

Kent County Council

Habitats Regulations Assessment (HRA) KENT MINERALS AND WASTE LOCAL PLAN UPDATE 2024- 2039

FINAL VERSION



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1. SUMMARY

1.1 Summary findings

1. Kent County Council is undertaking an update of the Kent Minerals and Waste Local Plan (KMWLP) 2013-30 which was adopted by the Council in July 2016 and partially updated in 2020. The update is required to enable the plan to address the minerals and waste requirements of Kent for the period 2024 to 2039. A Minerals Sites Plan which allocates three areas of land suitable for development associated with the extraction of sand and gravel was also adopted in 2020. This Minerals Sites Plan is also to be updated to address the need to identify additional land to meet the anticipated requirements for hard rock over the plan period. The update of the Minerals Site Plan is being undertaken separately and is not therefore included within this Habitats Regulations Assessment.
2. A Habitats Regulations Assessment (HRA) of the proposed revisions to the currently adopted policies has been undertaken and the outcomes of that assessment are set out in this document. Regulation 105 of the Conservation of Habitats and Species Regulations, 2017, (as amended - the Habitats Regulations) requires that such an assessment be made where a land use plan—
 - (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and
 - (b) is not directly connected with or necessary to the management of the site.
3. In the light of the conclusions of the assessment, and subject to regulation 107, the plan-making authority must give effect to the land use plan only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be). In making this assessment, the plan-making authority must consult Natural England and provide Natural England with sufficient information to provide its advice.

1.2 Screening Assessment Summary

4. A first stage screening assessment of all the proposed policy updates to the adopted KMWLP was undertaken to assess whether any of these policy changes were likely to have any significant effects on any Habitats Sites (Special Areas of Conservation SAC, Special Protection Areas SPA and Ramsar sites) and their qualifying features. The screening assessment is detailed in Section 3 of this report.
5. This assessment screened out any likely significant effects from any proposed updates to policies with the exception of Policy CSW17. This revised policy is proposed to extend the range of permitted operations at the Dungeness nuclear sites to be consistent with relevant national policy and guidance. It could not be excluded, based on available evidence, that the proposed changes to this policy would not result in likely significant effects to Habitats Sites and their qualifying interest features.

1.3 Appropriate Assessment Summary

6. A full detailed appropriate assessment was undertaken of the proposed revised wording of Policy CSW17 to test whether extending the range of permitted operations at the Dungeness nuclear sites could adversely affect the integrity of the Habitats Sites on the Dungeness peninsula, namely:

- The Dungeness Special Area of Conservation (SAC)
 - The Dungeness, Romney Marsh and Rye Bay Special Protection Area (SPA)
 - Dungeness, Rye Bay and Romney Marsh Ramsar Site.
7. The appropriate assessment is detailed in Section 5 of this report and Section 4 outlines the approach that was taken to the assessment. The following potential impact pathways were identified that may result from the additional operations that would be permitted under the proposed revisions to Policy CSW17:
- Habitat Loss and Degradation and impacts on qualifying species
 - Water and Soil Pollution and Changes in Hydrology
 - Noise and Vibration Disturbance
 - Visual Disturbance
8. Each Habitats Site and each of their qualifying features were assessed against these impact pathways for the likelihood of adverse effects on the integrity of these sites and features based on the published conservation objectives and based on the best available data. Table 1 summarises the outcome of the appropriate assessment.

Table 1 Summary of the findings of the appropriate assessment

	Dungeness SAC	Dungeness, Romney Marsh and Rye Bay SPA	Dungeness, Romney Marsh and Rye Bay Ramsar
Habitat Loss and Degradation and impacts on qualifying species	No adverse effects on integrity predicted	No adverse effects on integrity predicted	No adverse effects on integrity predicted
Air Pollution	No adverse effects on integrity predicted	No adverse effects on integrity predicted	No adverse effects on integrity predicted
Water and Soil Pollution and Changes in Hydrology	No adverse effects on integrity predicted	No adverse effects on integrity predicted	No adverse effects on integrity predicted
Disturbance Effects (noise and visual intrusion)	No adverse effects on integrity predicted	No adverse effects on integrity predicted.	No adverse effects on integrity predicted.

9. The data records for birds show a low likelihood that SPA qualifying bird species are breeding or wintering within land adjacent to the Dungeness nuclear sites and outside the boundaries of the SPA. Most of these bird species require freshwater or brackish water wetland habitats. The nearest wetland habitats are over 800 metres from the Dungeness nuclear sites at the RSPB nature reserve at Denge and the Long Pits.
10. Therefore, on the basis of these findings it is concluded that the additional operations permitted under the proposed revisions to Policy CSW17, either alone or in combination with other ongoing de-commissioning operations, coast protection operations and other development are unlikely to have an adverse effect on the integrity of the Dungeness,

Romney Marsh and Rye Bay SPA and the populations of its qualifying bird species as a result of noise or visual disturbances.

11. However, birds are mobile species and habitats can change over time. Therefore, the current distribution of qualifying bird species cannot continue to be relied upon throughout the whole plan period. It is therefore advised that to enable KCC (and Folkestone and Hythe DC) to carry out their legal duties as competent authorities under the Habitats Regulations, applicants should provide up to date data on the numbers and distribution of SPA qualifying bird species (as well as other bird species) to accompany planning applications.

2. Background

2.1 Background to the Update of the Kent Minerals and Waste Local Plan 2013-30

12. The current Kent Minerals and Waste Local Plan 2013-30 was adopted by the Council in July 2016 and partially updated in 2020. The current update is required to enable the plan to address the minerals and waste requirements of Kent for the period 2024 to 2039. A Minerals Sites Plan which allocates three areas of land suitable for development associated with the extraction of sand and gravel was also adopted in 2020. This Minerals Sites Plan is also to be updated to address the need to identify additional land to meet the anticipated requirements for hard rock over the plan period. The update of the Minerals Site Plan is being undertaken separately and is not therefore included within this Habitats Regulations Assessment.
13. The National Planning Policy Framework (NPPF) and legislation states policies in Local Plans should be reviewed at least once every five years to assess whether they need updating and should then be updated as necessary. A review of the Vision, Strategic Objectives and policies in the current Plan was completed in 2021. The review concluded that while much of the Local Plan is still relevant, some updates are needed in response to relevant Government policy and legislation published since 2016 including the following:
 - Updates to the NPPF in 2018, 2019 and 2021 and associated Planning Practice Guidance;
 - legislation and policy concerning the need to adapt to, and mitigate, climate change and associated low carbon growth;
 - new policy relating to the management of low-level radioactive waste; and,
 - policy and legislation concerned with achieving a circular economy where more waste is prevented or reused.
14. Updates are also proposed to ensure the Kent Minerals and Waste Local Plan takes account of the current local context which includes the following:
 - A need for the development of additional household waste management capacity;
 - the Kent Environment Strategy and Kent and Medway Energy and Low Emissions Strategy.
15. A number of further minor changes are proposed which are intended to improve the clarity of the policies. None of the proposed changes seek a fundamental shift in the way minerals will be supplied and waste will be managed in future.
16. Consultation on the draft proposed changes to the Plan took place between December 2021 and February 2022. Amongst other things this identified the need to change the plan timescale to ensure it covered a period of 15 years. This change to the Plan period revealed a need to identify additional land for working hard rock by making updates to the Kent Minerals Sites Plan.

2.2 Background to the Habitats Regulations Assessment

17. Regulation 105 of the Conservation of Habitats and Species Regulations, 2017, (as amended - the Habitats Regulations) requires that:

Assessment of implications for European sites and European offshore marine sites

105.— (1) Where a land use plan—

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of the site,

the plan-making authority for that plan must, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site's conservation objectives.

(2) The plan-making authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies.

(3) The plan-making authority must also, if it considers it appropriate, take the opinion of the general public, and if it does so, it must take such steps for that purpose as it considers appropriate.

(4) In the light of the conclusions of the assessment, and subject to regulation 107, the plan-making authority must give effect to the land use plan only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

(5) A plan-making authority must provide such information as the appropriate authority may reasonably require for the purposes of the discharge by the appropriate authority of its obligations under this Chapter.

(6) This regulation does not apply in relation to a site which is—

(a) a European site by reason of regulation 8(1)(c), or

(b) a European offshore marine site by reason of regulation 18(c) of the Offshore Marine Conservation Regulations (site protected in accordance with Article 5(4) of the Habitats Directive).

18. For the purposes of the Habitats Regulations, a European Site or a European Marine Site includes the following:
- Special Areas of Conservation (SAC's) designated under the EU Habitats Directive - a site hosting a priority natural habitat type or priority species protected in accordance with Article 5(4) of the Habitats Directive (a site in respect of which consultation has been initiated under Article 5(1) of that Directive;
 - Special Protection Areas (SPA's) designated under the EU Wild Birds Directive – supporting internationally important populations and concentrations of breeding, migratory or wintering birds;
 - Potential SAC's and SPA's – those proposed but not fully designated;
 - Ramsar Sites - wetlands of international importance that have been designated under the criteria of the Ramsar Convention on Wetlands for containing representative, rare or unique wetland types or for their importance in conserving biological diversity.
19. Following Brexit, the United Kingdom Government decided to retain the Habitats Regulations which gave effect to the EU Nature Directives and approved the

Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹. The main purpose of the 2019 Regulations, was to amend the Habitats Regulations 2017 that transpose the EU Habitats and Wild Birds Directives, to make them operable within the UK from 1 January 2021 following Brexit. One consequence of these changes is that sites that SAC's and SPA's that were formerly called 'European sites' or 'Natura 2000' sites are now part of the National Site Network and are frequently referred to as 'Habitats Sites' which is the abbreviation that will be used in this report.

20. It is important to note that Regulation 63 requires a similar assessment process for plans and projects, e.g. individual planning applications. A satisfactory assessment under Regulation 105 does not therefore infer or confer a satisfactory assessment for individual planning applications coming forward in compliance with that Local Plan.

2.3 Principles and Approach to this HRA

21. This HRA has been undertaken in accordance with the relevant law, policy and guidance including:
- The Habitats and Wild Birds Directives in England and its seas. Core guidance for developers, regulators & land/marine managers. December 2012 (draft for public consultation). Defra.
 - Guidance - Habitats regulations assessments: protecting a European site. How a competent authority must decide if a plan or project proposal that affects a European site can go ahead.²
 - National Planning Practice Guidance:³ and especially Paragraph: 001 Reference ID: 65-001-20190722. Revision date: 22 07 2019 When may appropriate assessments be required in the planning process?
 - National Planning Policy Framework (NPPF), 2021⁴ and especially paragraph 174 which states that:
*174. Planning policies and decisions should contribute to and enhance the natural and local environment by:
a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan).*
22. The HRA has also been informed by the data, information and advice relating to the qualifying interest features, the conservation objectives and the condition of Habitats Sites and advice and guidance on the measures required for the improvement and management of these sites and their special interest features, produced by Natural England and the Joint Nature Conservancy Council (JNCC).

2.4 Purpose

23. The requirement under Regulation 105 for a competent authority (in this case Kent County Council as local planning authority) to undertake an Appropriate Assessment of plans and projects, only applies where the plan or project is likely to have a significant effect on a Habitats Site either alone or in combination with other plans and projects. Therefore, the first stage in the HRA process is to identify if aspects of a plan

¹ <https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017>

² [Habitats regulations assessments: protecting a European site - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site)

³ <https://www.gov.uk/guidance/appropriate-assessment>

⁴ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

are likely to have a significant effect and on which Habitats Sites. This is commonly referred to as a Screening Assessment.

24. Guidance indicates the following steps for this process:
- Identify what (if any) Habitats Sites may be affected by the plan/policy;
 - Identify the conservation objectives of any site that may be affected, and the condition of the site;
 - Identify the potential effects of the plan/policy on the site, alone or in combination with other plans or projects. This will need to include consideration of each of the features for which the site is designated;
 - Identify how those effects may impact on the site's conservation objectives.
25. A "significant effect" only includes effects which would undermine a Habitats Sites conservation objectives, for example by reducing the area or quality of protected habitat for which the site was designated, or by the disturbance or displacement of species for which the site was designated.
26. European case law has interpreted the threshold of "likelihood" of significant effects at a low level. Accordingly, a plan or project must be considered to be "likely to have a significant effect" where, "it cannot be excluded on the basis of objective information that the plan or project will have significant effects on the site concerned". In other words, if it may have a significant effect, an appropriate assessment should be carried out.

2.5 Approach

27. The Chartered Institute of Ecology and Environmental Management (CIEEM) has published Guidelines for Ecological Impact Assessment in the UK and Ireland⁵. In order to screen for likely significant effects, these guidelines recommend:
- establish the zone(s) of influence of the proposed activities and area(s) over which ecological features may be affected by the biophysical changes caused by the proposed project and associated activities and
 - assess likely issues and concerns and identify designated sites, habitats and species populations which may be exposed to change as a result of the proposed activities – this should include the full distribution or extent of any ecological features which overlap with the zone of influence;
 - identify all relevant conservation objectives, including any specific objectives for designated sites;
 - identify information required to determine the baseline ecological conditions, including environmental trends, management activities, completed developments and development for which consent has been or is likely to be granted;
 - identify the factors likely to affect habitats, species and ecosystems, including the structure and function of relevant ecosystems and habitats and the conservation status of relevant habitats and species;
 - identify pathways for effects (e.g. water, soil or air) between the proposed development and the receiving environment
 - consider potential effects through the lifetime of the project including those associated with the construction, operation, decommissioning and restoration phases.

