

Twyni Byw - Sands of LIFE Briefing Note

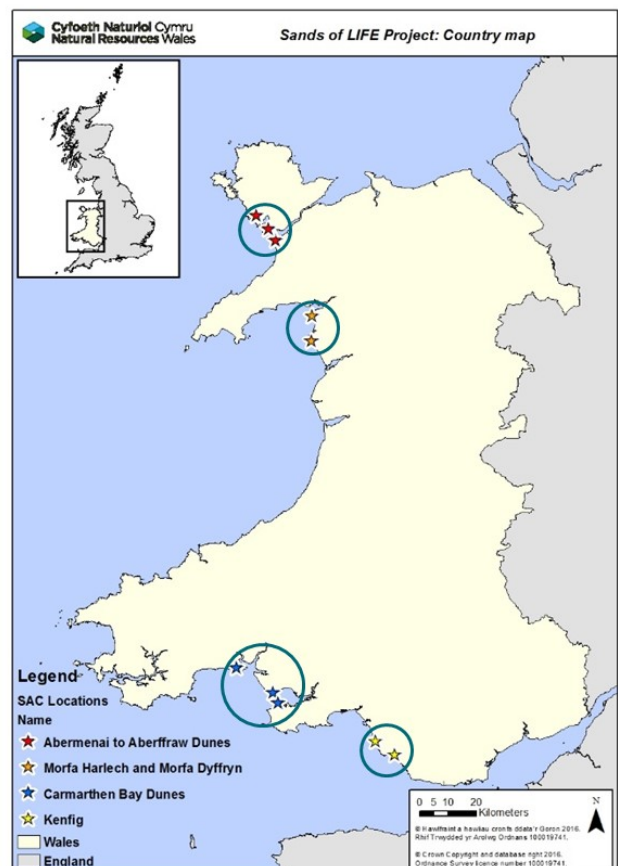
Sands of LIFE project

Twyni Byw - Sands of LIFE (SoLIFE) is a major conservation project that aims to restore almost two-thirds of Wales' sand dunes over four years.

The £4 million project is led by Natural Resources Wales and will focus on four Special Areas of Conservation across Wales, delivering practical restoration work on 10 separate sand dune sites. Started in September 2018, the work will be completed by December 2022.

SoLIFE aims to achieve favourable condition for five Habitats Directive Annex I habitats and three Annex II species, improving a total of 2400 ha of sand dune. The objective is to restore natural geomorphological and ecological processes, re-creating mobility in the dune landscape and allowing the re-establishment of early successional stages.

The SoLIFE project will re-profile dunes, promote sustainable grazing practice and remove invasive species. There will also be an extensive programme of monitoring and stakeholder and community engagement.



Sands of LIFE Project Sites

Special Area of Conservation	Budget	SoLIFE Project Sites	Area (ha)
Y Twyni o Abermenai i Aberffraw	£895k	Twyny Aberffraw	337 ha
		Newborough Warren	1289 ha (633 ha open dune)
		Morfa Dinlle	245 ha
Morfa Harlech a Morfa Dyffryn	£247k	Morfa Harlech	578 ha
		Morfa Dyffryn	484 ha
Carmarthen Bay Dunes	£702k	Laugharne – Pendine Burrows	796 ha
		Pembrey Coast	288 ha
		Whiteford Burrows	122 ha
Kenfig	£428k	Kenfig	716 ha
		Merthyr Mawr	474 ha

Background

Sand dunes are some of the UK's prime biodiversity hotspots. These complex ecosystems are comprised of an intricate suite of contrasting habitats, which together support scarce, and specialised species, many of which can be found nowhere else.

Sand dunes in Wales are rare – making up only 0.3% of the land surface. They account for 11% (8,101ha) of the total UK sand dune resource (71,569 ha).

