

Biodiversity Statement & Metric Assessment

Dungeness A Power Station, Kent

Dungeness Boiler and Ancillary Plant Removal Project

A Report to: NRS and Mitie Group PLC
Report number: RT-MME-181303-02
Date: November 2024



Project Information & Site Context	
Site Name & Location	Dungeness A Power Station, Kent
Site Area (ha)	Boilers Down (Red Line Area): 4.09 Middle Shingle (Blue Line / Offset Area): 0.33
Grid Reference	TR 084 167
Topography	The site is located at an altitude of approximately 5.8 m Above Ordnance Datum (AOD) on an extensive shingle foreland. Beyond the site, ground levels remain close to sea level for considerable distances inland.
Project Background	<p>In October 2024, Mitie Group PLC on behalf of NRS commissioned Middlemarch to undertake a Biodiversity Metric Assessment associated with a proposed the Boilers and Ancillary Plant Removal Project (hereafter referred to as the 'Boilers Down' Project) at Dungeness A Power Station, Kent.</p> <p>The assessment is informed by ecological works carried out at the site since 2022 by Middlemarch. The baseline data from these works has been reformatted for planning purposes and presented in the Evidence Base for Planning Application (RT-MME-181303-01).</p>
Summary of Proposals	<p>The proposed development will comprise the demolition of several buildings and the extraction and onsite storage of the plant's boilers. At this time, it is understood that all habitats within the red line area will be replaced with built form, hardstanding, sealed surfaces or equivalent habitats. Precautionarily, post development all habitats within the redline boundary will be assumed as having a Habitat Unit value of '0' per hectare.</p> <p>This assessment is based on the documentation provided by the client</p>

Methods		
Biodiversity Metric	The biodiversity calculations used within this assessment were undertaken by Rachel Baylis (Biodiversity Consultant) using 'The Statutory Biodiversity Metric' ¹ and associated User Guide ² .	
Data Sources	The baseline habitat data and condition assessment for the site is detailed in Appendix 2. A Phase 1 Habitat Plan showing the extent and location of each habitat recorded on site pre-development is included in Appendix 1 (C181303-01-01).	
Habitat Attributes	<i>Distinctiveness</i>	An automated score based on the type of habitat present and its value to wildlife. Highly diverse habitats such as those listed as Habitats of Principal Importance under the NERC Act (2006) or Annex 1 habitats in the Habitats Directive (1992) score highly in this category, whilst highly modified and low diversity habitats such as arable crops will have low distinctiveness scores.
	<i>Condition</i>	A score based on the quality of the habitat parcel against published condition criteria (See Appendix 2).
	<i>Strategic Significance</i>	A score based on information set out in local plans or policies. In this instance, a strategic location was defined as a distinct area identified for the preservation of specific habitats, species or biodiversity within Folkestone and Hythe District Council Places and Policies Local Plan (2020) ³ .
Constraints & Assumptions	The assumptions regarding target habitat types, or condition, in this report are founded on professional opinion with reference to the likely achievable habitat outcomes at the site, based on the proposed plans and presumed management resources. All target habitats presume the implementation of a long-term Management Plan to achieve these ends and a recommendation to this effect is given.	

¹ Department for Environment, Food and Rural Affairs (DEFRA) (2024) Statutory Biodiversity Metric Calculation Tool. <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

² Department for Environment, Food and Rural Affairs (DEFRA) (2024) Statutory Biodiversity Metric Condition Assessments. <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

³ Folkestone and Hythe District Council, Places and Policies Local Plan (2020). <https://www.folkestone-hythe.gov.uk/planning-policy/adopted-development-plan>

Headline Results				
On-Site Baseline	On-Site Baseline	Habitat units	1.58	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
	On-Site Post Intervention	Habitat units	0.00	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
	On-Site Net Unit Change (units & percentage)	Habitat units	-1.58	-100.00%
		Hedgerow units	0.00	0.00%
		Watercourse Units	0.00	0.00%
Off-Site Baseline	Off-Site Baseline	Habitat units	1.98	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
	Off-Site Post Intervention	Habitat units	3.77	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
	Off-Site Net Unit Change (units & percentage)	Habitat units	1.79	90.57%
		Hedgerow units	0.00	0.00%
		Watercourse Units	0.00	0.00%
Combined Net Unit Change (including all on-site & off-site habitat retention, creation & enhancement)		Habitat units	0.21	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
Spatial Risk Multiplier (SRM) Deductions		Habitat units	0.00	
		Hedgerow units	0.00	
		Watercourse Units	0.00	