⁵ <https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.1Update.pdf>

28. Regulation 105 (1) (a) requires that the likely significant effects of the plan/policy should be considered both alone and in combination with other relevant plans and projects that may have effects on Habitats Sites. At both the screening (for likely significant effects) and appropriate assessment stages, the effects of a plan or project must be considered both individually and in combination with other relevant plans or projects. This is a requirement of the Habitats Directive which helps ensure that Habitats Sites are not damaged by the additive effects of multiple plans or projects. In considering “in combination” effects:
- The competent authority should take account of all current and proposed plans or projects of which it is aware (and the applicant is responsible for making the authority aware of such plans or projects). This would include proposals where planning permission (or a similar regulatory consent) has been applied for or granted;
 - It is not necessary to take account of plans or projects for which there have been no formal applications under an approvals process;
 - The authority should take account of the effects of past plans or projects if they are having an ongoing effect on the conservation objectives of the site.
29. Consideration of “in combination” effects may mean that an appropriate assessment is required even though a proposal, by itself, would not have a significant effect.
30. Based on recent case law, current Government guidance on Habitats Regulation Assessment ⁶ requires that:
- integral design features or characteristics, such as layout, timing and location should be used to inform the screening decision. These may mean that any risk to a Habitats Site is avoided and there is no need to do an appropriate assessment; and
 - at this stage, any mitigation measures included for the purpose of avoiding or minimising risk to a Habitats Site *should not be considered*. These mitigation measures need to be considered at the appropriate assessment stage.
31. The current adopted Kent Minerals and Waste Local Plan (KMWLP) and the early Partial Review of the KMWLP have both been subject to HRA before their adoption and the last HRA being as recent as 2019. These previous HRA’s⁷ have been reviewed to inform this current HRA. Kent County Council is undertaking an update of the KMWLP as outlined in Section 2.1. It is therefore considered necessary to update the HRA’s to reflect any changes which may have new or additional effects on Habitats Sites in Kent. Given the scale and nature of the proposed changes, it was not considered necessary to undertake a completely new HRA, but instead to rely on the existing HRA’s in so far as policy and site allocations have not changed significantly. The approach that has been taken therefore is considered proportionate to the proposed changes in policy and is effectively a ‘refresh’ of the existing HRA’s that focuses on the likely significant effects of proposed policy changes on Habitats Sites in Kent. This is considered to be in accordance with Government guidance⁸ which advises Competent Authority’s that they should, “*keep duplication to a minimum, for example, you may be able to use information from the HRAs of previous similar*

⁶ [Habitats regulations assessments: protecting a European site - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

⁷ <https://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/planning-policies/minerals-and-waste-planning-policy#tab-4>

⁸ [Habitats regulations assessments: protecting a European site - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

decisions if they're still relevant and up to date". It goes on to advise that: "You can use an HRA previously carried outfor the same proposal if:

- *there's no new information or evidence that may lead to a different conclusion*
- *the assessments already done are relevant, thorough and correct*
- *the conclusions are rigorous and robust*
- *there's no new case law that changes the way an HRA should be carried out or interpreted*

If you decide to use a previous HRA's evidence and conclusions, you should still make sure your final decision will have no negative effect on the European site. The final decision is your responsibility".

32. The HRA process effectively consists of two stages:

- a. **Screening Assessment** - The first stage in the process of Habitats Regulations Assessment is the screening assessment which is intended to identify elements of the plan that are likely to have a significant effect on any Habitats Sites (including designated and potential Special Areas of Conservation SAC, Special Protection Areas SPA and Ramsar sites), either on land or offshore, either alone or in-combination with other plans. Case law has established that this assessment should not take into consideration any proposed mitigation measures. Any elements of the plan that cannot be screened out as having a likely significant effect should then be subject to the second stage of the HRA process, the full Appropriate Assessment.
- b. **Appropriate Assessment** – For those policies and proposals of the plan that cannot be screened out as having no likely significant effects. At this stage it is necessary to consider the potential effects of those aspects of the plan on the integrity of Habitats Sites in relation to the likely effects on the conservation objectives of those sites and effects on achieving and maintaining favourable conservation status for the qualifying interest features.

33. The following sections set out these assessments.

3. HRA Screening Assessment

3.1 Initial screening assessment

34. An initial high level screening assessment was undertaken to identify those policies and proposals of the proposed updates to the KMWLP that had the potential to give rise to significant effects on biodiversity and those that were unlikely to give rise to significant effects on biodiversity, if the activities permitted under the policies and proposals were to take place within the impact risk zone of a Habitats Site (SAC, SPA and Ramsar site).

35. Table 2 summarises the outcomes of this initial screening assessment.

Table 2 Summary of the Local Plan HRA Screening Assessment

Policy Types Assessment Criteria	Screening	Screened In?	Relevant Policies
A. General policy statements (which set the policy criteria for change and development)	NO	NO	CSM1/CSW1/CSW2/CSW3/DM16/DM17/DM20/DM21/DM22
B. Policies intended to protect or conserve or restore the environment and/or public health	NO	NO	CSW10/DM1/DM2/DM3/DM4/DM5/DM6/DM10/DM11/DM12/DM13/DM14/DM15/DM18/DM19
C. Policies which will not lead in themselves to change or development in the current plan period (to 2038) but could pave the way for future change and development	NO	NO	CSM5/CSM6/CSM7/CSW16/DM7/DM8 These are generally safeguarding policies for the future to prevent the loss of potential future minerals and waste resources
D. Policies which could lead to change or development but are not location specific	NO	NO	CSM4/CSM8/CSM9/CSM10/CSM12/ CSW6/CSW7/CSW8/CSW9/ CSW13//DM9
E. Policies which propose or could lead to change or development in specific locations, within the current plan period (and that could affect Habitats Sites)	YES	YES	CSM2/ CSM3 (Holborough Strategic Minerals Site, Medway)/ CSM11 (East Kent Limestone Prospecting) /CSW5 (Norwood Quarry/Landfill site) /CSW17 (low level nuclear waste deposition at Dungeness)
F. Policies which are not location specific but propose or could lead to general increases in the quantum of mineral extraction or waste management and associated	YES	YES	CSW4 ⁹ /CSW11 ¹⁰ /CSW12 ¹¹ /CSW14 ¹² / CSW15 ¹³ /CSW18 ¹⁴ /DM9 ¹⁵

⁹ Provides for an additional 20,000 tonnes of waste per annum over the plan period

¹⁰ Could result in an increase in inert waste import and deposition

¹¹ Could result in an increase in hazardous waste import and deposition

¹² Allows possible new dredgings sites and dredgings could be contaminated e.g. with heavy metals and hydrocarbons

¹³ Wastewater treatment is likely to be located near to rivers and may flow into protected sites e.g. Stodmarsh

¹⁴ Could result in an increase in deposition of low level nuclear waste

¹⁵ Could result in further mineral extraction coming forward within the plan period

environmental impacts e.g. air pollution		
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36. Based on this initial screening assessment, there is uncertainty as to the potential effects of the following policies summarised in Table 3 on Habitats Sites:

Table 3 Summary of the initial screening assessment

Minerals Policies Screened Out	Not	Waste Policies Screened Out	Not	Development Management Policies Not Screened Out
CSM2		CSW4		DM9
CSM3		CSW5		
CSM11		CSW11		
		CSW12		
		CSW14		
		CSW15		
		CSW17		
		CSW18		

37. A further, more detailed screening assessment of these policies was therefore required and any that could not be screened out would need to go forward for full appropriate assessment of their effects on the integrity of Habitats Sites. The further screening assessment required a more detailed examination of the proposed changes to the existing policies and proposals of the adopted KMWLP, to assess whether these changes were likely to result in significant effects that had not previously been considered in the HRA's of the current adopted versions of the KMWLP.

38. When undertaking further screening it was also necessary to identify any changes to the number, extent and distribution of Habitats Sites since the previous versions of the KMWLP and any substantive changes to the relevant legislation and national policy on Habitats Sites since the previous KMWLP was adopted. Such changes may affect the conclusions of the HRA's from the current adopted versions of the plan. There have been no substantive changes in the relevant legislation since the previous KMWLP was adopted in 2020 and no substantive changes in the Habitats Sites in Kent. The new Environment Act passed by Parliament in November 2021 does not take effect until November 2023. However, the National Planning Policy Framework was updated in July 2021.

39. The results of the further screening assessment are summarised in Table 4.

Table 4 Summary of the further screening assessment

Policy	Changes to Current Policy	Effects of Changes	Further Screening Assessment Result
CSM2	A change to the plan period from 2013-30 to 2023-38 means there is a need to identify additional land for the extraction of hard rock in order to maintain a 10 year	Whilst this policy change will lead to additional mineral extraction, it is not currently known where the locations of that extraction will be. Therefore, any likely significant	Policy screened out

	landbank. It is proposed that a new site(s) to address this matter be allocated in the Mineral Sites Plan.	effects resulting from the allocation of further sites will need to be subjected to a separate Habitats Regulations Assessment for the update of the Minerals Site Plan.	
CSM3	Medway Cement Works, Holborough and its permitted mineral reserves are together identified as the Strategic Site for Minerals in Kent. The site location is shown on Figure 17. The site already has planning permission that has been implemented and so it is proposed to delete this allocation as the reserves are safeguarded by other policies in the KMWLP.	Removing the policy and the site cannot result in any adverse effects on Habitats Sites.	Policy screened out
CSM11	There are no significant changes to current policy wording. No specific locations identified. No quantum of need expressed.	Significant effects will need to be considered, in line with other policy requirements, when specific applications in specific locations come forward.	Policy screened out.
CSW4	No additional waste capacity proposed. No significant changes to current policy wording.	No significant effects that have not already been considered within the current plan.	Policy screened out.
CSW5	Norwood Quarry and Landfill Site is already allocated as the Strategic Waste Site for Kent. No changes to current policy wording.	No significant effects that have not already been considered within the current plan and the current Minerals and Waste Sites Plan.	Policy screened out.

CSW11	No substantive change to current policy wording. No specific sites allocated. No quantum of need expressed.	No significant effects that have not already been considered within the current plan.	Policy screened out.
CSW12	No substantive change to current policy wording. No specific sites allocated. No quantum of need expressed.	No significant effects that have not already been considered within the current plan.	Policy screened out.
CSW14	No specific sites allocated. No changes to current policy wording. No quantum of need expressed.	No significant effects that have not already been considered within the current plan.	Policy screened out.
CSW15	No substantive change to current policy wording. No specific sites allocated. No quantum of need expressed.	No significant effects that have not already been considered within the current plan.	Policy screened out.
CSW17	Changes to policy wording allows for the importation and deposition of low-level nuclear waste and other wastes.	Potential significant effects from importation and deposition of low-level nuclear waste and other wastes.	Policy screened in.
CSW18	Policy extended to allow for importation of low level nuclear waste from beyond Kent. Policy principles remain the same as the current plan. No specific sites allocated. No quantum of need expressed.	Potential significant effects from additional importation of low-level nuclear waste. Significant effects will need to be considered, in line with other policy requirements, when specific applications in specific locations come forward.	Policy screened out.
DM9	No substantive change to current policy wording. No specific sites allocated.	No significant effects that have not already been considered within the current plan.	Policy screened out.

	No quantum of need expressed.		
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40. Following the further screening assessment, it was not possible to exclude the possibility that changes to Policy CSW17 could have likely significant effects that have not previously been considered in the current adopted versions of the KMWLP. Therefore, the changes to Policy CSW17 were taken forward for full appropriate assessment.

4. HRA Appropriate Assessment

4.1 Purpose

41. Appropriate assessment is required under Regulation 105 of the Habitats Regulations for any likely significant effects identified through the screening assessment or where on the basis of the available evidence, a risk of likely significant effects cannot be excluded.
42. Government guidance on appropriate assessment (AA) provides the framework for this process¹⁶. The key requirement is the 'integrity test' – an assessment as to whether the plan or project or elements of it, are likely either alone or in combination with other plans and projects, to have an adverse effect on the integrity of the European site(s). For the purposes of this assessment, adverse effects on integrity are defined as those that could undermine the conservation objectives for that site(s). A proposal will pass the integrity test if the AA can show that there is no reasonable scientific doubt that it will not have an adverse effect on the integrity of the site(s) taking into consideration any measures that can be implemented to avoid or mitigate for any adverse effects.

4.2 Approach

43. To carry out the assessment and apply the integrity test the guidance recommends the following approach:
 - the ecological requirements, conservation objectives and the current conservation status (if known) of the European site's designated features that might be affected by the proposal should be established;
 - each potential effect (impact pathway) on the European site(s), should be assessed thoroughly, including the risk of combined effects with other proposals, and how these effects might impact on the site's conservation objectives;
 - the scale, extent, timing, duration, reversibility and likelihood of the potential effects should be considered;
 - the certainty of the effects occurring should be determined;
 - mitigation measures that have been proposed or conditions that can attached to avoid or mitigate the effects should then be considered;
 - the likely effectiveness of these mitigation measures over the whole lifetime of the proposal - for example, the effects of construction, operation and decommissioning, must be assessed. This assessment must include the following considerations:
 - how the measures would be implemented and monitored, and for how long;
 - how the measures would be enforced;
 - the level of certainty that the measures would succeed in satisfactorily reducing adverse effects;
 - the time it will take for the measures to take effect;
 - remedial measures if monitoring shows the measures are failing.
44. The final judgement on the integrity test must be made based on:
 - the advice received from Natural England as the Statutory Nature Conservation Body on the draft AA;
 - the precautionary principle – the assessment must be able to conclude beyond all reasonable scientific doubt that there will be no adverse effect on a site's integrity before the plan or project can be approved.

