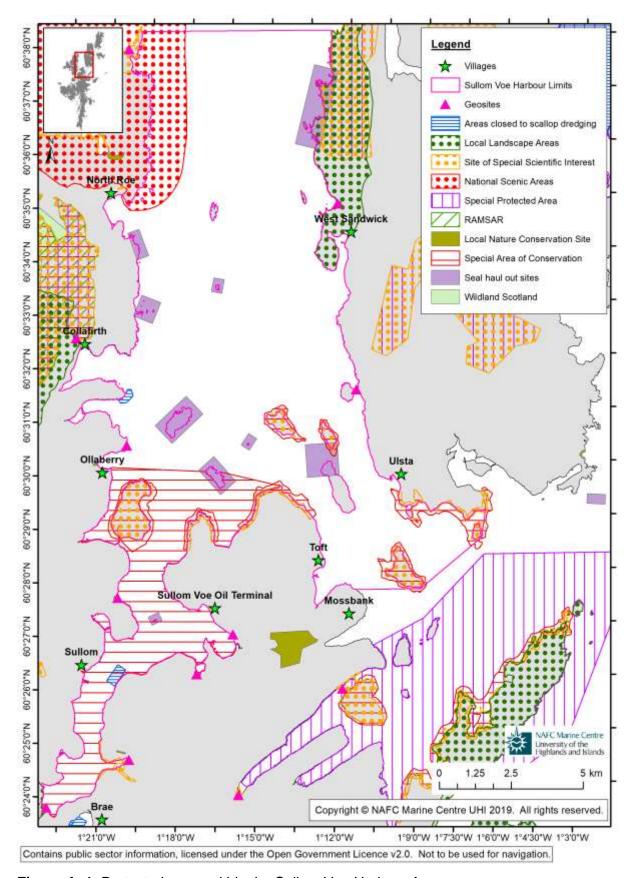


Figure A. 1 Protected areas within the Sullom Voe Harbour Area.

A1.2 Priority Marine Features (PMFs)

NatureScot and Marine Scotland have identified the most important components of Scotland's marine biodiversity. Priority Marine Features (PMFs) are a prioritised list of 81 marine habitats and species considered to be of national conservation importance³². Forty-four PMF species and habitats are known to be present in waters around Shetland and should be safeguarded in order that ecosystem health is maintained.

Within the Sullom Voe Harbour Area there are six species and habitats that are classed as PMFs:

- Dunes
- Horse mussel beds (Modiolus modiolus)
- Important mud habitats
- Kelp areas
- Rock areas
- Saltmarsh

Other PMF habitats might be present but are not recorded. Mobile PMF species including otter and cetaceans will also occur, for example. Priority Marine Features are illustrated on Figure A. 2 with the exception of horse mussel beds which are represented in Figure A. 1 within the SSMO Closed Areas which have been created to protect the beds from dredge fisheries (see Section A1.1.9 for further information).

A1.2.1 Protecting Priority Marine Features

Priority Marine features are protected under policy *MP SPCON4: Priority Marine Features* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021³³ (page 73)³⁴.

Policy MP SPCON4: Priority Marine Features

Developments or uses must demonstrate they will have no significant adverse direct or indirect effect on a Priority Marine Feature (PMF) unless:

- a) There is no reasonable alternative at a less ecologically damaging location:
- b) mitigation is included to minimise the impacts; and
- c) the reasons for the development clearly outweigh the value of the feature by virtue of social or economic benefits of national importance.

³² Priority Marine Features (PMFs; <u>www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/priority-marine-features-scotlands-seas</u>)

³³ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

Policy *MSP HER7* within the 4th Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

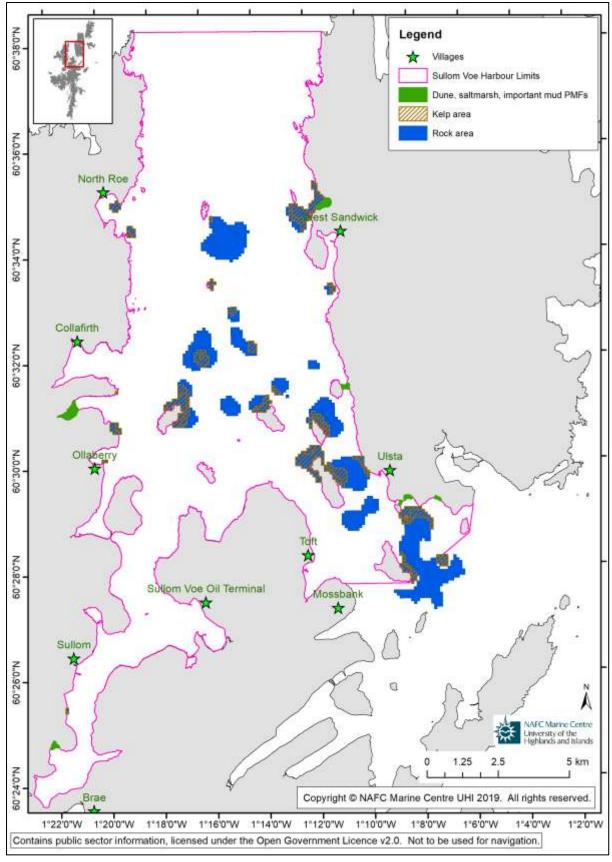


Figure A. 2 Priority Marine Features (PMFs), excluding horse mussel beds (*M. modiolus*) within the Sullom Voe Harbour Area.

A1.3 Historic Environment

The historic environment includes all aspects of the environment resulting from the interaction between people and places through time, including surviving physical remains of past human activity, whether visible, buried, or submerged. It helps give a sense of place, well-being, and cultural identity and enhances regional and local distinctiveness. Shetland's coasts and sea have been an integral part of Shetland's cultural identity. It is important that this inheritance is managed and protected so that future generations will be able to enjoy it. Marine historic assets around Shetland's coast include: the wrecks of boats, ships, submarines, and aircraft; harbours, lighthouses, and other built structures; drowned terrestrial archaeological sites; and cultural landscapes.

The Scottish Government's aims are to:

- Advance knowledge about marine heritage and make information widely available:
- Improve stewardship of key marine heritage sites; and
- Develop wider understanding and enjoyment of marine heritage³⁵

Some significant heritage assets are designated and protected under national legislation. Designated heritage assets may include:

- Scheduled Monuments
- Historic Marine Protected Areas
- Listed Buildings

Shetland's archaeology is a key part of what gives the islands their distinctive and unique character. The archaeology includes Scheduled Sites but also includes other sites which are of 'schedulable' quality, in addition to sites of regional and local importance. Shetland Amenity Trust provides the Regional Archaeology Service on behalf of the local planning authority. They are responsible for maintaining an up-to-date record known as the Shetland Sites and Monuments Record (SMR). The SMR currently holds information on about 9000 sites, a high proportion of which are coastal/marine. Archaeology, once designated at a site, defines the 'dominant use' for cultural and historic reasons.

