The Sizewell C Project

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APPENDIX 1A: SUPPLEMENTARY ASSESSMENT OF INTER-PATHWAY EFFECTS

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1 INTRODUCTION

1.1.1 The **Shadow HRA Report** (section 11) (Doc Ref. 5.10) draws an overall conclusion regarding the effect on European site integrity when all pathways for effect are considered collectively (for habitats, marine mammals, birds and migratory fish). For all European sites with the exception of the Minsmere to Walberswick Special Protection Area (SPA) and Ramsar site, it is concluded that there would not be an adverse effect on the integrity of the European site.

1.1.2 The purpose of this assessment is to provide further analysis of the pathways for effect on all European sites screened into the Shadow HRA to further analyse the potential for effects between the various pathways for each European site. This is referred to as 'inter-pathway effects' throughout this document.

1.1.3 The only pathway for potential effect on migratory fish is 'physical interaction between species and project infrastructure'. As there is only one identified potential effect pathway for the qualifying interest features, there is no potential for inter-pathway effects on a particular feature.

2 COASTAL, FRESHWATER AND TERRESTRIAL HABITATS

2.1 Introduction

2.1.1 With respect to inter-pathway effects on coastal, freshwater and terrestrial habitats, the **Shadow HRA Report** (Doc Ref. 5.10) concludes that, when the potential effect pathways are considered collectively, the outcome of the alone or in-combination assessment for each European site is unchanged from that reported in **section 7** of the **Shadow HRA Report** for one or more of the following reasons:

- The predicted effects are sufficiently localised in nature that different pathways do not combine to cause a larger effect on the qualifying interest feature in question.
- Where effect pathways interact / combine and may influence the same qualifying interest feature, the scale of the predicted effect is sufficiently low that there is no realistic potential for an inter-pathway effect to arise that could undermine the conservation objectives of the European site.
- There is only one identified potential effect pathway for the qualifying interest feature in question (i.e. there is no potential for an inter-pathway effect on a particular feature).

2.1.2 The above conclusion is further analysed in this chapter, which is structured to reflect the European sites, qualifying interests features and potential effect pathways (for coastal, freshwater and terrestrial habitats) as assessed in the **Shadow HRA Report** (Doc Ref. 5.10).

2.2 Alde, Ore and Butley Estuaries SAC and Alde-Ore Estuaries Ramsar site

2.2.1 The qualifying interest features and criteria screened into the Shadow HRA for the Alde, Ore and Butley Estuaries SAC and Alde-Ore Estuary Ramsar site comprise:

- Estuaries.
- Mudflats and sandflats not covered by seawater at low tides.
- Atlantic salt meadows.
- Ramsar criterion 2 - the site supports a number of nationally scarce plant species and British Red Data Book invertebrates.

2.2.2 The screened in effect pathways for these qualifying interest features and criteria due to the potential influence of the Sizewell C main development site are:

- alteration of coastal processes / sediment transport;
- water quality effects – marine environment;
- disturbance due to an increase in recreational pressure; and
- changes in air quality.

2.2.3 The screened in effect pathways for these qualifying interest features due to the potential influence of the Sizewell C associated development sites are:

- water quality effects – terrestrial environment;
- alteration of local hydrology and hydrogeology; and
- changes in air quality.

2.2.4 **Table 2.1** summarises the pathways and predicted effects of the Sizewell C Project on the Alde, Ore and Butley Estuaries SAC and Alde-Ore Estuary Ramsar site. It is concluded that the only relevant pathways for an assessment of inter-pathway effects (because there is some predicted effect via these pathways) are:

- disturbance due to an increase in recreational pressure; and
- changes in air quality.

2.2.5 The predicted effect on air quality (during operation) is of very low magnitude relative to the relevant Critical Levels and Critical Loads, with no predicted effect on the habitats of the European sites. The effect of disturbance due to recreational pressure is also predicted to be low magnitude.

2.2.6 For these pathways, it is concluded that the magnitude of the predicted effect is sufficiently low that there is no realistic potential for an inter-pathway effect to arise. Furthermore, any effect arising from one of the pathways does not make the habitats more susceptible to damage from the effect of the other pathway.