¹⁶ <https://www.gov.uk/guidance/appropriate-assessment>

5. Appropriate assessment of the likely significant effects of revised Policy CSW17

5.1 Background to the proposed changes to Policy CSW17

45. The original policy was numbered CSW18 in the KMWLP but became CSW7 when the policy numbering altered as a result of a modification to the Plan during the Examination in Public in 2015. The proposed changes to Policy CSW17 are required to make the policy consistent with relevant strategies, policy and guidance on the management of wastes from nuclear de-commissioning and other radioactive wastes. The Nuclear Decommissioning Authority (NDA) is required to produce a strategy for decommissioning nuclear legacy sites in the UK every five years. The current NDA Strategy (which was subject to prior public consultation) came into force in April 2016 and this included a commitment to prepare a single radioactive waste strategy for the NDA which was published in 2019 (“The Integrated Waste Management Radioactive Waste Strategy” (2019)).
46. The wording of the current adopted Policy CSW17 is as follows:
Policy CSW 17 Nuclear Waste Treatment and Storage at Dungeness
Facilities for the storage and/or management of radioactive waste will be acceptable within the Nuclear Licensed area at Dungeness where:
1. this is consistent with the national strategy for managing radioactive waste and discharges
2. the outcome of environmental assessments justify it being managed on site.
The only waste arising from Dungeness Nuclear Licensed Site that will be acceptable as fill material for the back-filling of voids within the nuclear licensed site are inert (non-radioactive) wastes generated by the demolition of existing buildings and structures. Landfill or landraise activities that use radioactive wastes within the nuclear licensed site will not be granted planning permission.
47. Comments received during the preparation of the Early Partial Review of the KMWLP 2013-2030, (ID53 and ID45) identified that as currently worded, Policy CSW17 was not consistent with NDA strategy for the treatment of wastes from de-commissioning nor was it consistent with the relevant guidance from the other regulatory authorities including:
- Management of radioactive waste from decommissioning of nuclear sites: Guidance on Requirements for Release from Radioactive Substances Regulation Version 1.0: July 2018 (Environment Agency);
 - Near-surface Disposal Facilities on Land for Solid Radioactive Wastes Guidance on Requirements for Authorisation February 2009 (Environment Agency).
48. A Statement of Common Ground (SoCG) was agreed between Kent County Council as local planning authority for minerals and waste and the NDA and Magnox Ltd on this matter dated January 2020. In it the parties agreed as follows:
- *4.1 The Parties agree that with respect to ‘consistency with national policy’ test of soundness, the Planning and Compulsory Purchase Act 2004 Section 19(2) requires that in preparing a local development document the local planning authority must have regard to national policies and advice contained in guidance issued by the Secretary of State. It is agreed that the NDA Strategy is a relevant national policy for the purposes of Section 20(5) of the 2004 Act which refers back to Section 19 and, in this regard, s19(2)(a).*
 - *4.4 The Parties agree that the preclusion of options is contrary to national policy in the form of the NDA Strategy (2016) and the Integrated Waste Management*

Radioactive Waste Strategy (2019) - both of which require the consideration of options for the management and disposal of waste in order to ensure application of the waste hierarchy and greater integration across the NDA estate, in particular sharing treatment and interim storage assets and capabilities where appropriate. The Parties agree that the policy is consistent with other national policy concerned with the protection of communities and the environment.

49. In particular, the current adopted wording of Policy CSW17 precludes the following:
- The disposal of low-level radioactive wastes either in-situ or within voids from existing de-commissioning operations at the Dungeness nuclear sites (Dungeness A and Dungeness B);
 - The disposal of low-level radioactive wastes from other nuclear de-commissioning sites or from other sources of low level radioactive wastes;
 - The storage and treatment of radioactive wastes from other nuclear de-commissioning sites or from other sources of low-level radioactive wastes.

50. In seeking to address the acknowledged inconsistencies with national strategy, Kent County Council is proposing a revision of the wording of Policy CSW17 as follows:

Policy CSW 17 -

Nuclear Waste Management at the Dungeness Nuclear Licensed Sites

Part A: General requirements

Facilities for the management (including storage, treatment or disposal (subject to Part B of this policy)) of radioactive waste will be acceptable within the **Dungeness Nuclear Licensed Sites** where:

1. this is consistent with the national strategy⁽⁹⁸¹⁰¹⁾ for managing radioactive waste and discharges; and
2. the outcome of environmental assessments justify it being managed on the Dungeness Nuclear Licensed Sites.

Part B: Disposal of Waste at Dungeness Nuclear Licensed Sites

The only wastes that will be acceptable **for disposal** within the **Dungeness Nuclear Licensed Sites** are **low-level and very low-level radioactive wastes, or inert (non-radioactive) wastes,**

The types of disposal of such wastes that would be acceptable are:

- **In situ disposal of inground structures and foundations (including contaminated below-ground structures, foundations and redundant drains);**
- **The back-filling of voids within the Dungeness Nuclear Licensed Sites using wastes generated by the demolition of existing buildings and structures; and**

- **Purpose built landfill or land raise activities within the Dungeness Nuclear Licensed Sites using wastes generated by the demolition of existing buildings and structures.**

Planning permission for the disposal of waste arisings as described above on the Dungeness Nuclear Licensed Sites will be granted only if it can be demonstrated that:

- the development is the optimum waste management approach for the radioactive waste concerned;**

Footnote 102¹: National strategy for radioactive wastes is the NDA Strategy at the time of **any application**

- impacts on the sustainability, including environment, of the area mitigated to an acceptable level with reference to baseline data; and,**
- for the disposal of imported low-level and very low-level radioactive demolition waste from other nuclear sites,:**
 - there is an on-site land engineering need that can be met using these imported wastes, e.g. the in-filling of voids; and**
 - there is insufficient suitable radioactive waste and/or non-radioactive material that would be generated from the demolition of buildings and structures on the Dungeness sites themselves available on the required timescales that would meet the engineering need; and**
 - if importation of radioactive demolition wastes from other nuclear sites were not to be carried out then an approximately equivalent amount of other materials would still require to be imported to meet the identified engineering need; and**
 - the type and number of vehicle movements associated with the disposal of imported low-level and very low-level radioactive demolition waste to meet the identified engineering need, would be equivalent to, or would have a lesser impact than, those which would be associated with any import of engineering material that would be used to meet the identified engineering need.**

51. These proposed changes to the policy wording permit the following activities which the current version of Policy CSW17 does not:

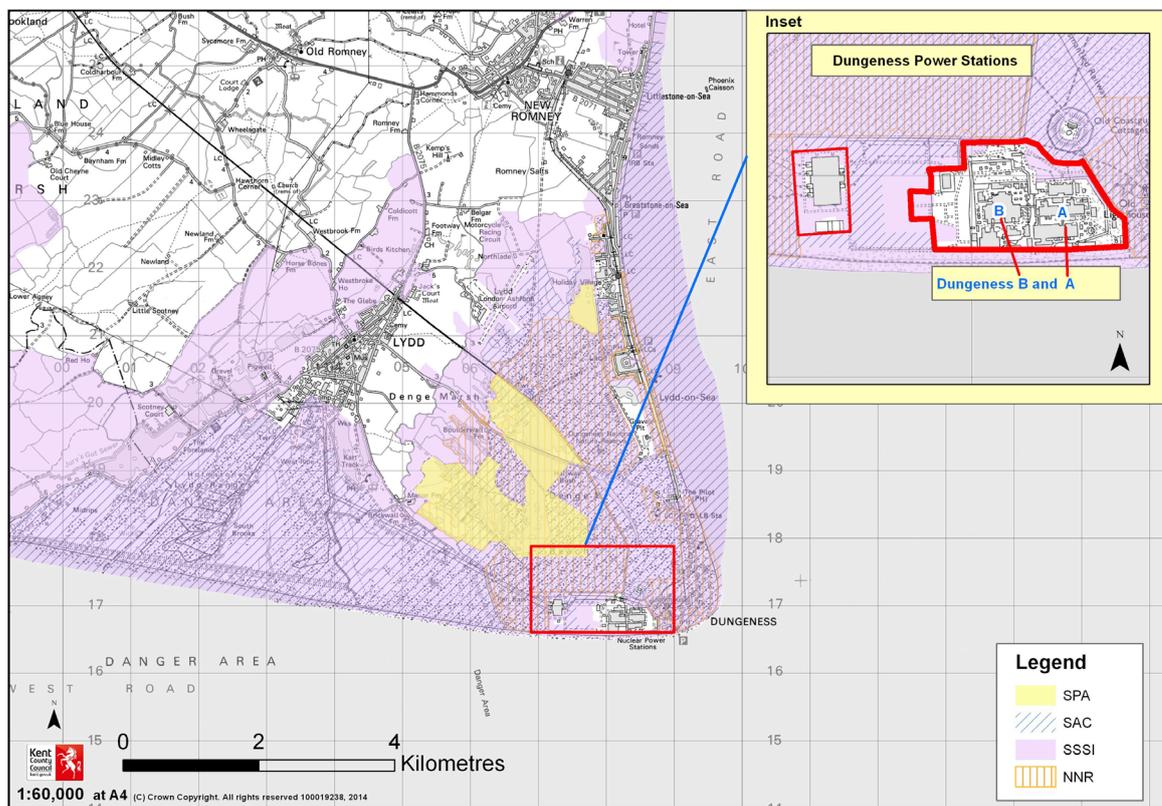
- the storage and treatment of radioactive wastes from other nuclear waste producers as well as those from within the Dungeness nuclear licensed site;

- the deposition of low-level non-hazardous radioactive wastes within the nuclear licensed site from de-commissioning operations within the Dungeness nuclear estate/licensed site;
- the deposition of other inert (non-radioactive) wastes from on-site de-commissioning operations;
- the importation and deposition of non-hazardous low-level radioactive wastes from other nuclear waste producers and
- the importation and deposition of other inert (non-radioactive) wastes.

52. These changes to the policy were assessed as being significant and have the potential for significant effects on the Habitats Sites on the Dungeness peninsula which had not been considered in previous HRA's for the adopted KMWLP.

53. The area of land to which this policy applies is shown in Figure 1.

Figure 1 The Dungeness Licensed Nuclear Sites



5.2 Likely significant effects

54. The likely significant effects of the revised Policy CSW17 were assessed in relation to:

- The scope of activities that the revised policy wording would permit (both alone and in combination with other relevant plans and projects); and
- The designated Habitats Sites and their qualifying interest features within the potential impact risk zone of the Dungeness nuclear licensed sites.

55. Appendix 1 to this report details the Habitats Sites that could be affected by these activities and their qualifying interest features and their conservation objectives as well

as an assessment of the current condition of these Habitats Sites and their qualifying interest features and the threats and pressures on them which could affect the maintenance or achievement of favourable conservation status. A summary of these details is set out at Table 5.

Table 5 Summary of the Habitats Sites and qualifying features on the Dungeness peninsula

Designated Site:
Dungeness Special Area of Conservation SAC - https://sac.jncc.gov.uk/site/UK0013059
Qualifying Features:
Annex I Habitat H1210. Annual vegetation of drift lines
Annex I Habitat H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves
Annex II Species S1166. <i>Triturus cristatus</i> ; Great crested newt.
Designated Site:
Dungeness, Romney Marsh and Rye Bay Special Protection Area SPA - https://www.gov.uk/government/publications/special-protection-area-and-ramsar-site-dungeness-romney-marsh-and-rye-bay
Qualifying Features:
A021 <i>Botaurus stellaris</i> ; Great bittern (Non-breeding)
A037 <i>Cygnus columbianus bewickii</i> ; Bewick's swan (Non-breeding)
A056 <i>Spatula (Anas) clypeata</i> ; Northern shoveler (Non-breeding)
A081 <i>Circus aeruginosus</i> ; Eurasian marsh harrier (Breeding)
A082 <i>Circus cyaneus</i> ; Hen harrier (Non-breeding)
A132 <i>Recurvirostra avosetta</i> ; Pied avocet (Breeding)
A140 <i>Pluvialis apricaria</i> ; European golden plover (Non-breeding)
A151 <i>Calidris (Philomachus) pugnax</i> ; Ruff (Non-breeding)

A176 <i>Larus melanocephalus</i> ; Mediterranean gull (Breeding)
A191 <i>Sterna sandvicensis</i> ; Sandwich tern (Breeding)
A193 <i>Sterna hirundo</i> ; Common tern (Breeding)
A195 <i>Sterna albifrons</i> ; Little tern (Breeding)
A294 <i>Acrocephalus paludicola</i> ; Aquatic warbler (Non-breeding)
Waterbird assemblage
Designated Site:
Dungeness, Rye Bay and Romney Marsh Ramsar Site - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/509228/dungeness-romney-rye-ramsar-documents.pdf
Qualifying Features:
The site qualifies under Criterion 1 because it contains representative, rare, or unique examples of natural or near-natural wetland types: Annual vegetation of drift lines and the coastal fringes of perennial vegetation of stony banks (Ramsar wetland type E – sand, shingle or pebble shores).
The site qualifies under Criterion 2 because it supports threatened ecological communities: The site consists of a complex network of wetland habitats including saltmarsh, natural freshwater pits, fens, ponds, gravel pits, and grazing marsh and ditches. They support rich and diverse assemblages of bryophytes, vascular plants and invertebrates that are rare, threatened, or listed as priority species.
The site further qualifies under Criterion 2 because it supports vulnerable, endangered or critically endangered species: including water vole (<i>Arvicola amphibius</i>), aquatic warbler (<i>Acrocephalus paludicola</i>), great crested newt (<i>Triturus cristatus</i>) and medicinal leech (<i>Hirudo medicinalis</i>).
The site qualifies under Criterion 5 because it regularly supports 20,000 or more waterbirds: In the non-breeding season, the site regularly supports 34,957 individual waterbirds (5 year peak mean 2002/3 – 2006/7).

The site qualifies under **Criterion 6** because it regularly supports 1% of the individuals in the populations of the following species or subspecies of waterbird in any season: Mute swan *Cygnus olor* Shoveler *Anas clypeata*.

56. Appendix 1 also includes maps showing the geographic extent of these Habitats Sites.

57. Based upon the known threats, pressures and vulnerabilities of these Habitats Sites (see Appendix 1, Tables 1A, 2A, 3A) and their qualifying interest features, and the further activities that would be permitted under the revised Policy CSW17, the following impact pathways in Table 6 were identified.

Table 6 Summary of potential impact pathways and effects

Potential Pathways for Significant Effects	Potential Effects from Construction	Potential Effects from Operation
Habitat Loss and Degradation and impacts on qualifying species	Temporary land take during construction	Permanent land take during operation
Air Pollution	Construction traffic and construction related dusts	None predicted
Water and Soil Pollution and Changes in Hydrology	Mobilisation of on-site contaminants/importation of contaminants and construction site drainage	Operational site drainage
Noise and Vibration Disturbance	Construction noise and vibration	None Predicted
Visual Disturbance	During construction	None Predicted

58. These potential impact pathways accord with those advised by Natural England in its email (reference 390435 dated 13th May 2022): *Having considered the proposed changes to the policy wording and supporting text, Natural England considers that a greater degree of information is required as part of the evidence base to underpin the Plan and the suggested amendments. Given that the land covered by Policy CSW17 appears to fall partly within the Dungeness Romney Marsh and Rye Bay Site of Special Scientific Interest and the Dungeness Special Area of Conservation (SAC) and is also surrounded by the Dungeness, Romney Marsh and Rye Bay Special Protection Area (SPA) and Ramsar Site, there are potential significant direct and indirect impacts that could arise from the proposed amendments. Such impacts may result from direct land take, noise, air quality (both transport generated and windblown), visual impacts to birds, contamination and water quality impacts, for example. Natural England would therefore recommend that further evidence to underpin the proposed amendments should be provided by the Council to ensure that adverse impacts to the designated sites do not*

result from the policy in accordance with the requirements within National Planning Policy Framework.