A1.3.1 Scheduled Monuments

Historic Environment Scotland, a non-departmental public body, takes the lead in providing statutory protection for nationally important elements of Shetland's coastal and marine historic environment through scheduling of ancient monuments³⁶.

Scheduled Monuments are recognised by law through the Ancient Monuments and Archaeological Areas Act 1979. The aim of scheduling is to preserve the most significant sites and monuments as far as possible in the form in which they have been passed down to us today.

³⁵ Our Place in Time: The Historic Environment Strategy for Scotland (2014). The Scottish Government (<u>www.gov.scot/publications/place-time-historic-environment-strategy-scotland</u>)

³⁶ Historic Environment Scotland (<u>www.historicenvironment.scot/advice-and-support/listing-scheduling-and-designations/scheduled-monuments</u>)

Within the Sullom Voe Harbour Area there are 11 Scheduled Monuments, most of which are coastal with only two being further inland, approximately 150 m from the coast (Table A. 11 and Figure A. 3). One of the two adjacent sites is a coastal monument (Infield, broch) which lies 900 m south of the Sullom Voe Harbour Area limits near Mossbank. The second adjacent site (Ladie Hill, cairn) is an inland site 500 m from the coastline, southeast of Sullom Voe.

Table A. 11 Scheduled Monuments within and adjacent to the Sullom Voe Harbour Area.

Site	Features	Importance
Fedeland, fishing station and prehistoric house at Isle of Fethaland (SM6072)	Finest surviving example of a 'haaf' fishing station	National
Kame of Isbister, settlement, Burravoe (SM3880)	Prehistoric domestic and defensive: settlement	
Birrier, settlement 250 m NW of Loch of Birriesgirt (SM3966)	Ecclesiastical: monastic settlement	
Meishie o' Stanes, two cairns 120 m N of Collafirth Pier (SM3568)	Two burial cairns of the Neolithic or Bronze age	National
Skeo Knowe, mound 200 m E of Nissetter (SM3562)	Prehistoric ritual and funerary: mound	
The Kames, coastal defence battery 100 m SE of Calback Ness (SM10756)	WWII coastal defence battery	National
Holm of Copister, broch 850 m SW of Southerness (SM2091)	Iron age broch and remains of two outer defenses	National
Norden, burnt mound 160 m ESE of (SM3557)	Burnt mound	National
Auchensalt, burnt mound 85 m E of (SM3556)	Burnt mound	National
Fugla Ness, broch 330 m NNW of (SM2080)	Iron Age broch	National
Head of Brough, broch, West Yell (SM2071)	Iron Age defended settlement and broch with external defences	National
Scheduled Monuments adjacent to Sullor	m Voe Harbour Area	
Infield, broch 215 m SE of (SM2058)	Iron Age broch	National
Ladie Hill, cairn 325 m E of 1 Gossaford (SM3558)	Burial cairn from Neolithic or Bronze Age	National

For further information, please see Historic Environment Scotland's portal (http://portal.historicenvironment.scot).

A1.3.2 Protecting Scheduled Monuments

Scheduled Monuments within the marine and coastal environment are protected under policy *MP HIS2: Safeguarding Nationally Important Heritage Assets* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021³⁷ (pages 88-90)³⁸.

³⁷ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

55

³⁸ Policy *MSP HIS2* within the 4TH Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

Policy MP HIS2: Safeguarding Nationally Important Heritage Assets

Development which results in substantial loss or harm to a scheduled monument or the integrity of its setting should not be permitted unless there are exceptional circumstances.

Where the loss of the whole or a material part of a heritage asset's significance is deemed justifiable, suitable mitigating actions will be required to be undertaken by the developer in agreement with the relevant regulator and advisors (e.g. the Regional Archaeology Service) to record and advance understanding of the significance of the heritage asset before it is lost.

If archaeological discoveries are made during any development, a professional archaeologist should be given access to inspect and record them. All requirements should be based on advise from the relevant regulator and advisors.

Scheduled Monuments are legally protected through the Ancient Monuments and Archaeological Areas Act 1979 as well as the Council's Local Development Plan (LDP). Policy HE4 Archaeology of the LDP states that Scheduled Monuments should be preserved in situ, and within an appropriate setting. Developments that may have an adverse effect on Scheduled Monuments or the integrity of their settings should not be permitted unless there are exceptional circumstances. Most works on scheduled monuments require scheduled monument consent from Historic Environment Scotland whose decision making is directed by the Historic Environment Policy for Scotland and their Scheduled Monument Consents Policy.

A1.3.3 Listed Buildings

Listing is the process that identifies, designates, and provides statutory protection for buildings of special architectural and historic interest. This work is undertaken by Historic Environment Scotland for Scottish Ministers. Listing is carried out under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997³⁹.

The criteria for identifying buildings which are of special architectural or historic interest are set out in the Scottish Historic Environment Policy and are broadly:

- Age and rarity;
- · Architectural or historical interest; and
- Close historical association.

There are currently 345 listed buildings and structures in Shetland⁴⁰. Within the Sullom Voe Harbour Area there are 16 listed buildings all of which are coastal, being no more than 60 m from the sea and some are listed for their piers, sea walls, and beach steps. There are three coastal listed buildings adjacent to the Sullom Voe Harbour Area, two at Mossbank (Mossbank Lighthouse and Mossbank Böd), which lie only 900 m from the Sullom Voe Harbour Area limits and one at Garth (Garth Pony Pund) which is more inland, approximately 500 m from the shore (Table A. 12 and Figure A. 3).

³⁹ Historic Environment Scotland-Listed Buildings (<u>www.historicenvironment.scot/advice-and-support/listing-scheduling-and-designations/listed-buildings</u>)

⁴⁰ Shetland Islands Council, Historic Buildings and Areas (<u>www.shetland.gov.uk/developmentplans/HistoricBuildingsAreas.asp</u>)

 Table A. 12
 Listed Buildings within, and adjacent to, the Sullom Voe Harbour Area.