Table 2.1: Summary of pathways and predicted effects on the Alde, Ore and Butley Estuaries SAC and Alde-Ore Estuary Ramsar site

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Alteration of coastal processes / sediment transport.	Construction, operation and decommissioning.	Any effect on coastal processes, sediment transport and suspended sediment concentrations (SSC) are localised and therefore too distant to have any effect on the qualifying features of the Alde, Ore and Butley Estuaries SAC and Alde-Ore Estuary Ramsar site.	As these effect pathways do not have any influence on the European sites, and could not interact with other pathways to result in a different effect, these pathways are not relevant considerations for the assessment of inter-pathway effects.
Water quality effects – marine environment.	Operation	The thermal plume does not intersect with the European site and is located over 12km to the north of the site. In addition, the chemical plume does not interact with the European site. The inter-relationships between the various individual effects on marine water quality during the operational phase are assessed in **Volume 2, Chapter 21** of the **ES** (Doc Ref. 6.3), with effects on marine ecology	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		and fisheries assessed in **Volume 2, Chapter 22** of the **ES** (Doc Ref. 6.3). This assessment included the following inter-relationships: • Cooling water thermal influence on dissolved oxygen. • Thermal elevation influence on proportion of un-ionised ammonia. • Synergistic effects of chlorinated discharges and treated sewage. • In-combination effects in the thermo-chemical plume. In summary, the assessed inter-relationships are not predicted to result in significant synergistic effects on water quality. Consideration of thermal uplift in combination with the toxicological	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		effects of chlorination is not predicted to change the assessment of the chlorination discharge or thermal plume when considered separately. Consequently, no effect on marine water quality, and hence on the qualifying interest features of the SAC and Ramsar site, is predicted.	
Disturbance due to an increase in recreational pressure (relevant to the Alde-Ore Estuary Ramsar site only).	Construction and decommissioning.	Any potential increase in recreational visits is predicted to be small in the context of the estimated existing number of recreational visits; in addition any increase in pressure would be diffuse and spread across a large number of potential car park access points. On this basis, no adverse effect on the integrity of the European site is concluded.	The potential for inter-pathway effects is discussed in this section.
	Operation	The increased pressure during the operational phase would be	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		substantially lower than for the construction phase. Consequently, no adverse effect on the integrity of the European site is concluded.	
Water quality effects – terrestrial environment.	Construction	This pathway is only relevant to the construction of the two village bypass, which includes a bridge over the River Alde upstream of the European sites. The potential effect on water quality would be mitigated by carrying out the construction in line with the Sizewell C Project's **Code of Construction Practice (CoCP)** (Doc Ref. 8.11). With this mitigation in place, no terrestrial water quality effects within the European sites are predicted.	As this effect pathway does not have any influence on the European sites, and it could not interact with other pathways to result in a different effect, this pathway is not a relevant consideration for the assessment of inter-pathway effects.
Alteration of local hydrology and hydrogeology.	Construction and operation.	This pathway is only relevant to the construction of the two village bypass, which includes a bridge over the River Alde upstream of the European sites. The design of the	As this effect pathway does not have any influence on the European sites, and it could not interact with other pathways to result in a different effect, this pathway is not a relevant

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		crossing ensures no direct disturbance to the river and the natural integrity of the banks of the river, bed and bankside would be preserved. Consequently, no effect on hydrological processes is predicted during either the construction or operational phases.	consideration for the assessment of inter-pathway effects.
Changes in air quality.	Construction and decommissioning.	The European sites fall beyond the study area for the assessment of dust emissions and, therefore, there would be no effect on the European site due to dust. Effects of traffic were screened out for this European site as being insignificant.	As this effect pathway does not have any influence on the European sites, and it could not interact with other pathways to result in a different effect, this pathway is not a relevant consideration for the assessment of inter-pathway effects.
	Operation	Any operational effects on the European site are predicted to be very low in relation to the relevant Critical Levels and Critical Loads, and no adverse effect is predicted.	The potential for inter-pathway is discussed in this section.