59. The qualifying features of the Habitats Sites were assessed against each of these potential impact pathways to identify the likely significant effects to each feature. Due to the significant overlap between the qualifying features of the Ramsar site with those of the SAC and SPA, a separate assessment was not considered necessary for the Ramsar site.

5.3 Appropriate Assessment of the likely significant effects on the Dungeness Special Area of Conservation (SAC)

60. Table 7 provides a summary of the likely significant effects on the qualifying interest features of the SAC. This assessment is based on available information on the sensitivity of each qualifying feature to the effects identified in Table 6. This is based on the information at Appendix 1 Table A1 which describes the current condition of qualifying features and the threats to them and vulnerabilities of them.

Table 7 Summary of the likely significant effects to the SAC

Qualifying Feature	Habitat Loss or Degradation and Species Impacts Habitat loss (permanent or temporary) and effects on qualifying species	Potential for Significant Effects
Annex I Habitat - H1210. Annual vegetation of drift lines	Human intrusions and disturbances (G05) are a recognised high level threat and pressure for this feature. The SAC boundaries are outside of but coincidental to the Dungeness A site. However, the SAC boundaries do include land within the Dungeness B site. If this land were to be used for development permitted under Policy CSW17 it could therefore result in the loss of or degradation of this SAC qualifying interest feature. This could include the movement of contractors plant and temporary storage areas within this habitat.	YES During construction
Annex I H1220. Perennial vegetation of stony banks	Human intrusions and disturbances (G05) are a recognised high level threat and pressure for this feature. The SAC boundaries are outside of but coincidental to the Dungeness A site. However, the SAC boundaries do include land within the Dungeness B site. If this land were to be used for development permitted under Policy CSW17 it could therefore result in the loss of or degradation of this SAC qualifying interest feature. This could include the movement of contractors plant and temporary storage areas within this habitat.	YES During construction
Annex II Species S1166. Triturus cristatus;	The nearest confirmed record of great crested newt (GCN) is over 800 metres from the boundary of the Dungeness nuclear sites see Figure 2). The nearest water body that could support GCN is Long Pits approximately 800 metres to the northeast. This waterbody is a	NO GCN breeding ponds and associated terrestrial habitat is over 500metres from

Great crested newt	coarse fishery ¹⁷ and therefore, unlikely to support breeding GCN. As the nuclear sites are therefore over 500metres from the nearest confirmed GCN breeding place, there is unlikely to be any effects on habitats used by this species or on the local population or individuals within it.	the Dungeness nuclear licensed sites
Qualifying Feature	Air Quality Emissions of NH3, NOx and SO2 and nitrogen and acid deposition	Potential for Significant Effects
Annex I Habitat - H1210. Annual vegetation of drift lines	<p>This habitat type is considered sensitive to changes in air quality. Exceedance of these critical values for air pollutants may modify the chemical status of its substrate, accelerating or damaging plant growth, altering its vegetation structure and composition and causing the loss of sensitive typical species associated with it.</p> <p>Emissions, concentrations and deposition of air pollutants must be kept to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System (www.apis.ac.uk).</p> <p>Critical Loads and Levels are recognised thresholds below which such harmful effects on sensitive UK habitats will not occur to a significant level, according to current levels of scientific understanding. There are critical levels for ammonia (NH3), oxides of nitrogen (NOx) and sulphur dioxide (SO2), and critical loads for nutrient nitrogen deposition and acid deposition.</p> <p>The Critical Loads for this feature are listed as follows: <i>Nitrogen Deposition:</i> 8-15 kg/N/ha/yr.</p> <p><i>Acid Deposition (keq/ha/yr):</i> Maximum: CLminN: 0.438 CLmaxN: 4.618 CLmaxS: 4.18 Minimum: CLminN: 0.223 CLmaxN: 4.373 CLmaxS: 4.15</p> <p>The Critical Levels for this feature are as follows: <i>Ammonia NH3:</i> 30 µg NOx/m³¹⁸ <i>Nitrous Oxide NOx:</i> 30 µg NOx/m³ annual mean 75 µg NOx/m³ 24hr mean <i>Sulphur Dioxide SO2:</i> 10-20 µg SO2/m³ annual mean</p>	No The type and number of vehicle movements associated with the policy change would be equivalent to, or would have a lesser impact than, those which would be associated with any import of engineering material that would be used to meet the identified engineering need associated with filling the voids.

¹⁷ <https://www.lyddanglingclub.com/waters.html>

¹⁸ <https://www.apis.ac.uk/ammonia-dunes-shingle-machair>

<p>Annex I H1220. Perennial vegetation of stony banks</p>	<p>This habitat type is considered sensitive to changes in air quality. Exceedance of these critical values for air pollutants may modify the chemical status of its substrate, accelerating or damaging plant growth, altering its vegetation structure and composition and causing the loss of sensitive typical species associated with it.</p> <p>Emissions, concentrations and deposition of air pollutants must be kept to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System (www.apis.ac.uk).</p> <p>Critical Loads and Levels are recognised thresholds below which such harmful effects on sensitive UK habitats will not occur to a significant level, according to current levels of scientific understanding. There are critical levels for ammonia (NH₃), oxides of nitrogen (NO_x) and sulphur dioxide (SO₂), and critical loads for nutrient nitrogen deposition and acid deposition.</p> <p>The Critical Loads for this feature are listed as follows: <i>Nitrogen Deposition:</i> 8-15 kg/N/ha/yr.</p> <p><i>Acid Deposition (keq/ha/yr):</i> Maximum: CLminN: 0.438 CLmaxN: 4.618 CLmaxS: 4.18 Minimum: CLminN: 0.223 CLmaxN: 4.373 CLmaxS: 4.15</p> <p>The Critical Levels for this feature are as follows: <i>Ammonia NH₃:</i> 3 µg/m³ (2-4 µg/m³) Where Lichens and Bryophytes present: 1 µg NH₃/m³ annual mean¹⁹ <i>Nitrous Oxide NO_x:</i> 30 µg NO_x/m³ annual mean 75 µg NO_x/m³ 24hr mean <i>Sulphur Dioxide SO₂:</i> 10-20 µg SO₂/m³ annual mean</p>	<p>NoThe type and number of vehicle movements associated with the policy change would be equivalent to, or would have a lesser impact than, those which would be associated with any import of engineering material that would be used to meet the identified engineering need associated with filling the voids.</p>
<p>Annex II Species S1166. <i>Triturus cristatus</i>; Great crested newt</p>	<p>The supporting habitat of this feature is considered sensitive to changes in air quality. Exceedance of these critical values for air pollutants may modify the chemical status of the habitat's substrate, accelerating or damaging plant growth, altering its vegetation structure and composition (including food-plants) and reducing supporting habitat quality and population viability of this feature.</p>	<p>NoThe type and number of vehicle movements associated with the policy change would be equivalent to, or would have a lesser impact than, those which would be</p>

¹⁹ <https://www.apis.ac.uk/ammonia-dunes-shingle-machair>

	<p>To achieve/maintain favourable conservation status concentrations and deposition of air pollutants must be maintained at or below the site-relevant Critical Load or Level values given for the feature's supporting habitat on the Air Pollution Information System (www.apis.ac.uk).</p> <p>Critical Loads and Levels are recognised thresholds below which such harmful effects on sensitive UK habitats will not occur to a significant level, according to current levels of scientific understanding. There are critical levels for ammonia (NH₃), oxides of nitrogen (NO_x) and sulphur dioxide (SO₂), and critical loads for nutrient nitrogen deposition and acid deposition.</p> <p>Critical Levels: Ammonia NH₃: 3 µg/m³ (2-4 µg/m³ set for all higher plants)</p> <p>Nitrous Oxide NO_x: 30 µg NO_x/m³ annual mean 75 µg NO_x/m³ 24hr mean (these values set for all higher plants)</p> <p>Dungeness Road along which all vehicle movements to and from the Dungeness nuclear sites must travel, passes through and adjacent to waterbodies with confirmed GCN breeding.</p>	<p>associated with any import of engineering material that would be used to meet the identified engineering need associated with filling the voids.</p>
Qualifying Feature	Water and Soil Quality and Hydrology Release or mobilisation of contaminants into the ground or surface waters and changes to ground or surface water levels	Potential for Significant Effects
Annex I Habitat - H1210. Annual vegetation of drift lines	Where the feature is dependent on surface water and/or groundwater, the SAC conservation objectives require that water quality and quantity are maintained to a standard which provides the necessary conditions to support the feature. Typically, meeting the surface water and groundwater environmental standards set out by the Water Framework Directive (WFD 2000/60/EC) will also be sufficient to support the achievement of SAC Conservation Objectives but in some cases more stringent standards may be needed. Further site-specific investigations may be required to establish appropriate water quality standards for the SAC.	YES During construction and operation as a result of changes to surface water and groundwater movement patterns and water quality as a result of contamination.
Annex I H1220.	Changes in source, depth, duration, frequency, magnitude and timing of water supply can have	YES

<p>Perennial vegetation of stony banks</p>	<p>significant implications for the assemblage of characteristic plants and animals present. For many SAC features which are dependent on wetland habitats supported by surface and/or ground water, maintaining the quality and quantity of water supply will be critical, especially at certain times of year. Poor water quality and inadequate quantities of water can adversely affect the structure and function of this habitat type. At a site, unit and/or catchment level the target standard is to maintain natural hydrological processes to provide the conditions necessary to sustain the feature within the site and thus help achieve the Conservation Objectives for this feature.</p> <p>Defining and maintaining the appropriate hydrological regime is a key step in moving towards achieving the conservation objectives for this site and sustaining this feature. Typically, meeting the surface water and groundwater environmental standards set out by the Water Framework Directive (WFD 2000/60/EC) will also be sufficient to support the achievement of SAC Conservation Objectives but in some cases more stringent standards may be needed. Further site-specific investigations may be required to establish appropriate water quality standards for the SAC.</p> <p>This target is generic and further site-specific investigations may be required to fully inform conservation measures and/or the likelihood of impacts.</p> <p>Furthermore, the location of this habitat feature coincides with Source Protection Zones for water (see Figure 7) and Denge Beach immediately to the north of the Dungeness nuclear sites is abstracted for water supply by Affinity Water.</p>	<p>During construction and operation as a result of changes to surface water and groundwater movement patterns and water quality as a result of contamination.</p>
<p>Annex II Species S1166. <i>Triturus cristatus</i>; Great crested newt</p>	<p>Changes in source, depth, duration, frequency, magnitude and timing of water supply can have significant implications for this qualifying feature and its supporting habitats. For many SAC features which are dependent on wetland habitats supported by surface and/or ground water, maintaining the quality and quantity of water supply will be critical, especially at certain times of year. Poor water quality and inadequate quantities of water can adversely affect the structure and function of this habitat type. At a site, unit and/or catchment level the target standard is to maintain natural hydrological processes to provide the conditions necessary to sustain the feature within the site</p>	<p>YES During construction and operation as a result of changes to surface water and groundwater movement patterns and water quality as a result of contamination.</p>

	<p>and thus help achieve the Conservation Objectives for this feature.</p> <p>Defining and maintaining the appropriate hydrological regime is a key step in moving towards achieving the conservation objectives for this site and sustaining this feature.</p> <p>Typically, meeting the surface water and groundwater environmental standards set out by the Water Framework Directive (WFD 2000/60/EC) will also be sufficient to support the achievement of SAC Conservation Objectives but in some cases more stringent standards may be needed. Further site-specific investigations may be required to establish appropriate water quality standards for the SAC.</p> <p>This target is generic and further site-specific investigations may be required to fully inform conservation measures and/or the likelihood of impacts.</p> <p>Furthermore, the location of this habitat feature coincides with Source Protection Zones for water (see Figure 7) and Denge Beach immediately to the north of the Dungeness nuclear sites is abstracted for water supply by Affinity Water.</p>	
Qualifying Feature	Disturbance Effects Disturbance from noise and vibration and disturbance from movement of contractors, plant etc	Potential for Significant Effects
Annex I Habitat - H1210. Annual vegetation of drift lines	None predicted	NO
Annex I H1220. Perennial vegetation of stony banks	None predicted	NO
Annex II Species S1166. <i>Triturus cristatus</i>; Great crested newt	As the nuclear sites are over 500metres from the nearest confirmed GCN breeding place, there is unlikely to be any effects on habitats used by this species or on the local population or individuals within it as a result of noise or visual disturbance (see Figure 2).	NO

61. Full appropriate assessment is required where potential significant effects from impact pathways on SAC qualifying interest features could not, on the basis of available evidence, be excluded. The following sections provide further appropriate assessment of these potentially significant effects.

5.4 Potential in combination effects

62. Regulation 105 of the Habitats Regulations requires that the effects of a land use plan must be considered not only alone but also in combination with other relevant plans and projects. This should include other relevant land use plans and other approved or submitted planning applications that may have effects on Habitats Sites in combination.

63. The HRA for the KMWLP adopted in 2016 and the HRA of the Early partial Review adopted in 2020, both considered a range of plans and projects which could together policies with in the KMWLP have significant effects on Habitats Sites and their qualifying features. The most significant likely in combination effects in relation to proposed revisions to Policy CSW17 are:

- the ongoing de-commissioning operations at both Dungeness A and Dungeness B. Some of these operations are the subject of individual planning applications to Kent County Council and Folkestone and Hythe District Council and are considered further below;
- the ongoing flood risk and coastal management works on the coast immediately to the south of the Dungeness nuclear sites at Policy Unit (PU)13, as part of the approved South Foreland to Beachy Head Shoreline Management Plan (SMP)²⁰.

5.5 Appropriate assessment of the effects of Habitat Loss or Degradation and Species Impacts (both alone and in combination with other relevant plans and projects)

64. Figure 1 shows the extent of land that is included within Policy CSW17. As can be seen in Appendix 1, Figures A1 and A2, the designated SAC wraps around the Dungeness nuclear licensed sites and its boundaries are contiguous with those of the nuclear sites in large part. The SAC boundaries are outside of but coincidental to the Magnox Dungeness A site. However, the SAC boundaries do include land within the EDF Dungeness B estate, but outside of the nuclear licensed site and outside of the policy boundary for CSW17. Therefore, no SAC designated land is within the policy boundary of CSW17.