Site	Description	Category
North Roe, North Haa, including walls and outbuildings (LB44559)	Early 19 th century Haa	С
North Roe Methodist Church, including railings (LB44558)	1878 mission chapel and house	С
North Roe, Post Office (LB44560)	Circa 1900 traditional houses with post office	С
North Roe, Telephone kiosk (LB44561)	Sir Giles Gilbert Scott 1953. Standard K6 telephone kiosk	В
North Roe, Lochend House, including outbuilding and garden wall (LB44557)	Late 18 th century Haa	С
Ollaberry, Ollaberry Kirkyard Monument (LB18687)	John Forbes, sculptor, 1754	В
Ollaberry, Ollaberry Böds, including retaining wall and steps (LB44563)	Early 19 th century trading booths including rubble retaining wall to sea with rough stone steps to beach	С
Ollaberry, Ollaberry Pier, including derrick and walls (LB44564)	19 th century harl-pointed random rubble pier.	В
Ollaberry, Ollaberry House (Haa of Ollaberry), including outbuilding and boundary walls (LB18691)	1789 Haa	В
Ollaberry, Bardister Haa, with outbuilding and garden walls (LB44562)	Late 18 th century Haa	В
Brae, Voxter House (now Voxter Centre), including walled garden (LB44526)	1869 former manse and walled garden	В
Mossbank, Mossbank Haa, including outbuildings and wall (LB44531)	18 th century Haa	С
Mossbank, Erlangen including garden wall (LB44529)	Early 19 th century, 2 storey and attic, 3 bay symmetrical house	С
Ulsta, Pier House (LB18679)	Later 19 th century single storey and loft 5-bay symmetrical former pier building (now shop)	С
West Yell, West Yell Schoolhouse, including playground and garden walls and toilet buildings (LB45325)	Mid-19 th century former school buildings	С
West Sandwick, North Haa (West Sandwick House), including garden walls, gates and gatepiers, walled garden and pier (LB18648)	17 th century Laird's house	A
Listed Buildings adjacent to Sullom Voe Ha		
Mossbank, Mossbank Lighthouse (LB44532)	Lighthouse	С
Mossbank, Mossbank Böd (LB44530)	Early 19th century trading booth	С
Garth, Pony Pund, including gates and adjoining outbuildings (LB44527)	Later 19 th century square pony pund	В

A1.3.4 Submerged Recorded Sites

Submerged Recorded Sites are included in the Shetland Sites and Monuments Record (SMR) maintained by the Shetland Amenity Trust. The SMR is the primary tool used by the Archaeology Section of the Shetland Amenity Trust for Development Control⁴¹.

There are 51 Submerged Recorded Sites within the Sullom Voe Harbour Area including wrecks, shipwreck graves, and aircraft. There are also numerous submerged recorded sites within the marine environment adjacent to the Sullom Voe Harbour Area (Figure A. 3).

There is the potential within the Sullom Voe Harbour Area for there to be undiscovered submerged archaeology, as the marine environment in this area is flooded land so the potential to find submerged terrestrial archaeology is high.

A1.3.5 Protecting Listed Buildings and Recorded Sites

Listed buildings are protected as a terrestrial asset within the Shetland Islands Council's Local Development Plan, 2014⁴². Policy *HE2 Listed Buildings* states that any development affecting a listed building, or its setting, should preserve the building, its setting, and any features of special architectural or historic interest that it possesses.

Listed buildings and recorded sites are protected as locally important heritage assets within the Shetland Islands Regional Marine Plan (SIRMP) 2021⁴³. Policy *MP HIS3:* Safeguarding Locally Important Heritage Assets (pages 90)⁴⁴ protects locally important archaeological resources which can include marine buildings such as böds, lighthouses, piers, and sea walls; and submerged archaeology such as wrecks.

Submerged archaeology may not prevent marine developments, but it is highly recommended that developers consult with the Regional Archaeology Service early in the development stage and have regard to the Shetland Islands Council's Local Development Plan and Supplementary Guidance – Historic Environment.

Policy MP HIS3: Safeguarding Locally Important Heritage Assets

All other archaeological resources should be preserved in situ wherever feasible. Where preservation in situ is not possible the consenting authority will ensure that developers undertake appropriate archaeological excavation, recording, analysis, publication, and archiving in advance of and/or during development.

Developments within the vicinity of heritage assets must respect the original structure in terms of design, scale and, where appropriate, setting.

⁴³ Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2 (https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

58

2021

⁴¹ Shetland Amenity Trust (www.shetlandamenity.org/sites-and-monuments-record)

⁴² Shetland Islands Council's Local Development Plan (www.shetland.gov.uk/planning/LocalDevelopmentPlan.asp)

⁴⁴ Policy *MSP HIS3* within the 4th edition of the Shetland Islands Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

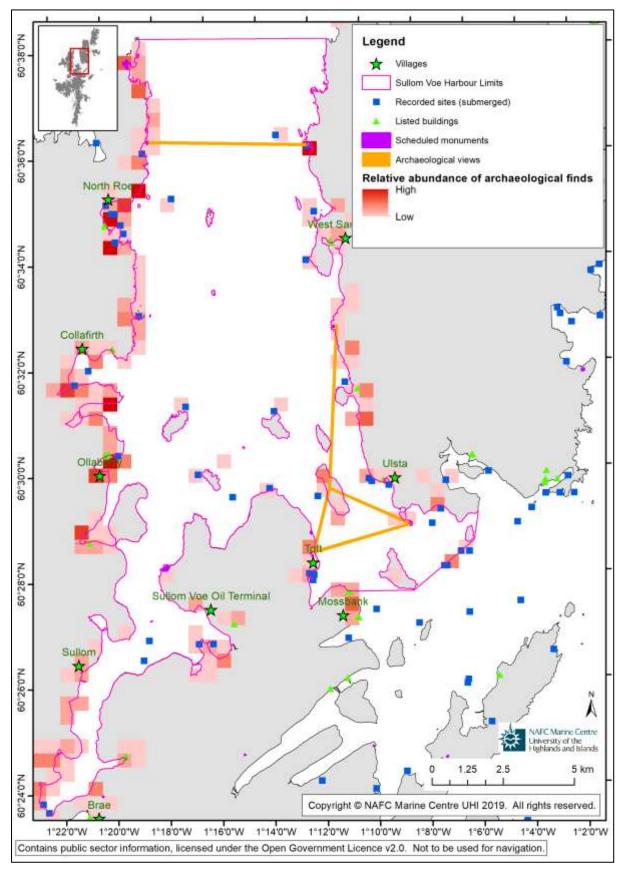


Figure A. 3 Archaeology within the Sullom Voe Harbour Area.

A1.4 Coastal Characteristics

A Coastal Character Assessment (CCA)⁴⁵ was undertaken in Shetland by the NAFC Marine Centre UHI with guidance from NatureScot. The assessment was undertaken as part of the ongoing development of the Shetland Islands' Marine Spatial Plan (SIMSP) and was completed in 2017.

The aim of the CCA was to gather information about various Coastal Character Types (CCTs) found around Shetland, the experiences the coast currently offers to local people and visitors, and any sensitivity to development, both inland and out to sea.