Welsh sand dunes are threatened by a number of pressures. Dynamic conditions are vital for maintaining rich sand dune biodiversity, however, the dunes suffer from excessive stability and lack of sand movement. This is due to factors such as lack of grazing, overgrowth of scrub and rank vegetation, invasive alien species, air pollution and artificial stabilisation works. Sand dunes across Europe suffer similar problems.

Because of this, all the internationally important Annex I sand dune habitats in Wales are in an 'unfavourable' conservation status. This had also led to the decline or extinction of rare species which depend upon bare sand and early successional stages. All three Annex II species are also in 'unfavourable' condition.

SoLIFE project Habitats Directive Annex I and II features

The project is working to improve the condition of the following Habitats Directive Annex I and II features which occur on Welsh sand dunes:

Code	Annex I or II feature name	Informal name	Note	UK Article 17 status (2007-13)
H2110	Embryonic shifting dunes	Shifting dunes		Unfavourable - bad
H2120	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")	Shifting dunes with marram		Unfavourable - bad
H2130	Fixed dunes with herbaceous vegetation ("grey dunes")	Dune grassland	Priority habitat UK special responsibility	Unfavourable - bad
H2170	Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>)	Dunes with <i>Salix arenaria</i>		Unfavourable - bad
H2190	Humid dune slacks	Humid dune slacks	UK special responsibility	Unfavourable - bad
S1395	<i>Petalophyllum ralfsii</i>	Petalwort	UK special responsibility	Unfavourable - inadequate
S1441	<i>Rumex rupestris</i>	Shore dock	UK special responsibility	Unfavourable - inadequate
S1903	<i>Liparis loeselii</i>	Fen orchid		Unfavourable - bad

Project objectives and actions

The project objectives are as follows:

Objective	Project actions	Action target	Budget
Restore mobile and early successional dune stages through reprofiling foredunes and dune slacks, and mowing	C1 & C2	49 ha and 10 dune notches	£452k
Remove threats arising from invasive native and non-native species	C3 & C4	169 ha	£950k
Restore appropriate grazing practices on the dunes using livestock and rabbits	C5 & C6	1185 ha & 24km of fencing	£249k
Remove unexploded ordnance	C7	28 ha	£119k
Monitor outcomes of interventions to improve management practices	D1-4	10 monitoring themes	£620k
Increase understanding of the functions and values of sand dunes in Wales through communication and engagement with stakeholders, and promote best practice guidance and expertise across Europe	E1 & E2	3500 members of public, 50 professionals from at least 10 partner organisations	£95k

Finances

NRW is the project lead and sole beneficiary. The project receives 75% funding from LIFE, a financial instrument of the European Community, while the Welsh Government provides 25% match funding through the Green Infrastructure Capital Fund.

Total project cost	€4,729,029	£4,007,652	
EU contribution	€3,546,771	£3,005,738	75%
NRW contribution (from WG)	€1,182,258	£1,001,914	25%

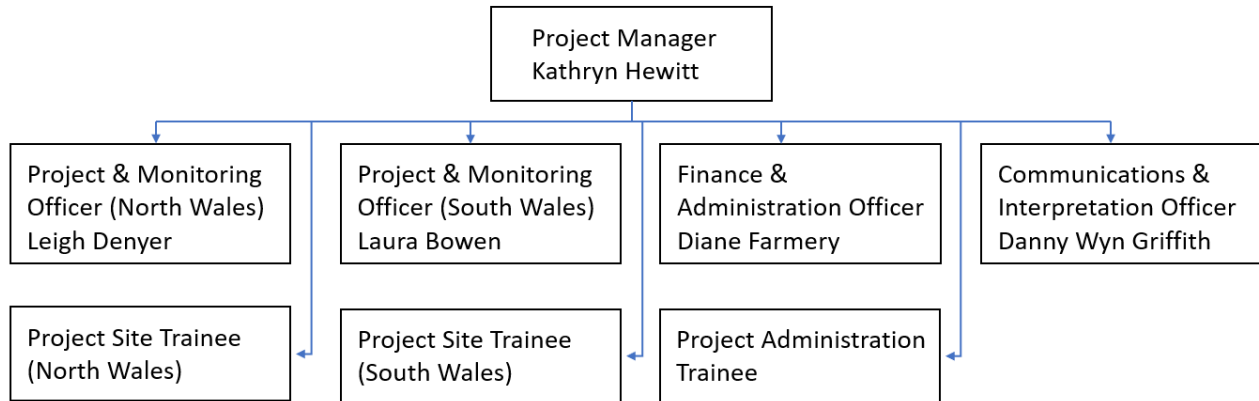
Sustainable Management of Natural Resources