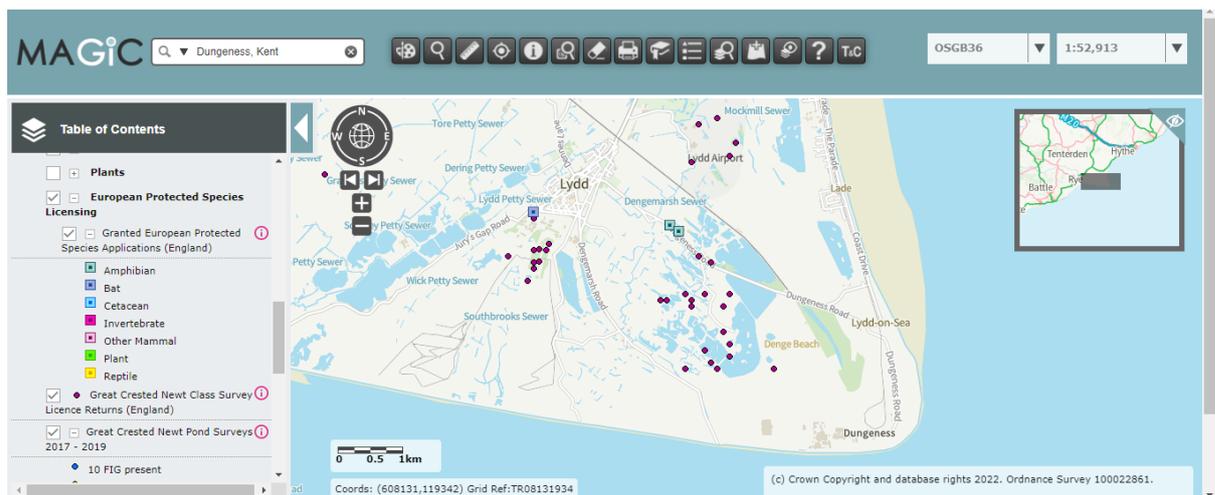
65. However, if adjacent land were required to be used for development permitted under Policy CSW17 (this could include the movement of contractors plant and temporary storage areas) it could result in the loss of or degradation of this SAC habitat. Unit 029 (Nuclear Power Station Compound) of the Dungeness, Romney Marsh and Rye Bay SSSI is currently assessed as being in Unfavourable Recovering condition with the following assessment: *This area is within the power station compound. This unit is in Favourable condition for its Coastal vegetated shingle, Invert assemblage and Coastal Geomorphology Features. Parts of the natural shingle ridge topography remains*

²⁰ <https://se-coastalgroup.org.uk/shoreline-management-plans/south-foreland-to-beachy-head/>

relatively undisturbed and supports good quality shingle vegetation. The area is grazed by rabbits which helps to maintain the vegetation as a short, open community. The typical shingle plant community present includes sea kale, thrift, yellow horned poppy, sea campion, vipers bugloss and saltmarsh goosefoot scattered amongst the largely unvegetated shingle with encrusting lichen.

66. Furthermore, there are small pockets of shingle habitat similar to the Annex I Habitat - H1210 annual vegetation of drift lines and Annex I H1220 habitat perennial vegetation of stony banks and enclosed within the nuclear licensed sites. Some of these pockets of habitat will be affected by current planning proposals.
67. There are no recorded freshwater bodies within 800metres of the Dungeness nuclear sites and the nearest recorded locations for confirmed breeding of great crested newt are shown in Figure 2. As the nuclear sites are over 500metres from the nearest confirmed GCN breeding place, there is unlikely to be any effects on habitats used by this species or on the local population or individuals within it as a result of habitat loss or degradation.

Figure 2 Recorded locations of breeding great crested newt on the Dungeness peninsula



68. It should also be noted that the shingle habitat around the coastal boundaries of the nuclear sites is currently subject to regular management for the purposes of coast defence and flood risk management. The shingle foreshore along the southern boundaries of the Dungeness nuclear sites forms part of coastal unit Policy Unit (PU)13. This section of coast is managed in accordance with the approved South Foreland to Beachy Head Shoreline Management Plan (SMP)²¹. SMP2 was adopted by the relevant Operating Authorities in 2006. Since then, Defra has transferred all of its ‘delivery’ responsibilities to the Environment Agency (EA) under their Strategic Overview role, which came into effect in April 2008. The policy for PU13 is to ‘hold the line’ i.e. to continue to protect the coast against further erosion.

69. An Appropriate Assessment has been carried out as part of the SMP2 and Natural England has written to confirm that they agree with the conclusions of the Appropriate Assessment for the South Foreland to Beachy Head SMP2. The Appropriate Assessment concluded that implementation of the SMP:

²¹ <https://se-coastalgroup.org.uk/shoreline-management-plans/south-foreland-to-beachy-head/>

- may have an adverse effect on the integrity of the Dungeness to Pett SPA (now the Dungeness, Rye Bay and Romney Marsh SPA);
- will have an adverse effect on the integrity of the Dungeness SAC;
- will not have a likely significant effect on the Dover to Kingsdown Cliffs SAC, Hastings Cliffs SAC or the Pevensey Levels Ramsar site;
- will not have any adverse effects as a result of in-combination effects with other plans and programmes.

70. Consequently, in accordance with Regulations 49(5) and 51(2) of the Conservation of Habitats and Species Regulations, 1994 (this was the version of the Habitats Regulations in force the time of the plan preparation and adoption), an Appendix 20 application was made to the Secretary of State for Defra to consider the case for Imperative Reasons of Overriding Public Interest (IROPI). This case was accepted by Defra who consequently confirmed that they had no objections to the intention to approve the SMP .

71. As a consequence of the requirement to hold the line, regular beach management takes place along the shingle foreshore requiring regular disturbance of the habitat. However, this foreshore habitat is not part of the designated SAC but does form part of the marine component of the designated SPA and the effects of this on the SPA are considered separately later.

72. In summary, Policy CSW17 as revised, does not extend beyond the nuclear licensed sites and does not include land within the SAC. The policy does not in itself therefore permit development that would result directly in the loss of degradation of the habitats of qualifying features. If it was necessary to use other land to facilitate the types of development permitted under Policy CSW17, then that would need to be subject to a detailed project level appropriate assessment under Regulation 63 of the Conservation of Habitats and Species Regulations, 2017(as amended) at the time of determining a planning application.

5.6 Appropriate assessment of the effects of changes in Soil and Water Quality and Hydrology (both alone and in combination with other relevant plans and projects)

73. Table 7 shows that all the qualifying features of the Dungeness SAC are to some extent dependent on hydrology (water levels) and water quality. Changes in source, depth, duration, frequency, magnitude and timing of water supply can have significant implications for the assemblage of characteristic plants and animals present. For many SAC features which are dependent on wetland habitats supported by surface and/or ground water, maintaining the quality and quantity of water supply will be critical, especially at certain times of year. Poor water quality and inadequate quantities of water can adversely affect the structure and function of this habitat type. At a site, unit and/or catchment level the target standard is to maintain natural hydrological processes to provide the conditions necessary to sustain the feature within the site and thus help achieve the Conservation Objectives for this feature.

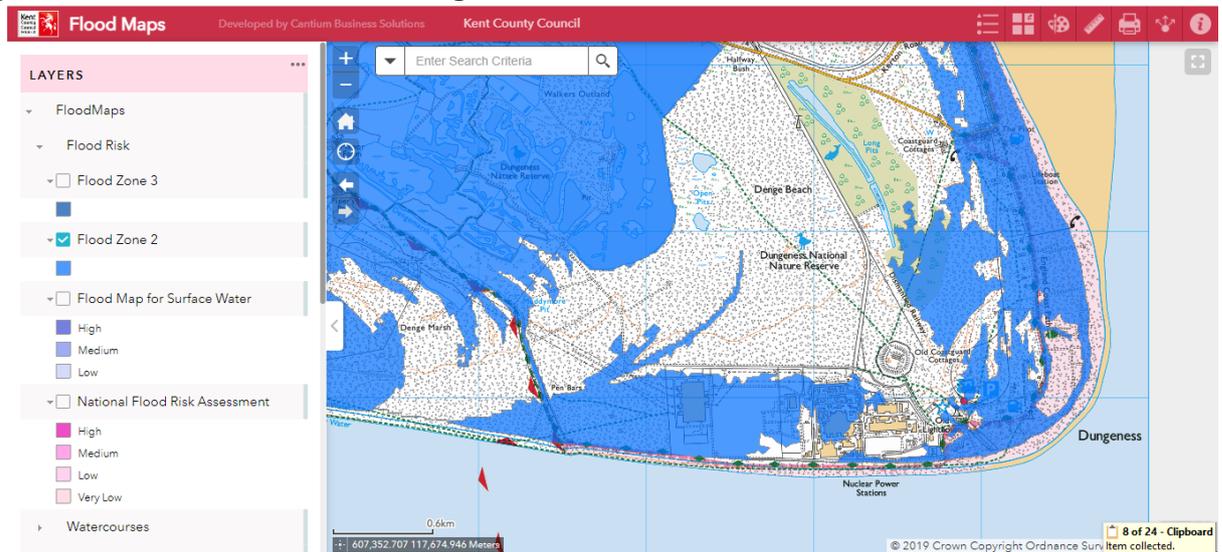
74. Defining and maintaining the appropriate hydrological regime is a key step in moving towards achieving the conservation objectives for this site and sustaining the qualifying features. Typically, meeting the surface water and groundwater environmental standards set out by the Water Framework Directive (WFD 2000/60/EC) will also be sufficient to support the achievement of SAC Conservation Objectives but in some cases more stringent standards may be needed. Further site-specific investigations may be required to establish appropriate water quality standards for the SAC.

75. The types of operation that would be permitted under the revision of Policy CSW17 could affect the SAC qualifying features in two ways:

- Changes to drainage patterns that reduce surface water flow or groundwater levels within the SAC;
- The release of pollutants into surface waters or groundwater.

76. The Dungeness nuclear sites are within land at risk of flooding. As shown in Figure 5 they occupy land within Flood Zones 2 and 3²².

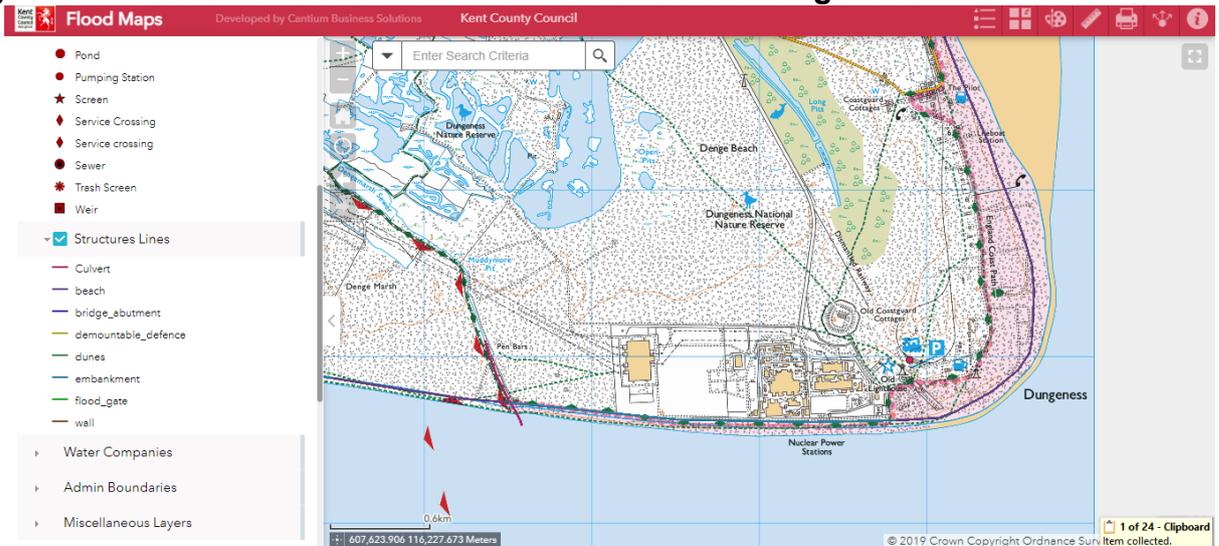
Figure 3 Flood risks at the Dungeness nuclear sites.



77. The sites are protected from flooding by the sea and from coastal erosion by a bank of shingle that is maintained for this purpose under the approved SMP (Section 5.5) and is shown in Figure 6.

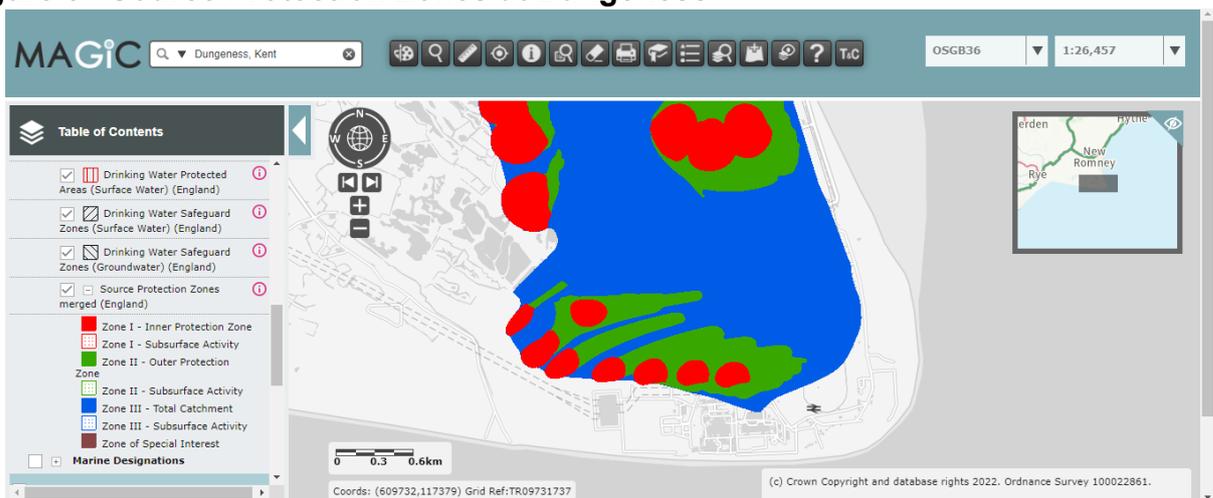
²² <https://webapps.kent.gov.uk/GIS/public/Floodmaps/>

Figure 4 Location of coastal and flood defences at Dungeness nuclear sites



78. The Dungeness nuclear sites also lie within Source Protection Zones (SPZ's) for groundwater as illustrated in Figure 7 and Denge Beach immediately to the north of the Dungeness nuclear sites is abstracted for water supply by Affinity Water. SPZ's are defined around large and public potable groundwater abstraction sites. The purpose of SPZs is to provide additional protection to safeguard drinking water quality through constraining the proximity of an activity that may impact upon a drinking water abstraction. This is part of an initial screening process in assessing impacts to groundwater resources. Zones around location sites are defined by groundwater travel time to an abstraction. This is determined through applying Environment Agency groundwater flow models run at the location of abstractions, inputting parameters such as flow direction, geology type, rainfall and hydrological boundaries. SPZs provide a visual representation of the increased risks as you get closer to the abstraction.