A pilot study for the CCA, began in 2014 and included Sullom Voe and Yell Sound (along with Bressay Sound), the remaining coastline around Shetland was surveyed in 2015 and 2016.

The coastal characteristics (as assessed within the CCA) found within the Sullom Voe Harbour Area are illustrated in Figure A. 4.

A1.4.1 Sullom Voe Coastal Characteristics

Sullom Voe is the longest voe in Shetland, running north to south. The north end opens up into Yell Sound and becomes narrower towards Brae in the south. The surrounding landscape is mainly rough grazing on heather clad hills with a large, industrialised area in Delting, including the Sullom Voe Oil and Gas Terminal, Sella Ness port, and Scatsta airport. Ronas Hill, standing at 450m, is the most dominant feature along the west side of the voe. The coastline is mainly low rocky coast with salt marsh, beaches, and low cliffs.

A1.4.2 Yell Sound Coastal Characteristics

Yell Sound is a large, undeveloped island sound with a north-south orientation. The north end is more exposed with views to open sea and the Ramna Stacks, before becoming more enclosed toward the south. The sound is scattered with several low-lying uninhabited islands. The landscape to the southern end of Yell Sound is mainly agricultural with scattered small settlements. The north has a more remote feel with large expanses of peat and heather moorland. Similar to Sullom Voe, Ronas Hill is a central landscape feature. The coastline is fragmented to the north, with high rock cliffs and steep banks. The scattered settlements are situated around small bays and voes with low rocky shores and beaches.

A1.4.3 Coastal Characteristics and Community Value

The high rock cliffs and steep banks that can be found at the north end of Yell Sound provide unrestricted views of dramatic scenery and are classified as 'isolated coast' within the Shetland CCA. This level of visual amenity is important to local communities and visitors and it allows people to experience and feel connected with the natural environment. The high rock cliffs and steep banks within the Sullom Voe Harbour Area, with a high visual amenity value, are illustrated in Figure A. 4.

⁴⁵ Shetland Coastal Character Assessment (<u>www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-coastal-character-assessment</u>)

Yell Sound is an undeveloped island sound with several offshore coastal and tidal islands. These have been classified as having a high level of wildness during an assessment carried out by NatureScot⁴⁶. Wildness offers people psychological and spiritual benefits and is an important aspect of what gives the local area its distinctive atmosphere.

Settlements within the Sullom Voe Harbour Area are generally small in size and concentrated to areas classified as 'small bays' and 'mini voes/firths' within the CCA (North Roe, Collafirth, Ollaberry, and West Sandwick). These areas often have good access to the coast and sea through development in the form of piers, marinas, and jetties, and from natural access from beaches, low banks, and low rocky shorelines. More developed areas include Sullom Voe Oil and Gas Terminal, Sella Ness, Toft, and Ulsta.

These access points are of high value to the local community from both a recreational and economic perspective. Local fishing vessels use the piers and marina at Collafirth, Toft and Sella Ness; inter-island ferry terminals are located at Toft and Ulsta; and Sullom Voe Oil and Gas Terminal and Sella Ness are important ports for the oil and gas industry.

Ease of access is important for both formal and informal recreational pursuits. Piers, jetties, and marinas provide access points for formal recreational activities such as fishing, rowing, sailing, cruising and other recreational activities. Beaches are important for informal recreational activities such as walking, hiking and dog walking, swimming, family and social activities, and hobbies such as reading, art, and creative writing.

These links to the marine and coastal environment directly contribute to the quality of life and well-being of communities. A strong connection to the coast can provide spiritual enrichment, cognitive development, and reflection.

A1.4.4 Protecting Coastal Characteristics

Seascape Character and Visual Amenity are protected under policy *MP VIS2:* Safeguarding Seascape Character and Visual Amenity within the Shetland Islands Regional Marine Plan (SIRMP) 2021⁴⁷ (page 83)⁴⁸.

⁴⁷ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

⁴⁶ NatureScot- Landscape policy: wild land (<u>www.nature.scot/professional-advice/landscape-landscape-policy-and-guidance/landscape-policy-wild-land</u>)

⁴⁸ Pages 98-104 of the 4th Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

Policy MP VIS2: Safeguarding Seascape Character and Visual Amenity

Any development or activity should demonstrate:

- a) how the proposal takes into account existing character and quality of local landscape/ seascape; how highly it is valued; and its capacity to accommodate change specific to any development.
- b) a high standard of design, in terms of siting, scale, colour, materials and form to ensure the various types of development or coastal use change might best be accommodated within particular landscape and seascape types.

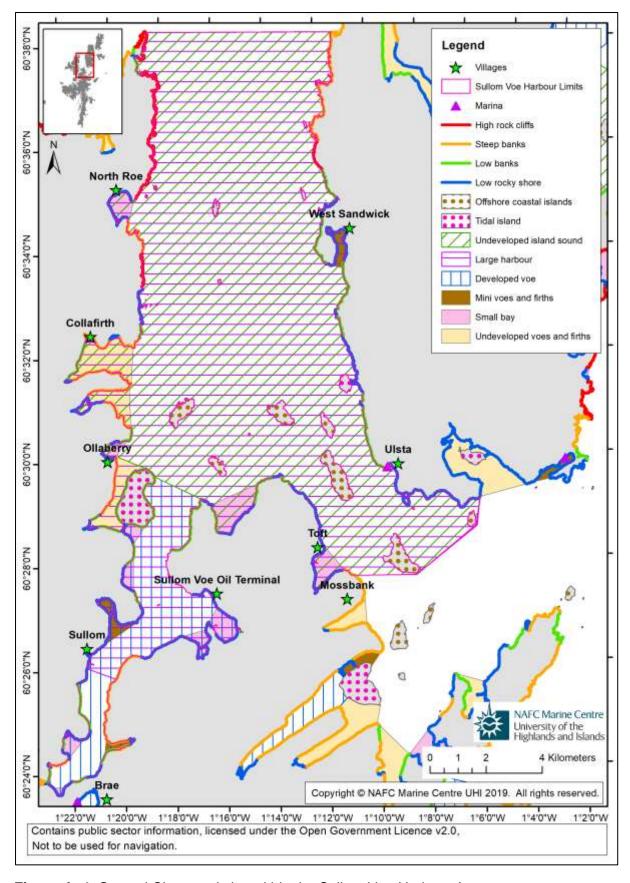


Figure A. 4 Coastal Characteristics within the Sullom Voe Harbour Area.

A2 Current Uses

A2.1 Sullom Voe Harbour Operations

The port of Sullom Voe is a major deep-water harbour and is owned and operated by Shetland Islands Council as the Harbour Authority⁴⁹.

