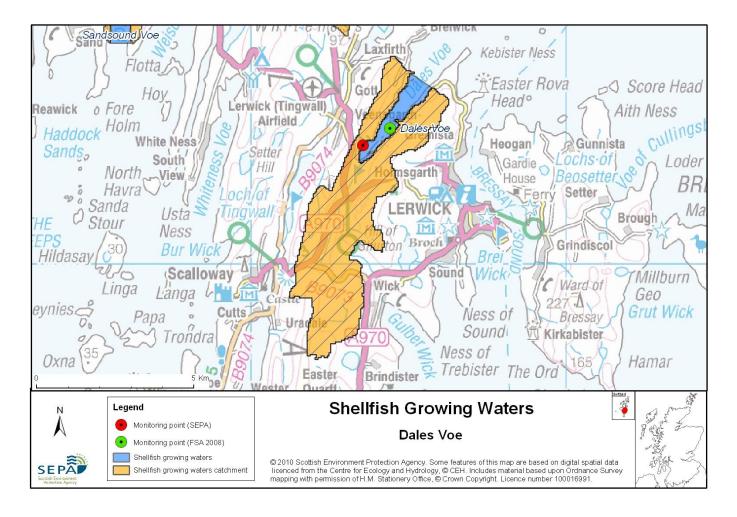
### 112 Dales Voe



Name	Dales Voe		
Report Reference Number	112		
WFD Code	UKS79923112		
Local Information	Area bounded by a line drawn from HU4513545980 to HU4573645589, extending to MHWS.		
Designated Area (km²)	1.44		
Year of Designation	2005		
Sampling Points	Dales Voe at Head of Loch (Biota) - HU 43559 43758		
Commencement of Monitoring	g 2005		

#### 112.1 Commercial Shellfish Interests

Part of Dales Voe was designated as a Shellfish Harvesting Area by the Food Standards Agency (FSA) for the production of Common mussels (*Mytilus edulis*) but was declassified in 2011.

For more information on Food Standards Agency Classification please visit: http://www.food.gov.uk/scotland/safetyhygienescot/shellmonitorscot/shellclassesscot/

## 112.2 Bathymetric Information

There are two Dales Voe in Shetland. Dales Voe Shellfish Water is situated on the east coast of mainland Shetland (northwest of Lerwick).

It has a total length of 5km (to Kebister Ness) and a catchment area of approximately 15 km². The shellfish growing area is approximately 3km, comprising most of the inner voe. There are no basins in the voe and the maximum water depth is 37m and the flushing time is 6 days.

Fresh/tidal flow ratio indicates a salinity reduction of 0.2, indicating a low freshwater input to the loch.

There are no morphological pressures on the waters.

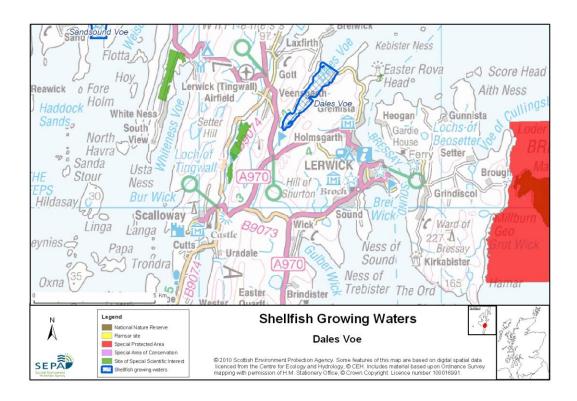
# 112.3 Conservation Designations

Part of this Shellfish Water is designated as a Shellfish Harvesting Area by the Food Standards Agency (FSA)

North of this Shellfish Waters is Wadbister Voe Shellfish Water (UKS79923103)

Sites of Special Scientific Interest (SSSI) – <u>Lochs of Tingwall and Asta</u> Designated 31/01/1985 for standing open water and canals (mesotrophic loch)

Sites of Special Scientific Interest (SSSI) – <u>Easter Rova Head</u> Designated 25/05/1987 for Stratigraphy (Non-marine Devonian)