Figure 5 Source Protection Zones at Dungeness



79. In the context of the above risks and constraints, managing drainage at the Dungeness nuclear sites presents a number of technical challenges. Drainage by infiltration risks potential contamination of groundwaters and therefore public water supplies. Drainage by surface water drains/features risks increasing potential flood risks.

80. At a meeting with technical and environmental staff and project management staff of Magnox on 15th August 2022, it was explained to KCC that groundwater at Dungeness flows in a north to south direction i.e. it moves from landward to seaward. This means that any contamination that may enter the groundwater from the Dungeness nuclear sites will move seawards and away from the Dungeness SAC to the north to the west and to the east. This means that the risk of any contaminated groundwater affecting the qualifying features of the SAC (including the standing freshwater pools supporting breeding great crested newt populations) is minimal.
81. At the same meeting it was also explained that the great majority of surface water drainage from the nuclear sites goes to sea. The runoff is collected within a series of drains within the sites before collecting in below ground chambers before being pumped out to sea through a buried pipeline and discharging offshore. This means that any contamination that may enter the surface waters from the Dungeness nuclear sites will move seawards and away from the Dungeness SAC to the north to the west and to the east. This means that the risk of any contaminated surface water affecting the qualifying features of the SAC (including the standing freshwater pools supporting breeding great crested newt populations) is minimal.
82. The drainage patterns also mean that the risks to hydrology (and in particular water levels) within the Dungeness SAC are also minimal.
83. The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017²³ provides the legislation for the control and authorisation of abstractions and discharges of water to protect the environment and public health. Additional guidance on permitting requirements for discharges to groundwater set out detailed controls and authorisation requirements^{24,25}. Other legislation controls surface water discharges and flood risks²⁶.
84. Additional controls apply to operations within nuclear sites and in relation to the decommissioning of nuclear power stations and in particular the Management of radioactive waste from decommissioning of nuclear sites: Guidance on Requirements for Release from Radioactive Substances Regulation Version 1.0: July 2018²⁷ commonly referred to as the GRR Regulations. Operator may be able to dispose of radioactive waste under a permit provided that they can prove to the Environment Agency that this disposal of radioactive waste is optimised. As part of the GRR, the Operator has to provide a waste management plan (WMP) and a site wide environmental safety case (SWESC).
85. A SWESC is a documented set of claims, made by the operator of a nuclear site, to demonstrate achievement by the site as a whole of the required standard of environmental safety. Where relevant, the SWESC includes the environmental safety case for any on-site disposal facility. The SWESC also takes account of contributions to the combined impact on representative persons from adjacent nuclear sites, and from areas of contamination and previously permitted disposals outside the site.

²³ <https://www.legislation.gov.uk/ukxi/2017/407/contents>

²⁴ Defra, 2010b: Environmental Permitting Guidance. Groundwater Activities. For the Environmental Permitting (England and Wales) Regulations 2010. December 2010.

²⁵ EA, 2017a: The collection of Environment Agency guidance on groundwater protection. Available at: <https://www.gov.uk/government/collections/groundwaterprotection>

²⁶ Flood and Water Management Act 2010 <https://www.legislation.gov.uk/ukpga/2010/29/contents>

²⁷ <https://www.sepa.org.uk/media/365893/2018-07-17-grr-publication-v1-0.pdf>

86. A WMP is a documented plan, prepared by the Operator of a nuclear site, which provides a comprehensive description of the current intent for dealing with all radioactive substances on or adjacent to the site and demonstrates how waste management has been optimised.
87. The above controls are in addition to planning controls such as Policies DM2 and DM3 and DM10 of the KMWLP and provide a robust framework for the control and authorisation of activities that could potentially lead to contamination of ground and water.
88. **Given the current patterns of groundwater movement and surface water drainage and the robust controls in place for the de-commissioning of nuclear sites, it is assessed that there is a low likelihood of operations that would be permitted under Policy CSW17, either alone or in combination with other de-commissioning operations, resulting in adverse effects to the integrity of the Dungeness SAC as a result of changes to hydrology or water quality.**

5.7 Appropriate Assessment of the likely significant effects on the Dungeness, Romney Marsh and Rye Bay Special Protection Area (SPA)

89. Table 11 provides a summary of the trends in the populations of the SPA qualifying bird species nationally and locally within the Dungeness, Romney Marsh and Rye Bay Special Protection Area (the SPA) since the SPA was designated in 2006. This provides an important background and context to considerations of the potential effects of any new developments within the SPA, including those that would be permitted under the revised wording of Policy CSW17.
90. It identifies the bird species populations that are of conservation concern nationally and whose population declines are therefore resulting from factors beyond the local county level or SPA site level. These populations are therefore vulnerable at the national as well as local level. It also identifies species populations that are stable or increasing at the national level so that any population declines at the local county level or SPA site level may be attributable to local threats and pressures. These populations are therefore vulnerable at the local level.
91. In Table 11 the colour coding is intended to provide a quick visual reference to the population trends for each species with red indicating significant decline, amber moderate or short-term decline and green indicating a stable or increasing population

trend. Reference has been made to all available sources of evidence including the Birds of Conservation Concern (BoCC)²⁸.

Table 8 Trends in the populations of the SPA qualifying bird species

Qualifying Species	5 year peak mean on designation (2006-07)	Most recent 5 year peak mean (2019-20)	Trends for GB and/or England
A021 <i>Botaurus stellaris</i> ; Great bittern (Non-breeding)	5 individuals – wintering 5.0% of GB population	No population estimates available	This species has moved from the Red List to the Amber List on the BoCC between 2015 and 2021.
A037 <i>Cygnus columbianus bewickii</i> ; Bewick's swan (Non-breeding)	155 individuals – Wintering 1.9% GB population	5 individuals wintering Drastic decline after 2011-12 96% decline at the SPA since 2016/17. https://app.bto.org/webs-reporting/numbers.jsp	80% decline in England over the same period https://app.bto.org/webs-reporting/numbers.jsp Species has moved from the Amber to the Red List on the BoCC between 2015 and 2021.
A056 <i>Spatula (Anas) clypeata</i> ; Northern shoveler (Non-breeding)	485 individuals – Wintering 1.2% NW & C Europe (nonbreeding)	757 individuals wintering 56% increase since 2016/17 https://app.bto.org/webs-reporting/numbers.jsp	83% increase since 2016/17 https://app.bto.org/webs-reporting/numbers.jsp However, remains on the BoCC Amber List
A081 <i>Circus aeruginosus</i> ; Eurasian marsh harrier (Breeding)	4 females – breeding 2% GB population	No population estimates available BTO Records: TR0618 2015 x 1 pair TR0618 2016 x 1 pair TQ9923 2017 X 2 pairs TR0618 2017 x 3 pairs (all nests failed) TR0620 2018 x 1 pair	Remains on the BoCC Amber List
A082 <i>Circus cyaneus</i> ; Hen harrier (Non-breeding)	11 individuals – Wintering 1.5% GB population	No population estimates available	Remains on the BoCC Red List

²⁸ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747. Available online at <https://britishbirds.co.uk/content/status-our-bird-populations>

Qualifying Species	5 year peak mean on designation (2006-07)	Most recent 5 year peak mean (2019-20)	Trends for GB and/or England
A132 <i>Recurvirostra avosetta</i> ; Pied avocet (Breeding)	31 pairs – breeding 3.5% GB population	No population estimates available	Remains on the BoCC Amber List
A140 <i>Pluvialis apricaria</i> ; European golden plover (Non-breeding)	4,050 individuals – wintering 1.6% GB population	2,264 51% decline between 1991-92 and 2016-17 in the medium term https://app.bto.org/webs-reporting/numbers.jsp	GB average decline over the medium term across all SPA's of 40%. England medium term decline of 32%. https://app.bto.org/webs-reporting/numbers.jsp However has moved from the Amber to the Green List on the BoCC between 2015 and 2021.
A151 <i>Calidris (Philomachus) pugnax</i> ; Ruff (Non-breeding)	51 individuals – Wintering 7.3% GB population	25 Medium term increase of 41% between 1991-92 and 2016-17 https://app.bto.org/webs-reporting/numbers.jsp	GB average decline over the medium term across all SPA's of 29% https://app.bto.org/webs-reporting/numbers.jsp Remains on the BoCC Red List
A176 <i>Larus melanocephalus</i> ; Mediterranean gull (Breeding)	56 pairs – breeding 52.2% GB population	No population estimates available BTO records: TR 0618 2018 1 occupied nest	JNCC. 2021. Seabird Population Trends and Causes of Change: 1986–2019 Report (https://jncc.gov.uk/our-work/smp-report-1986-2019). Joint Nature Conservation Committee, Peterborough. Updated 20 May 2021. Remains on the BoCC Amber List. Breeding was first confirmed in England in 1968 in Hampshire and was sporadic until the late 1980s. Thereafter, colonisation spread outwards from southern

Qualifying Species	5 year peak mean on designation (2006-07)	Most recent 5 year peak mean (2019-20)	Trends for GB and/or England
			<p>and south-east England so that, by Seabird 2000, there were 108 Apparently Occupied Nests (AON) recorded, some as far north as Lancashire and West Yorkshire. However, the main population was still centred in the south. Between 1,390–1,415 AON were reported to the Rare Breeding Birds Panel in 2017. This number increased to 2,373 AON and an estimated maximum number of breeding pairs of 2,400 in 2018. In 2019, breeding numbers of Mediterranean gull in England are lower according to the data submitted to the SMP. https://jncc.gov.uk/our-work/mediterranean-gull-larus-melanocephalus/</p>
<p>A191 <i>Sterna sandvicensis</i>; Sandwich tern (Breeding)</p>	<p>350 pairs – breeding 3.3% GB population</p>	<p>No population estimates available</p>	<p>JNCC. 2021. Seabird Population Trends and Causes of Change: 1986–2019 Report (https://jncc.gov.uk/our-work/smp-report-1986-2019). Joint Nature Conservation Committee, Peterborough. Updated 20 May 2021.</p> <p>Remains on the BoCC Amber List</p> <p>Sandwich terns exhibit the most erratic population trends and distribution of any seabird breeding in the UK. The population fluctuates dramatically among years due to large variations in the proportion of mature birds attempting to breed and distribution varies owing to mass</p>

Qualifying Species	5 year peak mean on designation (2006-07)	Most recent 5 year peak mean (2019-20)	Trends for GB and/or England
			<p>movements between colonies. The species is distributed widely but patchily around the coasts of the British Isles, broadly reflecting the availability of favoured nesting habitat: low-lying offshore islands, islets in bays or brackish lagoons, spits or remote mainland dunes. Despite frequent changes in the sites used, the broad distribution in the UK has changed little over the last 30 years.</p> <p><u>Several former breeding sites in England now hold no breeding Sandwich terns (e.g. Dungeness, Foulness, Foulney, Havergate, Chichester and North Solent). The largest colonies in England are on the Farne Islands, Coquet Island, Blakeney Point and Scolt Head Island where over 6,662 Sandwich terns nested in 2019.</u></p> <p><u>https://jncc.gov.uk/our-work/sandwich-tern-sterna-sandvicensis/</u></p>
A193 <i>Sterna hirundo</i> ; Common tern (Breeding)	273 pairs – breeding 2.7% GB population	No population estimates available BTO Records: Up to 50 birds recorded at TR0618 in breeding season in 2014 Up to 23 birds recorded at TR0618 in breeding season in 2015	<p>JNCC. 2021. Seabird Population Trends and Causes of Change: 1986–2019 Report (https://jncc.gov.uk/our-work/smp-report-1986-2019). Joint Nature Conservation Committee, Peterborough. Updated 20 May 2021.</p> <p>Remains on the BoCC Amber List</p> <p>Common terns are not the most abundant UK tern</p>

Qualifying Species	5 year peak mean on designation (2006-07)	Most recent 5 year peak mean (2019-20)	Trends for GB and/or England
			<p>species but are probably the most familiar because their breeding range extends around much of the British Isles coastline plus inland on lakes, reservoirs and gravel pits along the large river valleys of SE and Central England.</p> <p>Common tern numbers in England decreased by 24% between the Operation Seafarer and Seabird Colony Register (SCR) censuses and Seabird 2000 recorded approximately the same number as the SCR. Since Seabird 2000, the common trend index has fluctuated close to the 1986 baseline (Figure 7). In 2019, the index was 18% above the baseline, suggesting that the English common tern breeding population may now be larger than it was at the time of Seabird 2000.</p> <p>https://jncc.gov.uk/our-work/common-tern-sterna-hirundo/</p>
A195 <i>Sterna albifrons</i> ; Little tern (Breeding)	35 pairs – breeding 1.5% GB population	No population estimates available	<p>JNCC. 2021. Seabird Population Trends and Causes of Change: 1986–2019 Report (https://jncc.gov.uk/our-work/smp-report-1986-2019). Joint Nature Conservation Committee, Peterborough. Updated 20 May 2021.</p> <p>Remains on the BoCC Amber List</p> <p>Little tern is the smallest species of tern breeding in the UK, nesting exclusively</p>

Qualifying Species	5 year peak mean on designation (2006-07)	Most recent 5 year peak mean (2019-20)	Trends for GB and/or England
			<p>on the coast in well-camouflaged shallow scrapes on beaches, spits or inshore islets. They do not forage far from their breeding site, which dictates a necessity for breeding close to shallow, sheltered feeding areas where they can easily locate the variety of small fish and invertebrates that make up their diet. Colonies are found around much of the coastline, but the main concentration is in south and east England, where the species' preference for beaches also favoured by people makes it vulnerable to disturbance.</p> <p>The trend shown for England closely matches that for the UK as a whole, where the majority of data have been collected over the years. The declining trend for little terns in England, visible since 1987, has been slowed somewhat in recent years, no doubt through targeted management with many colonies now benefiting from some form of guarding, e.g. fencing, trapping, signage, surveillance, and public relations. <u>However, the breeding Little Tern population in England is now only 50% of the 1986 baseline.</u> https://jncc.gov.uk/our-work/little-tern-sternula-albifrons/</p>

Qualifying Species	5 year peak mean on designation (2006-07)	Most recent 5 year peak mean (2019-20)	Trends for GB and/or England
A294 <i>Acrocephalus paludicola</i> ; Aquatic warbler (Non-breeding)		No records	No records
Waterbird assemblage	34,625	32,082 https://app.bto.org/webs-reporting/numbers.jsp	No records

92. Table 12 provides a summary of the likely significant effects on the qualifying interest features of the SPA. This assessment is based on available information on the sensitivity of each qualifying feature to the effects identified in Table 7. This is based on the information at Appendix 1 Table A2 which describes the current condition of qualifying features and the threats to them and vulnerabilities of them.