The Sullom Voe Harbour Area was created to protect shipping coming in and out to the Sullom Voe Terminal. The Terminal was built between 1975 and 1981, with the first oil being received in November of 1978. Located on a 1000 acre site, it is one of the biggest oil and liquefied gas terminals in Europe. It handles oil and gas from oilfields in the North Sea and East Shetland Basin via the Brent, Ninian, and Clair pipelines. Gas is imported through the West of Shetland pipeline. The TOTAL Gas Plant is located near the Sullom Voe Terminal but is not as reliant on Sullom Voe Harbour operations due to its hydrocarbon import and export via pipelines (see Section A2.2).

The Sullom Voe Port Authority are legally responsible for port and harbour operations and for safeguarding shipping. Tanker and commercial vessel tracks can be seen in Figure A. 5.

A2.1.1 Protecting Navigational Safety

It is essential that port activity is maintained and that safe navigation in and out of the harbour area is not restricted. The Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021, has two policies relating to safeguarding ports and navigational safety. Policy MP PORT1: Harbour Plans and policy MP SHIP1: Safeguarding Navigation Channels and Port Areas (pages 32-33)⁵⁰.

Policy MP PORT1: Harbour Plans

All proposals for marine-related developments located within a designated harbour area must comply with any harbour plans, policies, directions, and by-laws in place within such designated harbour areas.

Policy MP SHIP1: Safeguarding Navigation Channels and Port Areas

Development proposals that would have an adverse impact on the efficient and safe movement or navigation of shipping to and from ports, harbours, marinas, and anchorages or the long-term operational capacity of a ferry operation will be refused. Where shipping may be displaced, developers may be required to quantify and consider the impacts of increased fuel use.

Developments which have the potential to restrict identified future expansion of important ports and harbours (e.g. proposals included in a local development plan or master plan) may be refused.

Pre-application consultation with Sullom Voe Harbour Authority is strongly advised.

⁴⁹ Shetland Islands Council- Sullom Voe Harbour (www.shetland.gov.uk/ports/sullomvoe)

⁵⁰ Policies *MSP PORT1* and *MSP SHIP1* within the 4th Edition of the Shetland Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

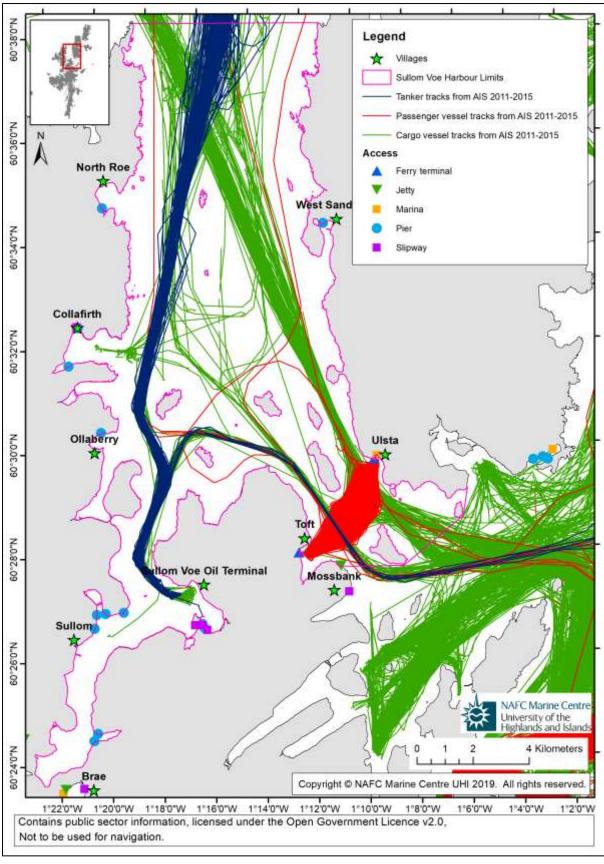


Figure A. 5 Vessel tracks, based on Automatic Identification System (AIS) tracking data within the Sullom Voe Harbour Area.

A2.2 Utility Cables and Pipelines

Utility cables (e.g. telecommunications, electricity) and pipelines (e.g. oil and gas, water) are buried deep in the seabed where possible. Where burial is not feasible, they tend to be placed on top of the seabed and protected, for example by rock armour.

There are seven pipelines running through the Sullom Voe Harbour Area and into the Sullom Voe Terminal or the TOTAL Gas Plant (Figure A. 6). One oil and two gas pipelines service the Sullom Voe Terminal connecting Shetland to the east of Shetland (Magnus) and west of Shetland (Plem) fields through liquified gas. The Clair pipeline brings oil to the Sullom Voe Terminal. The Tormore field is connected to the Total Gas Plant through an 18 inch gas pipeline, an 8 inch methanol pipe, a 6 inch hydraulic umbilical, and 2 inch condensate service line.

There are two submarine utility cables running between mainland Shetland and Yell connecting the Northern Isles to the Shetland mainland electricity and telecommunications networks. Existing utility cables and pipelines provide lifeline services to Shetland and its outer islands. Any damage to these cables can have a significant impact to these island communities, as well as requiring extra resources for repairs.

A2.2.1 Protecting Utility Cables and Pipelines

Policy *ACBP1: Avoidance of Cables and Pipelines* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021⁵¹ (page 36)⁵² aims to establish clear safety zones that address potentially serious public safety issues and disruption to lifeline services.

Policy MP ACBP1: Avoidance of Cables and Pipelines

Activities that could damage any cable or pipeline (e.g. dredging or mooring attachments to the seabed) must not be carried out in the following situations:

- a) within the 500m exclusion zone(s) established under the Petroleum Act 1987 around oil and gas platforms, well heads and associated pipelines; and
- b) within a 250m exclusion zone either side of utility (telecommunications, electricity, or water supply) cables or pipelines unless there is a proximity agreement in place with the asset owner.