2.2.7 Consequently, there would be no adverse effect on integrity of the European sites due to inter-pathway effects. The conclusions drawn in the Shadow HRA Report (Doc Ref. 5.10) with respect to effects on the Alde, Ore and Butley Estuaries SAC and Alde-Ore Estuary Ramsar site are, therefore, unaltered.

2.3 Benacre to Easton Bavents Lagoons SAC

2.3.1 The coastal lagoons qualifying feature of the Benacre to Eastern Bavents Lagoons SAC is screened into the Shadow HRA. .

2.3.2 The screened in effect pathways for this qualifying feature are:

- alteration of coastal processes / sediment transport; and
- water quality effects – marine environment.

2.3.3 There are no effect pathways from the associated development sites to the coastal lagoon feature.

2.3.4 **Table 2.2** summarises the pathways and predicted effects of the Sizewell C Project on the Benacre to Eastern Bavents Lagoons SAC. It is concluded that there are no relevant pathways for assessment of inter-pathway effects.

2.3.5 Consequently, there would be no adverse effect on integrity of the European site due to inter-pathway effects. The conclusions drawn in the **Shadow HRA Report** (Doc Ref. 5.10) with respect to effects on the Benacre to Eastern Bavents Lagoons SAC are, therefore, unaltered.

2.4 Dew's Ponds SAC

2.4.1 The great crested newt qualifying feature of the Dew's Pond SAC is screened into the Shadow HRA. There are no effect pathways predicted from the main development site to the Dew's Ponds SAC, but the European site is located within 2 km of the proposed Northern Park and Ride site located at Darsham.

2.4.2 The screened in effect pathway for the Dew's Pond SAC is alteration of local hydrology and hydrogeology. Because there is only one effect pathway, it is concluded that there is no potential for inter-pathway effects. Consequently, the conclusions drawn in the Shadow HRA with respect to effects on the Dew's Pond SAC are, therefore, unaltered.

Table 2.2: Summary of pathways and predicted effects on the Benacre to Eastern Bavents Lagoons SAC

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Alteration of coastal processes / sediment transport.	Construction, operation and decommissioning.	Any effect on coastal processes, sediment transport and SSC are localised and therefore too distant to have any effect on for the coastal lagoon qualifying feature of the Benacre to Eastern Bavents Lagoons SAC.	As these effect pathways do not have any influence on the European site, these pathways are not relevant considerations for the assessment of inter-pathway effects.
Water quality effects – marine environment.	Operation	The coastal lagoons qualifying feature of the Benacre to Easton Bavents SAC lies outwith the extent of the thermal and chemical plumes respectively. The inter-relationships between the various individual effects on marine water quality during the operational phase are assessed in **Volume 2, Chapter 21** of the **ES** (Doc Ref. 6.3), with effects on marine ecology and fisheries assessed in **Volume 2, Chapter 22** of the **ES** (Doc Ref.	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		6.3). This assessment included the following inter-relationships: • Cooling water thermal influence on dissolved oxygen. • Thermal elevation influence on proportion of un-ionised ammonia. • Synergistic effects of chlorinated discharges and treated sewage. • In-combination effects in the thermo-chemical plume. In summary, the assessed inter-relationships are not predicted to result in significant synergistic effects on water quality. Consideration of thermal uplift in combination with the toxicological effects of chlorination is not predicted to change the assessment	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		of the chlorination discharge or thermal plume when considered separately. Therefore, it can be concluded that there would be no effect on marine water quality from the thermal or chemical plume on the qualifying features of the SAC.	

2.5 Minsmere to Walberswick Heaths and Marshes SAC and Minsmere-Walberswick Ramsar site

2.5.1 The qualifying features screened into the Shadow HRA for the Minsmere to Walberswick Heaths and Marshes SAC comprise:

- Annual vegetation of drift lines.
- European dry heaths.
- Perennial vegetation of stony banks.