Final Results				
Total Net Unit Change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units			0.21
	Hedgerow units			0.00
	Watercourse Units			0.00
Total Net % Change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units			13.21%
	Hedgerow units			0.00%
	Watercourse Units			0.00%
Trading Rules Satisfied*				Yes
*you must state if irreplaceable habitats are on-site at baseline: No irreplaceable habitats were identified on-site at baseline				
Unit Type	Target**	Baseline Unit	Units Required	Unit Deficit
Habitat units	10.00%	1.58	1.74	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse Units	10.00%	0.00	0.00	0.00
**From January 2024, the UK Mandatory minimum is a 10% net gain in biodiversity for all development. Folkestone and Hythe District Council have set the minimum biodiversity net gain at 10%.				
Discussion				
The calculations used within the metric to quantify biodiversity units differ between habitat, hedgerow and watercourse features, consequently, the values generated are not comparable, and a net gain in one feature cannot compensate for a net loss within another feature.				
How is the target net gain percentage being delivered?	Habitat units	Only off-site.		
	Hedgerow units	N/A		
	Watercourse Units	N/A		
How many Biodiversity Units are needed off-site to meet the required net gain percentage?	Habitat units	1.79		
	Hedgerow units	0.00		
	Watercourse Units	0.00		

Recommendations

The recommendations below are based on Middlemarch's current understanding of the project. If works are changed in any way these recommendations will need to be amended if appropriate.

R1	After planning permission has been approved a Biodiversity Gain Plan needs to be produced and submitted to the Local Planning Authority to provide evidence for all BNG decisions and show how BNG will be achieved.
R2	A 30-year Ecological Management and Monitoring Plan (EMMP) should be produced to set out the detailed habitat enhancement specifications and long-term management prescriptions, that will be required to ensure the scheme will achieve its conservation objectives over the lifespan of the project. The EMMP should also be inclusive of a long-term monitoring strategy to measure progress against conservation objectives and inform an adaptive approach to long-term management.

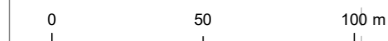
Quality Assurance

Date	Version	Author	Checked & Approved By
14/11/2024	Final	Rachel Baylis BSc (Hons) (Biodiversity Consultant)	Chris Walsh (Natural Capital Solutions Leader)

Appendix 1

Drawings

Drawing C181303-01-01 – Phase 1 Habitat Survey



Legend

- - - Boiler's Down (Red Line Area)
- - - Middle Shingle (Blue Line / Offset Area)
- Sea wall / shingle bund
- Artificial unvegetated unsealed surface
- Building
- Dense scrub
- Hardstanding
- Vegetated shingle
- Target note - habitat parcel



Project	NRS Dungeness	
Drawing	Phase 1 Habitat Map (Red Line Area and Offset Area)	
Client	Mitie Group PLC on behalf of NRS	
Drawing Number	C181303-01-01	Revision 00
Scale @ A3	1:2,500	Date November 2024
Approved By	RB	Drawn By RP/CD



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Appendix 2

Habitat Condition Assessment

Area Habitat				Condition Sheet Criteria Score																
Polygon / Line Ref.	JNCC	UK Hab (Field Key)	Habitat Description	Condition Sheet Used	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	Total Score	Condition Assessment	
Middle Shingle (Blue Line / Offset Area)																				
TN5	H3 Shingle above high tide mark	Coastal vegetated shingle s3b	Area of vegetated shingle to the southern and western sides of the main access road. A mosaic of scrub, bare shingle and a smaller, but yet still relatively large area of lichen turf <i>Cladonia</i> sp. Species recorded included gorse <i>Ulex europaeus</i> , prostrate broom <i>Cytisus scoparius</i> subsp. <i>maritimus</i> , red valerian <i>Centranthus ruber</i> , wild carrot <i>Daucus carota</i> , viper's-bugloss <i>Echium vulgare</i> , red fescue <i>Festuca rubra</i> and perennial ryegrass <i>Lolium perenne</i> , sweet vernal-grass <i>Anthoxanthum odoratum</i> , moss <i>Sphagnum</i> sp., bramble <i>Rubus fruticosus</i> agg., seaside fleabane <i>Erigeron glaucus</i> , bristly oxtongue <i>Helminthotheca echioides</i> , cat's-ear <i>Hypochaeris radicata</i> , traveller's-joy <i>Clematis vitalba</i> , sea plantain <i>Plantago maritima</i> , buck's-horn plantain <i>Plantago coronopus</i> , common sorrel <i>Rumex acetosa</i> , hawk's-beard <i>Crepis</i> spp., yellow horned-poppy <i>Glaucium flavum</i> , cock's-foot <i>Dactylis glomerata</i> , dandelion <i>Taraxacum officinale</i> agg., carline thistle <i>Carlina vulgaris</i> , great burnet <i>Sanguisorba officinalis</i> , wood sage <i>Teucrium scorodonia</i> , mouse-ear hawkweed <i>Pilosella officinarum</i> , common sorrel, dog rose <i>Rosa canina</i> and flat pea <i>Lathyrus sylvestris</i> . Since the 2022 survey this area has not been actively managed resulting in the grass species beginning to dominate the sward. This area is within a SSSI.	Coastal (1)	F	F	F	F	F	P	P	P							4	Poor