Table 9 Summary of the likely significant effects on the SPA

Qualifying Feature	Habitat Loss or Degradation and Species Impacts Habitat loss (permanent or temporary) and effects on qualifying species	Potential for Significant Effects
A021 <i>Botaurus stellaris</i> ; Great bittern (Non-breeding)	The appropriate assessment of the effects of habitat loss and degradation on the Dungeness SAC qualifying features (Section 5.3) concluded that the revised Policy CSW17 does not in itself permit development that would result directly in the loss of degradation of the qualifying habitats features. The qualifying bird species of the SPA share these same habitat features and therefore it is reasonable to conclude that Policy CSW17 as revised would not result in the loss of or degradation of habitats used by the SPA bird species for breeding or wintering.	NO
A037 <i>Cygnus columbianus bewickii</i> ; Bewick's swan (Non-breeding)	See above	NO
A056 <i>Spatula (Anas) clypeata</i> ; Northern shoveler (Non-breeding)	See above	NO

A081 <i>Circus aeruginosus</i> ; Eurasian marsh harrier (Breeding)	See above	NO
A082 <i>Circus cyaneus</i> ; Hen harrier (Non-breeding)	See above	NO
A132 <i>Recurvirostra avosetta</i> ; Pied avocet (Breeding)	See above	NO
A140 <i>Pluvialis apricaria</i> ; European golden plover (Non-breeding)	See above	NO
A151 <i>Calidris (Philomachus) pugnax</i> ; Ruff (Non-breeding)	See above	NO
A176 <i>Larus melanocephalus</i> ; Mediterranean gull (Breeding)	See above	NO
A191 <i>Sterna sandvicensis</i> ; Sandwich tern (Breeding)	See above	NO
A193 <i>Sterna hirundo</i> ; Common tern (Breeding)	See above	NO

A195 <i>Sterna albifrons</i> ; Little tern (Breeding)	See above	NO
A294 <i>Acrocephalus paludicola</i> ; Aquatic warbler (Non-breeding)	See above	NO
Waterbird assemblage	See above	NO
Qualifying Feature	Air Quality Emissions of NH3, NOx and SO2 and nitrogen and acid deposition	Potential for Significant Effects
A021 <i>Botaurus stellaris</i> ; Great bittern (Non-breeding)	<p>The screening of the effects of air quality on the Dungeness SAC qualifying features (Section 5.3) concluded that current levels and loads of air pollutants at the Dungeness peninsula were not exceeding the critical levels and critical loads for the qualifying Annex 1 habitat features or the Annex II species great crested newt (using its habitat as a proxy).</p> <p>It further concluded that the type and number of vehicle movements associated with the policy change would be equivalent to, or would have a lesser impact than, those which would be associated with any import of engineering material that would be used to meet the identified engineering need associated with filling the voids</p> <p>The qualifying bird species of the SPA share these same habitat features and therefore it is reasonable to conclude that Policy CSW17 as revised would not result in the loss of or degradation of habitats used by the SPA bird species for breeding or wintering.</p> <p>Therefore it is concluded that there would not be a likely significant effect on the integrity of the Dungeness SAC and its qualifying features, if as a result of the additional opportunities for the importation of wastes for treatment and disposal, allowed under Policy CSW17.</p>	No

A037 <i>Cygnus columbianus bewickii</i> ; Bewick's swan (Non-breeding)	As above	No
A056 <i>Spatula (Anas) clypeata</i> ; Northern shoveler (Non-breeding)	As above	No
A081 <i>Circus aeruginosus</i> ; Eurasian marsh harrier (Breeding)	As above	No
A082 <i>Circus cyaneus</i> ; Hen harrier (Non-breeding)	As above	No
A132 <i>Recurvirostra avosetta</i> ; Pied avocet (Breeding)	As above	No
A140 <i>Pluvialis apricaria</i> ; European golden plover (Non-breeding)	As above	No
A151 <i>Calidris (Philomachus) pugnax</i> ; Ruff (Non-breeding)	As above	No
A176 <i>Larus melanocephalus</i> ; Mediterranean gull (Breeding)	As above	No
A191 <i>Sterna sandvicensis</i> ;	As above	No

Sandwich tern (Breeding)		
A193 <i>Sterna hirundo</i> ; Common tern (Breeding)	As above	No
A195 <i>Sterna albifrons</i> ; Little tern (Breeding)	As above	No
A294 <i>Acrocephalus paludicola</i> ; Aquatic warbler (Non-breeding)	As above	No
Waterbird assemblage	As above	No
Qualifying Feature	Water and Soil Quality and Hydrology Release or mobilisation of contaminants into the ground or surface waters and changes to ground or surface water levels	Potential for Significant Effects
A021 <i>Botaurus stellaris</i> ; Great bittern (Non-breeding)	Section 5.7 of this HRA concluded in respect of the qualifying features of the Dungeness SAC that given the current patterns of groundwater movement and surface water drainage and the robust controls in place for the de-commissioning of nuclear sites, it is assessed that there is a low likelihood of operations that would be permitted under Policy CSW17 resulting in adverse effects to the integrity of the Dungeness SAC as a result of changes to hydrology or water quality. The qualifying bird species of the SPA share these same habitat features and therefore it is reasonable to conclude that Policy CSW17 as revised would not result in adverse effects on the habitats used by the SPA bird species for breeding or wintering.	NO
A037 <i>Cygnus columbianus bewickii</i> ;	As above	NO

Bewick's swan (Non-breeding)		
A056 <i>Spatula</i> <i>(Anas) clypeata</i> ; Northern shoveler (Non- breeding)	As above	NO
A081 <i>Circus</i> <i>aeruginosus</i> ; Eurasian marsh harrier (Breeding)	As above	NO
A082 <i>Circus</i> <i>cyaneus</i> ; Hen harrier (Non- breeding)	As above	NO
A132 <i>Recurvirostra</i> <i>avocetta</i> ; Pied avocet (Breeding)	As above	NO
A140 <i>Pluvialis</i> <i>apricaria</i> ; European golden plover (Non-breeding)	As above	NO
A151 <i>Calidris</i> <i>(Philomachus)</i> <i>pugnax</i> ; Ruff (Non-breeding)	As above	NO
A176 <i>Larus</i> <i>melanocephalus</i> ; Mediterranean gull (Breeding)	As above	NO
A191 <i>Sterna</i> <i>sandvicensis</i> ; Sandwich tern (Breeding)	As above	NO

A193 <i>Sterna hirundo</i> ; Common tern (Breeding)	As above	NO
A195 <i>Sterna albifrons</i> ; Little tern (Breeding)	As above	NO
A294 <i>Acrocephalus paludicola</i> ; Aquatic warbler (Non-breeding)	As above	NO
Waterbird assemblage	As above	NO
Qualifying Feature	Disturbance Effects Disturbance from noise and vibration and disturbance from movement of contractors, plant etc	Potential for Significant Effects
A021 <i>Botaurus stellaris</i> ; Great bittern (Non-breeding)	<p>Birds are sensitive to disturbance from noise and from visual intrusion. Different species show different levels of tolerance and will react to different thresholds of noise and visual disturbance. Taking flight away from the source of disturbance is the most common reaction. For breeding bird species, this can result in leaving nests, eggs and chicks open to predation and repeated disturbances can result in nests and eggs being abandoned altogether. For wintering bird species disturbance can result in significant energy use and loss and repeated disturbances can result in otherwise suitable foraging and roosting habitats being abandoned.</p> <p>During both construction and operation, noise and vibration and visual disturbance from the movements of contractors and the use of plant and equipment can result in bird disturbance. Vehicle movements to and from the Dungeness nuclear sites are unlikely to result in such disturbance as these vehicle movements have been ongoing for a long period of time and therefore, birds will either be habituated to</p>	YES During construction and operation

	this vehicle movement or will be avoiding areas close to roads.	
A037 <i>Cygnus columbianus bewickii</i> ; Bewick's swan (Non-breeding)	As above	YES During construction and operation
A056 <i>Spatula (Anas) clypeata</i> ; Northern shoveler (Non-breeding)	As above	YES During construction and operation
A081 <i>Circus aeruginosus</i> ; Eurasian marsh harrier (Breeding)	As above	YES During construction and operation
A082 <i>Circus cyaneus</i> ; Hen harrier (Non-breeding)	As above	YES During construction and operation
A132 <i>Recurvirostra avosetta</i> ; Pied avocet (Breeding)	As above	YES During construction and operation
A140 <i>Pluvialis apricaria</i> ; European golden plover (Non-breeding)	As above	YES During construction and operation
A151 <i>Calidris (Philomachus) pugnax</i> ; Ruff (Non-breeding)	As above	YES During construction and operation
A176 <i>Larus melanocephalus</i> ; Mediterranean gull (Breeding)	As above	YES During construction and operation

A191 <i>Sterna sandvicensis</i> ; Sandwich tern (Breeding)	As above	YES During construction and operation
A193 <i>Sterna hirundo</i> ; Common tern (Breeding)	As above	YES During construction and operation
A195 <i>Sterna albifrons</i> ; Little tern (Breeding)	As above	YES During construction and operation
A294 <i>Acrocephalus paludicola</i> ; Aquatic warbler (Non-breeding)	As above	YES During construction and operation
Waterbird assemblage	As above	YES During construction and operation

5.8 Appropriate assessment of the effects of Disturbance Effects (both alone and in combination with other relevant plans and projects)

93. Birds are sensitive to disturbance from noise and from visual intrusion. Different species show different levels of tolerance and will react to different thresholds of noise and visual disturbance. Taking flight away from the source of disturbance is the most common reaction. For breeding bird species, this can result in leaving nests, eggs and chicks open to predation and repeated disturbances can result in nests and eggs being abandoned altogether. For wintering bird species disturbance can result in significant energy use and loss and repeated disturbances can result in otherwise suitable foraging and roosting habitats being abandoned.

3

94. For those bird species populations which are already under stress from other environmental factors, disturbance effects could be critical. These would include the qualifying bird species which have shown serious declines within the SPA including A037

Cygnus columbianus bewickii; Bewick's swan (non-breeding) and A140 *Pluvialis apricaria*; European golden plover (non-breeding).

95. Research has established that different species of waterbirds have different tolerances to noise and visual disturbance (caused for example by plant and machinery operating within sight of the birds)²⁹. The type of noise and its level and frequency result in different effects. Sudden loud noises (associated with e.g. piling operations) have different effects from regular background noises such as the noise of running engines from plant and machinery.
96. During both construction and operation, noise and vibration and visual disturbance from the movements of contractors and the use of plant and equipment can result in bird disturbance. Vehicle movements to and from the Dungeness nuclear sites are unlikely to result in such disturbance as these vehicle movements have been ongoing for a long period of time and therefore, birds will either be habituated to this vehicle movement or will be avoiding areas close to roads.
97. In assessing the potential levels of disturbance that may occur as a result of the additional activities permitted under the proposed revised wording of Policy CSW17, both alone and in combination with other ongoing de-commissioning operations, it is important to understand whether any of the qualifying bird species are or are likely to be using habitats within a distance of the Dungeness nuclear sites where such activities and operations are likely to result in disturbance.
98. Two approaches have been taken to ascertain the likelihood of disturbance effects on qualifying bird species. Firstly, the British Trust for Ornithology (BTO) was commissioned to produce a report of its records of observations of the qualifying bird species (and all other bird species) within the 1km, 2km(tetrad) and 10km recording squares that include the Dungeness nuclear sites and surrounding land. Secondly, based on an understanding of the habitat requirements of each of the qualifying bird species, map searches using Magic³⁰ to measures the distance from the Dungeness nuclear sites to the nearest suitable habitats for each species.
99. Whilst it is important to note that the SPA boundaries are over 500metres from the Dungeness nuclear sites at their closest point (see Appendix 1 Figure A3) it is likely that the qualifying bird species are utilising land outside of those SPA boundaries for breeding, foraging and roosting. Land outside of an SPA boundary but which nevertheless plays an important role in maintaining the populations of the qualifying species of the SPA is referred to as 'functionally linked land' and case law has determined that the effects of plans and projects on such functionally linked land must be taken into consideration in appropriate assessments.
100. 'Functional linkage' refers to the role or 'function' that land or sea beyond the boundary of a Habitats Site might fulfil in terms of supporting the populations for which the site was designated or classified³¹. Such an area of land or sea is therefore 'linked' to

²⁹ https://gat04-live-1517c8a4486c41609369c68f30c8-aa81074.divio-media.org/filer_public/8f/bd/8fbd7e9-ea6f-4474-869f-ec1e68a9c809/11367.pdf

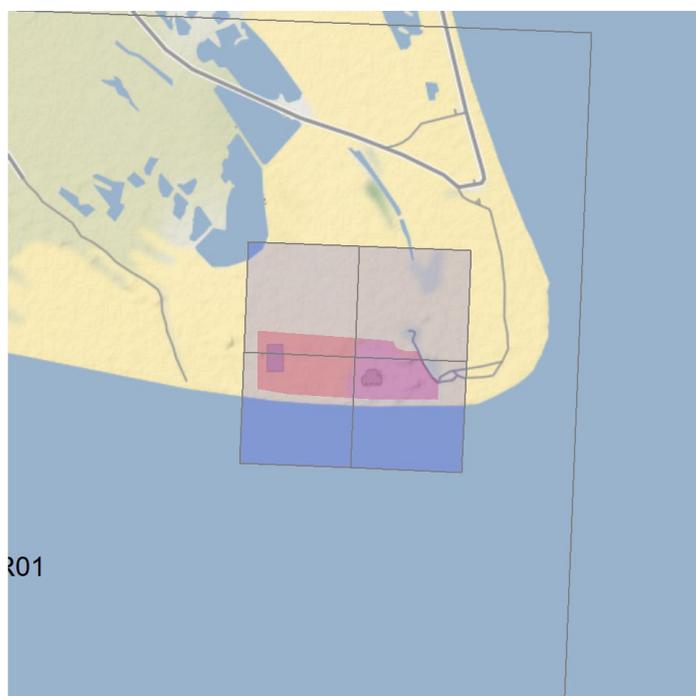
³⁰ <https://magic.defra.gov.uk/MagicMap.aspx>

³¹ CHAPMAN, C. & TYLDESLEY, D. 2016. *Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and*

the site in question because it provides a (potentially important) role in maintaining or restoring a protected population at favourable conservation status. Whilst the boundary of a European site will usually be drawn to include key supporting habitat for a qualifying species, this cannot always be the case where the population for which a site is designated or classified is particularly mobile. Individuals of the population will not necessarily remain in the site all the time.