2.5.2 The qualifying criteria screened into the Shadow HRA for the Minsmere-Walberswick Ramsar site comprise:

- Ramsar criterion 1 - the site contains a mosaic of marine, freshwater, marshland and associated habitats complete with transition areas in between. It also contains the largest continuous stand of reedbed in England and Wales, and rare transition in grazing marsh ditch plants from brackish to fresh water.
- Ramsar criterion 2 - this site supports nine nationally scarce plants and at least 26 Red Data Book invertebrates. It supports a population of the mollusc narrow-mouthed whorl snail *Vertigo angustior* (Habitats Directive Annex II, British Red Data Book Endangered), recently discovered on the Blyth estuary river walls.
- Ramsar criterion 2 – the sites also supports an important assemblage of rare breeding birds associated with marshland and reedbeds including: bittern *Botaurus stellaris*, gadwall *Anas strepera*, teal *Anas crecca*, shoveler *Anas clypeata*, marsh harrier *Circus aeruginosus*, avocet *Recurvirostra avosetta* and bearded tit *Panurus biarmicus*.

2.5.3 The screened in effect pathways for these qualifying features and criterion due to the influence of the Sizewell C main development site are:

- alteration of coastal processes / sediment transport;
- water quality effects – marine environment;
- water quality effects – terrestrial environment (relevant to the Minsmere-Walberswick Ramsar site only);
- alteration of local hydrology and hydrogeology (relevant to the Minsmere-Walberswick Ramsar site only);
- changes in air quality; and

- disturbance due to increase in recreational pressure.

2.5.4 There are no effect pathways from the associated development sites to the qualifying interest features and criterion screened into the assessment.

2.5.5 **Table 2.3** summarises the pathways and predicted effects of the Sizewell C Project on the Minsmere to Walberswick Heaths and Marshes SAC and Minsmere-Walberswick Ramsar site. It is concluded that the only relevant pathways for an assessment of inter-pathway effects (because there is some predicted effect via these pathways) are:

- water quality effects – marine environment;
- water quality effects – terrestrial environment (relevant to the Minsmere-Walberswick Ramsar site only);
- alteration of local hydrology and hydrogeology (relevant to the Minsmere-Walberswick Ramsar site only);
- changes in air quality; and
- disturbance due to increase in recreational pressure.

2.5.6 The location of the qualifying interest features and criterion above the level of mean high water spring tides means that there is a very low potential for any effect due to changes in marine water quality. There is no realistic potential for any significant effect between this pathway and other pathways relevant to the scope of this assessment for these European sites.

2.5.7 For air quality and disturbance due to increase in recreational pressure, any effect arising from one of the pathways does not make the habitats more susceptible to damage from the effect of the other pathway. With regard to nutrient nitrogen and acid deposition, although coastal vegetated sand dunes and heathland have been modelled, the former habitat is not a reason for SAC designation and the latter habitat is not present within the affected area. Exceedances of the Critical Load are predicted to be confined to a relatively small area at the south of the European sites.

2.5.8 For those pathways only relevant to the Ramsar site ('water quality effects – terrestrial environment' and 'alteration of local hydrology and hydrogeology'), it is expected that mitigation measures will avoid any significant effect on the European site. The predicted effect on groundwater is expected to be confined to a very small area of the site and is predicted to be a short-term and reversible effect. Any potential

effects due to these pathways are, therefore, very localised and small-scale or can be effectively mitigated and, consequently, there is to realistic potential for significant inter-pathway effects.

2.5.9 Given the nature of the effect pathways and the predicted effects on the habitat of these European sites, it is concluded that there would be no adverse effect on integrity of the European sites due to inter-pathway effects. The conclusions drawn in the **Shadow HRA Report** (Doc Ref. 5.10) with respect to effects on the Minsmere to Walberswick Heaths and Marshes SAC and Minsmere-Walberswick Ramsar site are, therefore, unaltered.

Table 2.3: Summary of pathways and predicted effects on the Minsmere to Walberswick Heaths and Marshes SAC and Minsmere-Walberswick Ramsar site