As well as being reservoirs of biodiversity, the sand dunes of Wales offer other key ecosystem services for the benefit of people. They provide a natural solution to flood defence and coastal erosion as well as maintaining water flows and supporting populations of pollinators. Dunes attract thousands of tourists and other visitors each year, providing opportunities for enjoyment and active recreation, improving health and wellbeing.

The Sands of LIFE project will contribute towards Wales' Wellbeing Goals, by improving the resilience of this vulnerable ecosystem. It will also create new jobs, providing training in conservation management, and generate economic opportunities for local contractors and graziers. The project will explore the value of sand dunes to people, including their cultural and historical significance and project actions will open up the dunes, making them more accessible.

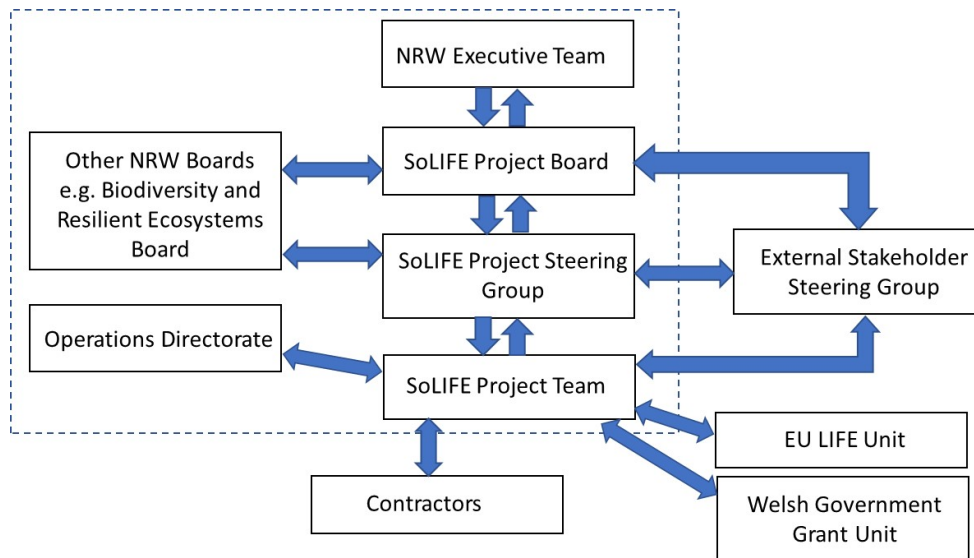
The project will follow the principles of SMNR in all its work, particularly seeking multiple benefits from all actions and focusing on large-scale, long-term, sustainable measures based on evidence from intensive survey and monitoring. The project will engage and collaborate closely with the public, local communities, partner organisations and professionals.

Sands of LIFE project team



Governance

The project sits within the Operations Directorate. The Project Manager reports to the Project Steering Group and to the Project Board. Governance for the project is shown in the diagram below.



Contacts

For more information or to contact a member of the team, email SoLIFE@cyfoethnaturiolcymru.gov.uk

Version 3: July 2019



SoLIFE: LIFE 17 NAT/UK/000023

The Twyni Byw-Sands of LIFE project has received funding from the LIFE Programme of the European Union
Part funded by Welsh Government