101. The BTO has provided a report³² compiled from records of bird observations in the area around the Dungeness nuclear sites. The BTO Data Report uses comprehensive atlas distribution data from 2007–11 to give a baseline of high-quality information about species status at and around the site and in the wider context. This is supplemented by the latest records from current schemes, including BirdTrack and BBS (2018-22).
102. The data covers the 10km grid square TR01 within which the Dungeness nuclear sites are centrally located (see Figure 8) and which includes a large part of the SPA, and the four 1km grid squares immediately surrounding the Dungeness nuclear sites (Figure 8) (which are TR0716 Seaward West of Site T0717 Landward West, TR0816 Seaward East TR0817 Landward East) and the two 2km tetrads surrounding the Dungeness nuclear sites (see Figure 9) TR01T and TR01Y.

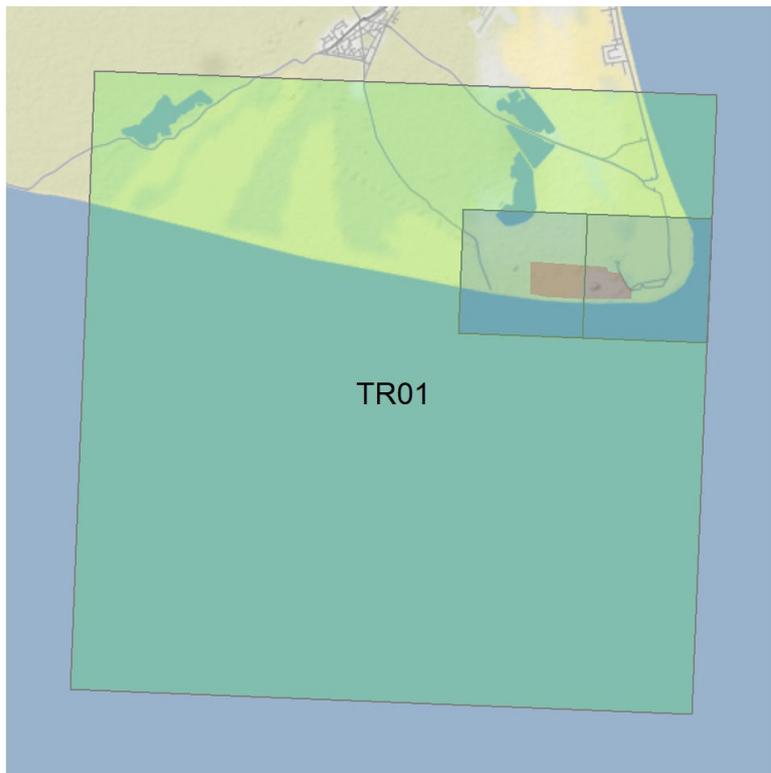
Figure 6 BTO data records area – 10km grid square and one kilometre grid squares



projects - a review of authoritative decisions. Natural England Commissioned Reports, Number 207.

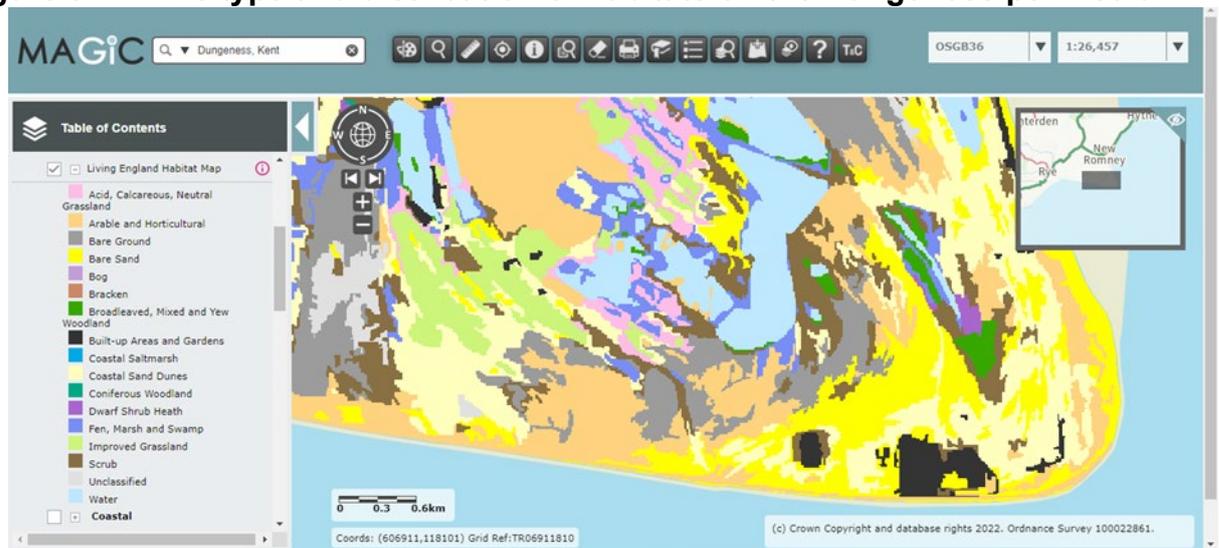
³² BTO Data Report Dungeness Power Station Compiled on 16th August 2022

Figure 7 BTO data records area – 10km grid square and 2km tetrads



103. In addition to the BTO bird records, Magic was used to identify the range of habitats within 1km of the Dungeness nuclear sites. This (along with aerial imagery from Google Earth Pro) provided an understanding of the spatial relationships of habitat suitable for the qualifying bird species in relation to the Dungeness nuclear sites. Figure 10 shows the type and distribution of habitats around the Dungeness nuclear sites.

Figure 8 The type and distribution of habitats on the Dungeness peninsula



104. Using a combination of the BTO data records and the habitat mapping, an assessment was made of the potential for the SPA qualifying bird species to be using land adjacent to the Dungeness nuclear sites. Table 13 shows the assessment for the qualifying breeding bird species and Table 14 for the non-breeding (mostly wintering) qualifying bird species.

Table 10 Qualifying breeding bird status within land around the Dungeness nuclear sites

Breeding Species	Breeding Status 2007-11		Breeding Status 2018-22		Likely to be breeding within land adjacent to the Dungeness Nuclear Sites?
	1km squares	2km tetrads	1km squares	2km tetrads	
A081 <i>Circus aeruginosus</i> ; Eurasian marsh harrier (Breeding)	No breeding records	No breeding records	No breeding records	Present within breeding season	UNLIKELY Breeding confirmed within 10km square TR01 but no breeding records within 1km squares or 2km tetrads. No suitable breeding habitat within 800 metres of the Dungeness nuclear sites.
A132 <i>Recurvirostra avosetta</i> ; Pied avocet (Breeding)	No breeding records	No breeding records	No breeding records	Present within breeding season	UNLIKELY Breeding confirmed within 10km square TR01 but no breeding records within 1km squares or 2km tetrads. No suitable breeding habitat within 800 metres of the Dungeness nuclear sites.
A176 <i>Larus melanocephalus</i> ; Mediterranean gull (Breeding)	No breeding records	No breeding records	No breeding records	Present within breeding season	UNLIKELY Breeding confirmed within 10km square TR01 but no breeding records within 1km squares or 2km tetrads. No suitable breeding habitat within 800 metres of the Dungeness nuclear sites.

Breeding Species	Breeding Status 2007-11		Breeding Status 2018-22		Likely to be breeding within land adjacent to the Dungeness Nuclear Sites?
	1km squares	2km tetrads	1km squares	2km tetrads	
A191 <i>Sterna sandvicensis</i> ; Sandwich tern (Breeding)	No breeding records	No breeding records	No breeding records	Present within breeding season	UNLIKELY Possible breeding within 10km square TR01 but no breeding records within 1km squares or 2km tetrads.
A193 <i>Sterna hirundo</i> ; Common tern (Breeding)	No breeding records	No breeding records	No breeding records	Present within breeding season	UNLIKELY Breeding confirmed within 10km square TR01 but no breeding records within 1km squares or 2km tetrads.
A195 <i>Sterna albifrons</i> ; Little tern (Breeding)	No breeding records	No breeding records	No breeding records	Present within breeding season	UNLIKELY No breeding records within 10km square TR01.

Table 11 Qualifying non-breeding bird status within land around the Dungeness nuclear sites

Wintering Species	Wintering Status 2007-11		Wintering Status 2018-22		Likely to be wintering within land adjacent to the Dungeness Nuclear Sites?
	1km squares	2km tetrads	1km squares	2km tetrads	
A021 <i>Botaurus stellaris</i> ; Great bittern (Non-breeding)	No records	Present	No records	Present	UNLIKELY Wintering confirmed within 2km tetrads. No suitable habitat within 800 metres of the Dungeness nuclear sites.
A037 <i>Cygnus columbianus bewickii</i> ; Bewick's	No records	Present	No records	Present	UNLIKELY Wintering confirmed within 2km tetrads. No

Wintering Species	Wintering Status 2007-11		Wintering Status 2018-22		Likely to be wintering within land adjacent to the Dungeness Nuclear Sites?
	1km squares	2km tetrads	1km squares	2km tetrads	
swan (Non-breeding)					suitable habitat within 800 metres of the Dungeness nuclear sites.
A056 <i>Spatula (Anas) clypeata</i> ; Northern shoveler (Non-breeding)	No records	Present	No records	Present	UNLIKELY Wintering confirmed within 2km tetrads. No suitable habitat within 800 metres of the Dungeness nuclear sites.
A082 <i>Circus cyaneus</i> ; Hen harrier (Non-breeding)	No records	Present	No records	Present	UNLIKELY Wintering confirmed within 2km tetrads. No suitable habitat within 800 metres of the Dungeness nuclear sites.
A140 <i>Pluvialis apricaria</i> ; European golden plover (Non-breeding)	No records	No records	No records	Present	POSSIBLE Wintering confirmed within 2km tetrads. Suitable habitat adjacent to the Dungeness nuclear sites.
A151 <i>Calidris (Philomachus) pugnax</i> ; Ruff (Non-breeding)	No records	No records	No records	Present	UNLIKELY Wintering confirmed within 2km tetrads. No suitable habitat within 800 metres of the Dungeness nuclear sites.
A294 <i>Acrocephalus paludicola</i> ; Aquatic warbler (Non-breeding)	No records	No records	No records	No records	UNLIKELY ON PASSAGE No suitable habitat within 800 metres of the Dungeness nuclear sites.

Wintering Species	Wintering Status 2007-11		Wintering Status 2018-22		Likely to be wintering within land adjacent to the Dungeness Nuclear Sites?
	1km squares	2km tetrads	1km squares	2km tetrads	
Waterbird assemblage	N/A*	N/A*	N/A*	N/A*	UNLIKELY No suitable wetland habitat within 800 metres of the Dungeness nuclear sites.

* As it's an assemblage have stated Not Applicable as unable to be specific.

105. The data records show that the likelihood that any SPA qualifying breeding bird species are breeding within land adjacent to the Dungeness nuclear sites and outside the boundaries of the SPA is low. Most of the breeding species require freshwater or brackish water wetland habitats or coastal shingle. The nearest wetland habitats are over 800 metres from the Dungeness nuclear sites at the RSPB nature reserve at Denge and the Long Pits. There is suitable coastal shingle for breeding birds such as tern species however there are no breeding records for these species within the 2km tetrads around the nuclear sites.

106. The data records also show that the likelihood the SPA qualifying non-breeding bird species are wintering within land adjacent to the Dungeness nuclear sites and outside the boundaries of the SPA is low. Most of the wintering species require freshwater or brackish water wetland habitats. The nearest wetland habitats are over 800 metres from the Dungeness nuclear sites at the RSPB nature reserve at Denge and the Long Pits. There is suitable foraging habitat for golden plover and wintering birds of this species have been confirmed within the 2km tetrads around the Dungeness nuclear sites.

107. **Therefore, on the basis of these findings it is concluded that the additional operations permitted under the proposed revisions to Policy CSW17, either alone or in combination with other ongoing de-commissioning operations, coast protection operations and other development are unlikely to have an adverse effect on the integrity of the Dungeness, Romney Marsh and Rye Bay SPA and the populations of its qualifying bird species as a result of noise or visual disturbances.**