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Alteration of coastal processes / sediment transport.	Construction, operation and decommissioning.	Any effect on coastal processes, sediment transport and SSC are localised and small-scale and no effect on the qualifying features of the Minsmere to Walberswick Heaths and Marshes SAC or Minsmere-Walberswick Ramsar site are predicted.	As this effect pathway does not have any influence on the European sites, and could not interact with other pathways to result in a different effect, this pathway is not a relevant consideration for the assessment of inter-pathway effects.
Water quality effects – marine environment.	Construction and decommissioning.	A number of activities have the potential to affect marine water quality during construction, including dewatering, discharge from the CDO and dredging. There would also be chemical discharges during the commissioning phases. The assessment, comprising H1 Environmental Risk Assessment and modelling where necessary concluded that discharges would be diluted to acceptable levels in close	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		proximity to the discharge. Importantly, the qualifying features of the SAC and Ramsar site are found at, or above, the level of mean high water spring tides, thus greatly limiting vulnerability to marine water quality effects. No adverse effect on integrity is concluded.	
	Operation	No pathway for effect on the qualifying interest features of the SAC exists for the thermal or chemical plume as the features are located at or above the level of mean high water spring tides. Consequently, no adverse effect on integrity is concluded. This potential effect pathway is only relevant for Ramsar criterion 1. Because both habitats are located either within the splash zone at the limits of the tide or above the tidal limit, the level of interaction between the habitats and the thermal plume would be small and there is no direct interaction between the predicted extent of the plume and the Ramsar site. Consequently, no adverse effect on integrity is concluded.	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Water quality effects – terrestrial environment (relevant to the Minsmere-Walberswick Ramsar site only).	Construction, operation and decommissioning.	Infrastructure would be in place to ensure all surface run-off and foul water is captured and treated and does not enter the Ramsar site. Run-off would be managed as part of the **Outline Drainage Strategy** (**Volume 2, Chapter 2** of the **ES; Appendix 2A**) (Doc Ref. 6.3). It is concluded that there would not be an adverse effect on the integrity of the Ramsar site due to effect on water quality. The principles of the **Outline Drainage Strategy** described for the construction phase are expected to apply during the operational phase.	The potential for inter-pathway effects is discussed in this section.
Alteration of local hydrology and hydrogeology (relevant to the Minsmere-Walberswick Ramsar site only).	Construction and decommissioning.	Primary mitigation measures are embedded in the design to manage surface water discharges adequately during the construction phase. These measures, combined with the proposed Sizewell Drain realignment, largely isolate the proposed development from the surrounding areas. The mitigation measures also ensure that any flows discharged to an existing surface	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		water receptor would have passed through water quality treatment measures and would be discharged at greenfield rates. The proposed water management structures would also allow for easy manipulation of the water levels and flows and thus levels/flows within the Leiston Drain could be reduced as and when required to allow for the Scott's Hall Drain to discharge efficiently when required. With these measures in place, no significant effect on the flow regime or water quality of the existing surface water receptors and, therefore, no effect on the habitats within the Ramsar site is predicted. With respect to groundwater, modelling predicts drawdown of less than 10 cm for a very localised part of the Ramsar site, just to the north of the main platform. The predicted affected area is less than 0.6ha, and this is predicted to be short-term and reversible. Given the minor predicted effect on groundwater, localised area of effect,	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		temporary nature of the effect and the lack of sensitive habitats, it is predicted that there would not be an adverse effect on the integrity of the Ramsar site.	
Changes in air quality.	Construction and decommissioning.	The potential effects of the construction and decommissioning phases are deposition of dust and effects from road traffic emissions. Dust deposition is predicted to be localised to within tens of metres and due to distance of the qualifying interest features, no adverse effect is predicted. Background levels of nutrient and acid deposition for the European sites already exceed the Critical Load. Given the background rates of high chronic deposition, the contributions from road traffic are unlikely to result in significant changes in species composition or habitat condition.	The potential for inter-pathway effects is discussed in this section.
	Operation	It is predicted that there would be exceedance of Critical Levels for short-term (daily) NOx at the European sites, but over a small area. The predicted annual average, or long-term, NOx concentration would not	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		exceed the Critical Level. The annual average is the most important measure, as vegetation exposed to levels of NOx above the Critical Level are more likely to recover from a short duration exposure. Given the small area of short-term exceedance of the Critical Level, no adverse effect is predicted. Critical Loads for nitrogen and acid deposition are predicted to be exceeded at the European sites. However, given the background rates of high chronic deposition, it is very unlikely that the increases predicted would lead to significant changes in species composition or to noticeable damage to the constituent plants. Hence, there would not be an adverse effect on the integrity of the qualifying features of the European sites due to nutrient nitrogen or acid deposition.	
Disturbance due to an increase in	Construction and decommissioning.	Any potential increase in recreational visits is predicted to be small in the context of the estimated existing number of recreational visits; in addition any increase in pressure	The potential for inter pathway effects with