Area Habitat				Condition Sheet Criteria Score																
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Polygon / Line Ref.	JNCC	UK Hab (Field Key)	Habitat Description	Condition Sheet Used	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	Total Score	Condition Assessment
Boilers Down (Red Line Area)																			
N/A	J3.6 Buildings	Buildings u1b5	A series of buildings were present in the area associated with the workings of the Magnox Dungeness site. Inspections of the individual buildings were not undertaken as part of the Preliminary Ecological Appraisal. These areas were generally devoid of vegetation.	N/A															N/A
N/A	J5 Hardstanding (other habitat)	Developed land; sealed surface u1b	A series of tarmac and concrete surfaces are present throughout the area and associated with the workings of the Magnox Dungeness site.	N/A															N/A
TN10	J4 Bare Ground	Artificial unvegetated unsealed surface u1c	An area barren of vegetation comprising construction type pebbles akin to oyster pebbles rather than coastal vegetated shingle, these pebbles are larger and white and grey shaded.	N/A															N/A
TN14	J3.6 Buildings J5 Hardstanding (other habitat)	Buildings u1b5 Developed land; sealed surface u1b	Area within the Radiation/Reactor Controlled Area (RCA). Predominately buildings and hardstanding associated with the workings of the Magnox Dungeness site.	N/A															N/A
N/A	H3 Shingle above high tide mark	Coastal vegetated shingle s3b	Within the main area of the site, a number of areas of vegetated shingle are located around the buildings and hardstanding. Species recorded include red fescue, perennial ryegrass, red valerian, viper's bugloss, cat's-ear, buck's-horn plantain, hawk's-beard, hedge mustard <i>Sisymbrium officinale</i> , prostrate broom, bristly oxtongue, yellow horned-poppy, bramble, carline thistle, sea mayweed <i>Tripleurospermum maritimum</i> , wood sage, salad burnet <i>Poterium sanguisorba</i> subsp. <i>sanguisorba</i> and common mallow <i>Malva sylvestris</i> . Since the 2022 survey this area has not been actively managed resulting in the grass species beginning to dominate the sward.	Coastal (1)	F	F	F	F	F	P	P	P						4	Poor
TN15	J4 Bare Ground	Artificial unvegetated unsealed surface u1c	Area of previous demolition of buildings and hardstanding.	N/A															N/A

Key:

P – Criteria passed

F – Criteria failed

Coastal Condition Assessment

Passes 7 or 8 of 8 criteria including essential criterion 1 = Good (3)

Passes 5 or 6 of 8 criteria; OR Passes 7 of 8 criteria excluding essential criterion 1 = Moderate (2)

Passes 0, 1, 2, 3 or 4 of 8 criteria = Poor (1)

Appendix 3

Statutory Biodiversity Metric Calculation

PDF output of the Statutory Metric is attached below with the Excel Spreadsheet included separately as a read-only document.