### 112.4 Topography and Land Use – Potential Diffuse Pollution Sources

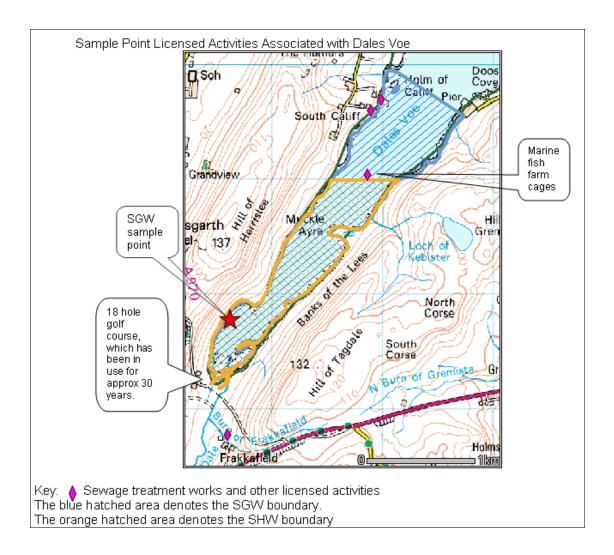
The designated waters are in an inlet formed by two headlands. The land on either side of the waters is steep grazing land and sparsely populated. There is a small business park on the Kebister Ness headland which may contribute to diffuse sources of pollution although this has not been identified as being a problem. There are one or two private septic tanks. Sheep graze the Dales Voe hillside and beach area.

The most likely cause for the failing of Shellfish Growing Water Standards is diffuse source pollution from livestock farming.

### 112.5 Point Source Discharge

There are no major settlements in the area and no major Scottish Water discharges. There is a shellfish depuration unit at Barge near Muckle Ayre, Copa licence number WPC/N/0070200 and an oil rig servicing base near Doos Cove, Copa licence WPC/N/0049012. There are two marine cage fish farms in the designated waters and one just out with near Fora Ness.

Category	Name	Consent No.	NGR	Biomass (t)	Additional Information
Fish Farm	Dales Voe, Lerwick Harbour Area	CAR/L/1009817	HU 44874505	800	-
	Fora Ness	CAR/L/1004061	HU 45614688	800	-



# 112.6 Compliance Monitoring Regime

Site	Current Monitoring	Comments
Dales Voe	<ul> <li>Quarterly for faecal coliforms in mussels</li> <li>Once every three years for metals and organohalogens in mussels</li> </ul>	Sampled by SEPA

### **112.7 Compliance History**

	UKS79923112 - Dales Voe				
	Compliance history for Waters and Biota, excluding faecal coliforms data  Compliance history for faecal coliforms				
Year	Overall Result	Imperative	Guideline	Guideline	
2006	Fail	Fail <sup>1,</sup>	Fail <sup>2</sup>	Pass	
2007	Pass	Pass	Fail <sup>3</sup>	Fail	
2008	Pass	Pass	Pass	Fail	
2009	Pass	Pass	Fail4	Fail	
2010	Pass	Pass	Pass	Pass	

<sup>&</sup>lt;sup>1</sup>Failure relates to a single exceedance of the imperative standard for copper of 5.31 mg/kg taken in water at this site in July 2006. The failure of this mandatory EQS standard led to this site failing overall in 2006.

The waters passed the Guideline standard for faecal coliforms in 2006 and 2010, but has failed 2007, 2008 and 2009.

# 112.8 Future Monitoring

The monitoring regime (85.6 Compliance Monitoring Regime) will be followed. In the event of any chemistry parameter failing to meet any EQS, the site will be revisited and resampled for the failed parameter.

Samplers are asked to identify any evidence of visible harm to the shellfish population at the site.

Faecal coliform data is collected by SEPA from many of the shellfish waters to comply with Guideline Standards (≤ 300/100ml of shellfish flesh and intervalvular fluid). However many shellfish sites are also by FSA, which can often be more frequent. When this occurs FSA data (≤ 230 *E.coli*/100g flesh) can be used to infer pass/fail of Guideline Standards for faecal coliforms.

### **112.9 Improvement Actions**

There are no significant pressures in the waters therefore, it is anticipated that improvement actions will not be necessary, however, this could change if monitoring shows otherwise.

<sup>&</sup>lt;sup>2</sup>Failure relates to a single exceedance of the guideline standard for salinity of 7.92 % taken at this site in September 2006.

<sup>&</sup>lt;sup>3</sup> Failure relates to dissolved oxygen saturation result in 2007.

<sup>&</sup>lt;sup>4</sup> Guideline Failure in 2009 for Zinc

# **WFD Objectives**

Under the Water Framework Directive, the target objectives expect this shellfish water to Pass by 2015 (first River Basin Management Plan Cycle) for Imperative Shellfish Growing Water Standards, with high confidence. The Guideline Shellfish Growing Water Standards are predicted to Pass by 2021, the second River Basin Management Plan Cycle, but with only low confidence.

Objective	First Cycle 2015	Confidence	Second Cycle 2021	Confidence	Third Cycle 2027	Confidence
Imperative Shellfish Growing Waters Standard	Pass by 2015	High	Pass by 2021	High	Pass by 2027	High
Guideline Shellfish Growing Waters Standard	Fail by 2015	High	Pass by 2021	Low	Pass by 2027	Low

# 112.10 Summary of Actions

Action	Deadline
No improvement actions currently planned.	N/A