⁵¹ Shetland Islands Amended Draft Regional Marine Plan (SIRMP) 2021 (https://www.nafc.uhi.ac.uk/research/marine-spatial-planning/shetland-islands-regional-marine-planning-partnership/sirmp-2019)

⁵² Policy *MSP ACBP1* within the 4th Edition of the Shetland Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

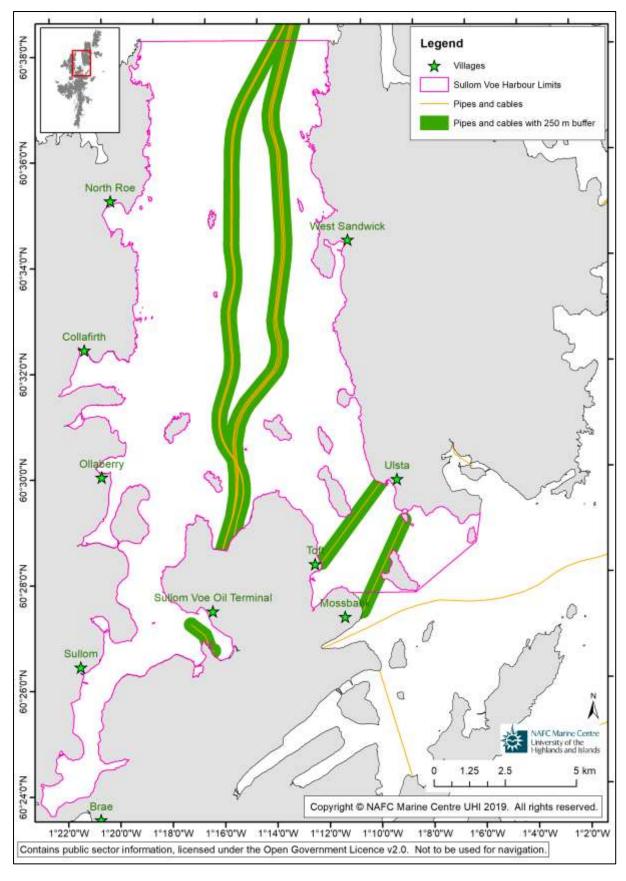


Figure A. 6 Cables and pipelines (with their associated buffer) within the Sullom Voe Harbour Area.

A2.3 Commercial Fishing

Shetlanders have fished the waters around their islands for thousands of years, and fishing remains one of Shetland's most important industries with many businesses still directly and indirectly dependant on commercial fishing⁵³.

In 2019 there were 221 active commercial fishing vessels in Shetland⁵⁴. Virtually all of them owned by local shareholder crewmen, and many are based in rural areas of Shetland where there may be few alternative opportunities for economic activity.

More than £81 million worth of fish and shellfish were landed in Shetland in 2019, making Shetland one of the UKs leading fish ports (second only to Peterhead). One quarter of all finfish landed in Scotland and almost one sixth of all finfish landed in the UK are landed in Shetland, and more finfish are landed in Shetland than in all of England and Wales combined⁵⁵. The conservation of local fisheries is therefore very important for socio-economic reasons.

The Shetland Fishermen's Association (SFA) and the Shetland Shellfish Management Organisation (SSMO) respond to proposals for marine developments on behalf of their members. It should be noted that in some instances it may also be appropriate to contact the Scottish Fishermen's Federation (SFF), where non-Shetland vessels may be affected.

A2.3.1 Demersal Fishery

Demersal fish are those that live on or near the seabed and include species such as cod, haddock, whiting, saithe, and monkfish and are fished mainly with bottom trawling nets. Demersal stocks that are distributed around Shetland are fished by both Scottish vessels and vessels from other (mainly EU) countries.

Location data from the EU Vessel Monitoring System (VMS) for all EU vessels exceeding 12 m in overall length, shows fishing activity in the north of Yell Sound which falls within the Sullom Voe Harbour Area (Figure A. 7).

A2.3.2 Squid Fishery

Squid fishing (species: *Loligo forbesii*) is often undertaken in inshore areas by the inshore fishing fleet (vessels generally <10 m in length). Squid fishing areas were identified running north-south along the western shore of Yell Sound within the Sullom Voe Harbour Area (Figure A. 8).

⁵³ Shetland Islands Council – Shetland Employment Survey 2017 (<u>www.shetland.gov.uk/news-advice/Shetland-Employment-Survey-2017.asp</u>)

⁵⁴ Marine Scotland (2020) Scottish Sea Fisheries Statistics 2019 (<u>www.gov.scot/publications/scottish-sea-fisheries-statistics-2017</u>)

⁵⁵ Napier, I., R (2020) Shetland Fisheries Statistics 2019. NAFC Marine Centre UHI report.

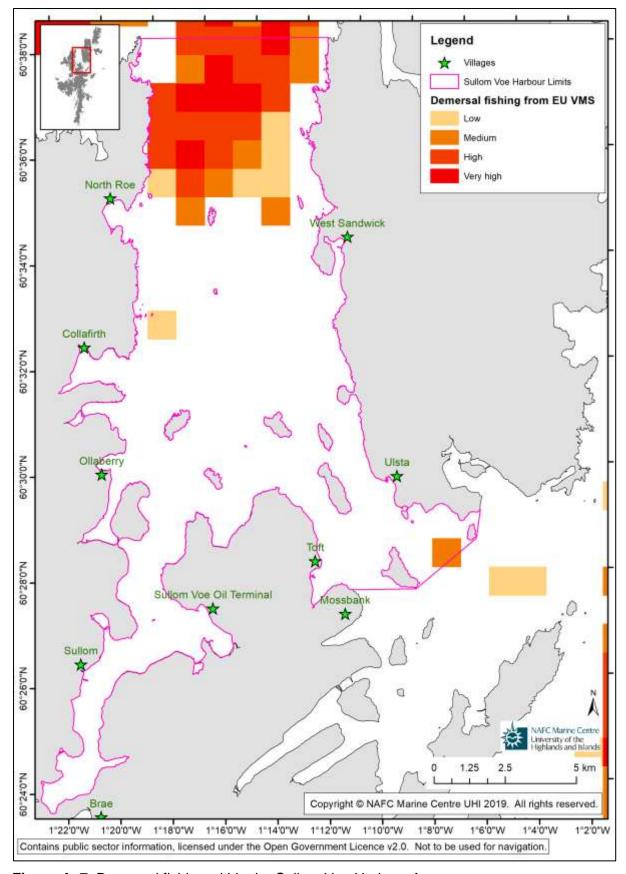


Figure A. 7 Demersal fishing within the Sullom Voe Harbour Area.

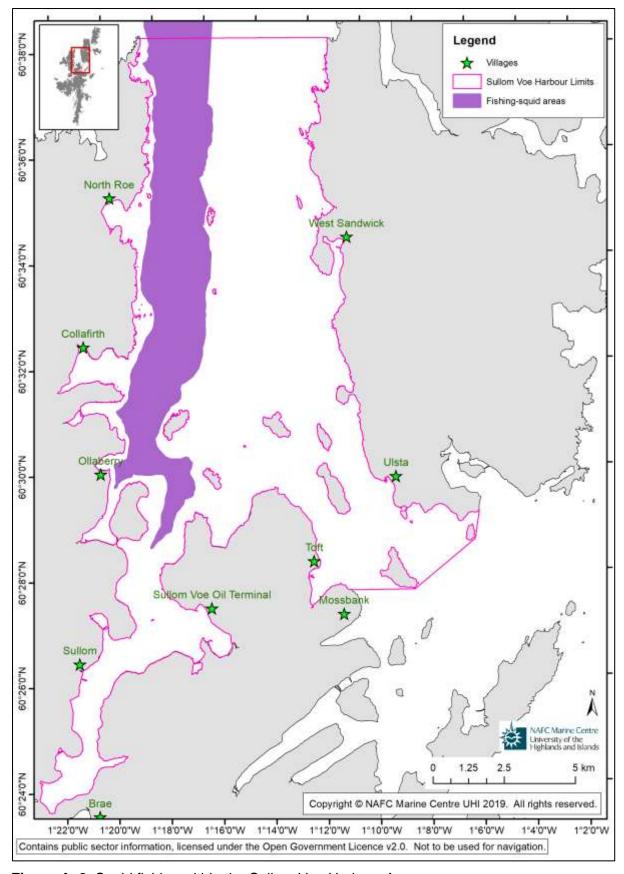


Figure A. 8 Squid fishing within the Sullom Voe Harbour Area.