The Statutory Biodiversity Metric Start page

Project details			
Planning authority:	Folkestone & Hythe District Council		
Project name:	Dungeness A, Boilers Down Project (RT-MME-181303)		
Applicant:	NRS		
Application type:			
Planning application reference:			
Completed by:	Rachel Baylis (Middlemarch)		
Date of metric completion:	13 November 2024		
Reviewer:	Chris Walsh (Middlemarch)		
Calculation iteration:	1		
Planning authority reviewer:			
Date of planning authority review:			
Target % net gain:	10%		
Irreplaceable habitat present at baseline:	No ✓		
Total site area - including irreplaceable habitat area (hectares):	4.09	Irreplaceable habitat site area (hectares):	0.00
Total off-site area - including irreplaceable habitat area (hectares):	0.33	Irreplaceable habitat area off-site (hectares):	N/A

Main menu

Results

Cell style conventions	
	Attention required
	Input error/rules and principles not met
	Use of this cell is not appropriate
	Enter data
	Automatic lookup
	Result

View all

Reset view

On-site baseline map Insert

On-site baseline map reference number

On-site post intervention map Insert

On-site post-intervention map reference number

Off-site baseline map Insert

Off-site baseline map reference number

Off-site post intervention map Insert

Off-site post-intervention reference number

Dungeness A, Boilers Down Project (RT-MME-18130)

Return to results menu

Headline Results

Scroll down for final results Δ

On-site baseline	Habitat units	1.58		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site net change <small>(units & percentage)</small>	Habitat units	-1.58	-100.00%	On-site net gain is less than target set Δ
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	

Off-site baseline	Habitat units	1.98		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	3.77		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change <small>(units & percentage)</small>	Habitat units	1.79	90.57%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	

Combined net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.21	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS

Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.21
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	13.21%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes \checkmark	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	1.58	1.74	0.00	No additional area habitat units required to meet target \checkmark
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target \checkmark
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target \checkmark

Project Name: Dungeness A, Boilers Down Project (RT-MME-181303) Map Reference:
A-1 On-Site Habitat Baseline

Area habitat summary	
Total Net Unit Change	0.21
Total Net % Change	13.21%
Trading Rules Satisfied	Yes ✓

Condense / Show Columns

Condense / Show Rows

Main Menu

Ref	Existing area habitats				Distinctiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Ecological baseline Total habitat units
	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier		
1	Urban	Developed land; sealed surface	No	0.8	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00
2	Urban	Developed land; sealed surface	No	2.15	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00
3	Sparsely vegetated land	Coastal vegetated shrubland	No	0.24	High	6	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same habitat required =	1.58
4	Urban	Artificial unvegetated, unsealed surface	No	0.9	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00
5													
6													
7													
8													
9													
				Total habitat area									1.58
				Site Area (Excluding area of individual trees, green walls, intertidal hard structures)									4.09

						Comments			
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost	Bespoke compensation agreed for losses of VHDH or irreplaceable habitat	User comments	Planning authority comments	Habitat reference number
		0.00	0.00	0.80	0.00				
		0.00	0.00	2.15	0.00				
		0.00	0.00	0.24	1.58				
		0.00	0.00	0.90	0.00				
0.00	0.00	0.00	0.00	4.09	1.58				

Total area lost (excluding area of individual trees, green walls and intertidal hard structures) 4.09

M² to hectares conversion tool:	Select a unit	Hectares	M²
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Area habitat summary	
Type for this Change	0.00
Type for 1 Change	0.00
Habitat Area Available	0.00

Habitat ref	Baseline habitat	Type habitat (Benthic)	Baseline disturbance band	Baseline disturbance score	Baseline habitat			Baseline strategic significance category	Baseline strategic significance score	Baseline habitat size	Required Action to Meet Trading Rule	Proposed habitat (assess habitat pro proposed but can be overriden)		Change in disturbance and condition		Area (hectares)	Disturbance	Score	Condition	Score	Post-Action Habitat				Difficulty multipliers			Spatial risk multiplier	Habitat area adjustment	Comments							
					Proposed broad habitat	Proposed habitat	Disturbance change					Condition change	Strategic significance	Strategic significance multiplier	Standard time to target condition (years)						Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Revised or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Difficulty of enhancement category	Applied difficulty multiplier			Difficulty	Difficulty multiplier applied	Spatial risk category	Other comments	Planning authority comments	Habitat available	Other references	
1	Openly vegetated land - Coastal vegetated shrubs	0.00	High	4	Low	1	Low Strategic Significance	1	1.00	Openly vegetated land	Openly vegetated shrubs	High - High	Low - Good	0.00	High	4	Good	2	Formerly identified as local storage	High strategic significance	1.00	00	0	0	Revised time to target condition applied	00	0.00	Medium	Standard difficulty applied	Medium	0.00	Comprehensive needs (DPS Inventory) or NCC at request site	0.00				Media Design