A2.3.3 Shellfish Fishery

Within six nautical miles of the Shetland coast, shellfish fishing is managed by the Shetland Shellfish Management Organisation (SSMO) via the Shetland Regulated Fishery (Scotland) Order 2012. The SSMO manages fishing methods and fishing gear, restricts fishing seasons, sets minimum landing sizes for shellfish, manages shellfish beds for stock conservation, and protects sensitive habitats through spatial closures. The SSMO also undertakes the collection of data which allows a comprehensive stock assessment to be developed year on year. Only vessels with a SSMO licence are permitted to fish commercially within the six nautical mile limit around Shetland⁵⁶.

The main shellfish stocks fished locally around Shetland are king scallops, brown crab, velvet crab, European lobster, and common whelk (buckie), but green crab and queen scallops also have a commercial market.

Since 2010, the SSMO has implemented a spatial management framework that prohibits dredge fishing for shellfish in designated areas where specific Priority Marine Features (PMF; e.g. maerl beds, horse mussel beds, sea grass) have been confirmed or are suspected to occur (see Section A1.1.9 for further information on SSMO Closed Areas).

A2.3.4 King Scallop Fishery

King scallops (*Pecten maximus*) are caught by inshore fishing vessels using a row of scallop dredges attached to a fixed bar that is towed along the seabed.

Vessel tracks from SSMO licenced vessels were used to create a map of the scallop fishing areas within the Sullom Voe Harbour Area (Figure A. 9). The majority of king scallop fishing is concentrated to areas within Yell Sound.

A2.3.5 Creel and Pot Fishery

Creels are used by inshore shellfish vessels to catch velvet crabs (*Necora puber*), brown crabs (*Cancer pagurus*), green crabs (*Carcinus maenas*), and European lobsters (*Homarus gammarus*). Pots are used to catch common whelks (*Buccinum undatum*). The baited creels and pots are strung onto a headline rope in strings (leaders) of 10 to 25 creels/pots which sit on the seabed at intervals, with a line to the surface at each end marked by a buoy.

Creel and pot fishing areas cover nearly all the coastal waters within the Sullom Voe Harbour Area, including around the islands and skerries (Figure A. 10).

_

⁵⁶ Shetland Shellfish Management Organisation (<u>www.ssmo.co.uk</u>)

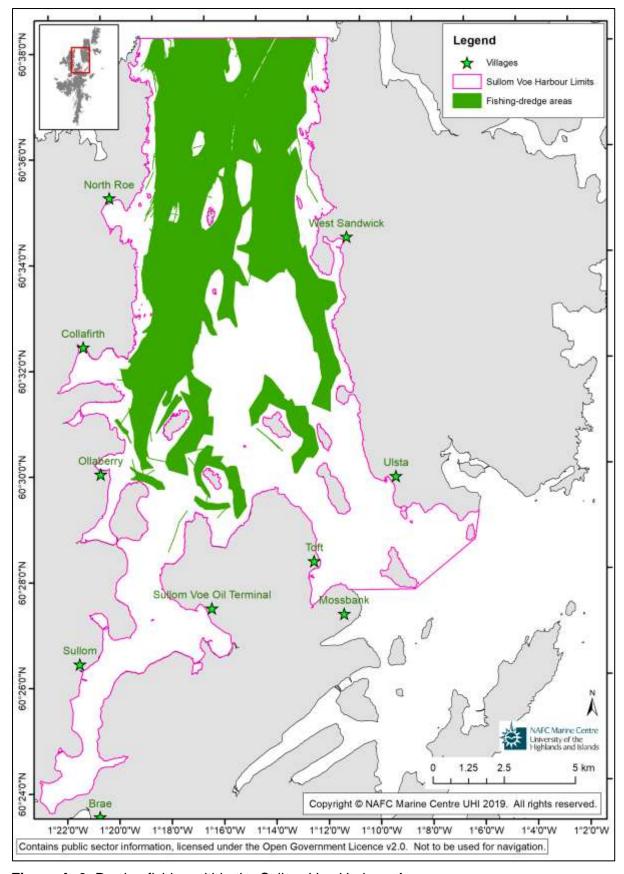


Figure A. 9 Dredge fishing within the Sullom Voe Harbour Area.

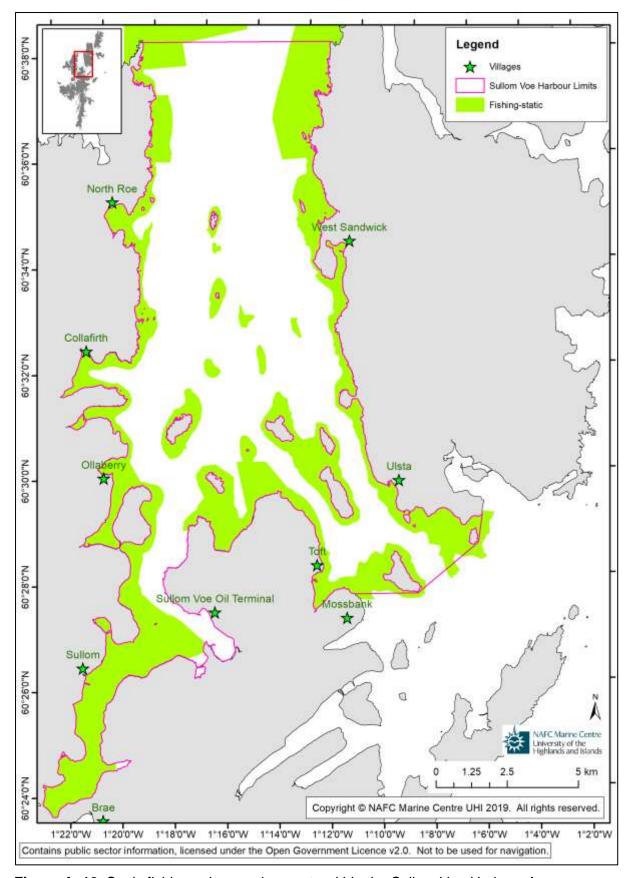


Figure A. 10 Static fishing using creels or pots within the Sullom Voe Harbour Area.

A2.3.6 Protecting Commercial Fishing

Fishing areas for both finfish and shellfish around Shetland are protected under policy *MP FISH1: Safeguarding Fishing Opportunities* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021 (pages 102-104)⁵⁷.

Policy MP FISH1: Safeguarding Fishing Opportunities

Developments will only be permitted where it can be demonstrated that:

- a) there will be no significant negative impact or permanent significant obstruction to an important* fishing area;
- b) there will be no significant environmental impact to a known/designated spawning, nursery area or habitats or species which are important for commercially important species of fish:
- c) it will not cause a navigational hazard for commercial fishermen;
- d) there will be no significant negative effect to the cultural importance of fishing, particularly for vulnerable coastal communities; and
- e) there is no reasonable alternative and any such adverse effects are clearly outweighed by social, environmental, or economic benefits of national importance.

A2.4 Communities

The marine environment not only provides economic benefits but also directly contributes to the quality of life and well-being of coastal communities. The non-material benefits people obtain from ecosystems include spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experience; for example, knowledge systems, social relations, and aesthetic values.

Community councils are the most local tier of statutory representation in Scotland. Their primary purpose is to ascertain and express the views of the community to the local authority and other public bodies. There is a statutory requirement for local authorities to consult with them on planning applications⁵⁸.

A2.4.1 Quality of Life for Communities

Development can have social implications for the local community. Social impacts can be diverse and complex in their nature, but are most likely to be felt by individuals, families, or groups at a local rather than regional or national level. Development can restrict the choices available to users for safe and accessible recreation locations. Development therefore has the potential to affect the well-being of individuals and groups who value their use of the marine environment as integral to their 'way of life' and social identity. Understanding what people value about their living environment, and why they care about a particular place or region, can lead to a better understanding of the impacts of development on the community and how to minimise them.

⁵⁷ Policy *MSP FISH1* within the Shetland Islands' Marine Spatial Plan, 2015, Supplementary Guidance to the SIC Local Development Plan 2014

⁵⁸ Shetland Community Councils (www.shetland.gov.uk/coins/allCommunityCouncils.asp)

A2.4.2 Protecting Communities

A2.4.3 The importance of considering local communities is highlighted in policy *MP COM1: Community Considerations* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2020 (pages 94-96)⁵⁹.

Policy MP COM1: Community Considerations

Applications for marine-related developments must demonstrate that there will be no adverse social impact on the local community. They will be required to provide evidence that:

- a) there is no alternative location for this type of development;
- b) all necessary mitigation measures have been included in the development proposal;
- c) local stakeholders, community councils, groups, and other marine and coastal users have been consulted and engaged in the development process; and
- d) an assessment of social impacts of major developments* has been carried out to the satisfaction of the consenting authority.

*Major developments for Marine Licences are those developments listed under the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013, and also for planning applications under The Town and Country Planning (Scotland) Act 1997 (as amended) and associated Regulations.

A2.4.4 Marine Recreation

The seas around Shetland provide a variety of sporting and recreational opportunities. Within the Sullom Voe Harbour Area there are a range of marine and coastal recreational activities being undertaken including: kayaking, rowing, sea angling, sail racing, SCUBA diving, surfing, sailing, cruising and climbing (Figure A. 11).

More informal recreational activities including walking, hiking, cycling, swimming, fishing, wildlife watching, social activities, and artistic pursuits are also undertaken around the coast of the Sullom Voe Harbour Area. These more informal activities, by their nature, are more difficult to map but can be linked to shore access (piers, jetties, marinas) and by coastal character types (see Section A1.4).

A2.4.5 Protecting Marine Recreation

Marine recreation opportunities are protected under policy *MP REC1: Safeguarding Marine Recreation* within the Amended Draft Shetland Islands Regional Marine Plan (SIRMP) 2021 (pages 94-96)⁶⁰.

⁵⁹ Policy MSP COM1 in the 4th Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

⁶⁰ Policy *MSP REC1* in the 4th Edition of the Shetland Islands' Marine Spatial Plan 2015, Supplementary Guidance to the SIC Local Development Plan 2014.

Policy MP REC1: Safeguarding Marine Recreation

Developments that are likely to result in the reduction or loss of a marine recreational amenity must demonstrate that the proposal is necessary in order to deliver social, economic, or environmental benefits that outweigh the reduction or loss.

Developments should ensure that continued access rights to the marine and coastal resource for recreational use is maintained, with any necessary changes to be determined through the land-use planning process..

Opportunities for co-existence should be maximised wherever possible.

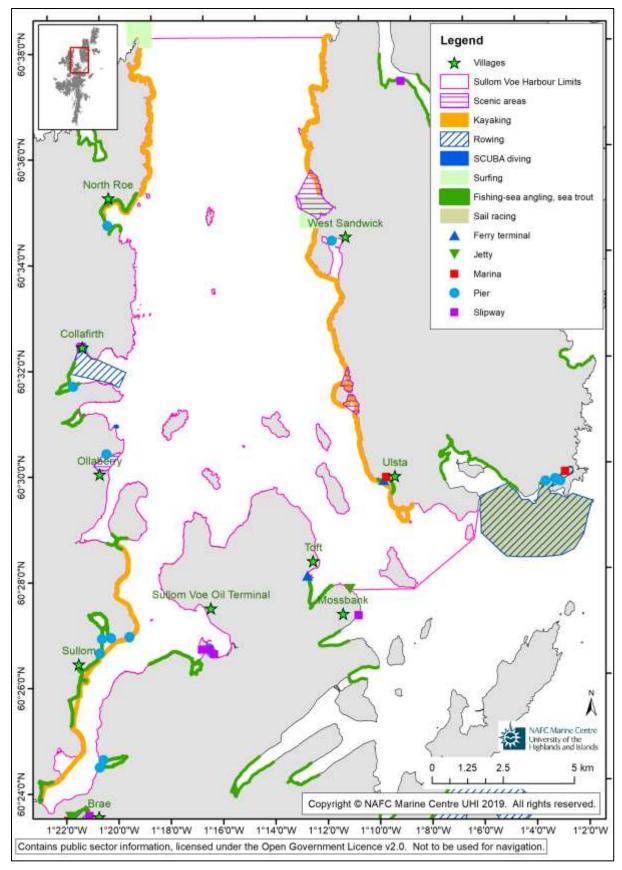


Figure A. 11 Formal recreation and access points within the Sullom Voe Harbour Area.