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
recreational pressure.		would be diffuse and spread across a large number of potential car park access points. On this basis, no adverse effect on the integrity of the European sites is concluded.	other pathways is discussed in this section.
	Operation.	The increased pressure during the operational phase would be substantially lower than for the construction phase. Consequently, no adverse effect on the integrity of the European sites is concluded.	

2.6 Orfordness to Shingle Street SAC

2.6.1 The qualifying features screened into the Shadow HRA for the Orfordness to Shingle Street SAC comprise:

- Coastal lagoons.
- Annual vegetation of drift lines.
- Perennial vegetation of stony banks.

2.6.2 The screened in effect pathways for these qualifying features and criterion due to the influence of the Sizewell C main development site are:

- alteration of coastal processes / sediment transport;
- water quality effects – marine environment;
- changes in air quality; and
- disturbance due to increase in recreational pressure.

2.6.3 These effects are considered below for each relevant phase of the Sizewell C Project.

2.6.4 There are no effect pathways from the Sizewell C Project associated development sites to the screened in qualifying features.

2.6.5 **Table 2.4** summarises the pathways and predicted effects of the Sizewell C Project on the Orfordness to Shingle Street SAC. It is concluded that the only relevant pathways for an assessment of inter-pathway effects (because there is some predicted effect via these pathways) are:

- water quality effects – marine environment;
- changes in air quality; and,
- disturbance due to an increase in recreational pressure.

2.6.6 The predicted effect on air quality (during operation) is of very low magnitude relative to the relevant Critical Levels and Critical Loads, with no predicted effect on the habitats of the European site. The effect of disturbance due to recreational pressure is also predicted to be low magnitude.

2.6.7 Given the location of the qualifying features and the distance of the SAC from the Sizewell C Project, no effect is predicted due to effect on marine

water quality during either the construction, operational or decommissioning phases.

2.6.8 For these pathways, it is concluded that the magnitude of the predicted effect is sufficiently low that there is no realistic potential for an inter-pathway effect to arise. Furthermore, any effect arising from one of the pathways does not make the habitats more susceptible to damage from the effect of the other pathway.

2.6.9 Consequently, there would be no adverse effect on integrity of the European site due to inter-pathway effects. The conclusions drawn in the **Shadow HRA Report** (Doc Ref. 5.10) with respect to in-combination effects on the Orfordness to Shingle Street SAC are, therefore, unaltered.

Table 2.4: Summary of pathways and predicted effects on the Orfordness to Shingle Street SAC

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Alteration of coastal processes / sediment transport.	Construction, operation and decommissioning.	Any effect on coastal processes, sediment transport and SSC are localised and therefore too distant to have any effect on the qualifying features of the Orfordness to Shingle Street SAC.	As these effect pathways do not have any influence on the European sites, and could not interact with other pathways to result in a different effect, these pathways are not relevant considerations for the assessment of inter-pathway effects.
Water quality effects – marine environment.	Construction and decommissioning.	Chromium and zinc were the only contaminants that failed the screening undertaken for the H1 Environmental Risk Assessment. The modelling shows that the chromium plume was predicted to be below the EQS within 5.5ha of the CDO at the sea surface. The SAC is located approximately 8km to the south of the CDO; therefore, there is no pathway of effect from the discharge of chromium as a contaminant to the SAC. The modelling also shows that zinc concentrations would be	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		indiscernible from background levels within 0.11ha of the CDO outfall. Consequently, no adverse effect on integrity is predicted.	
	Operation	The 2°C thermal contour extends along the coastline adjacent to the SAC. However, this is limited up to the level of mean high water spring tides. As the lagoons sit behind the shingle bank, the seawater would percolate slowly through the shingle before reaching the lagoons, dissipation of any retained heat by the time it reaches the lagoons. No effect pathway from the thermal plume to the annual vegetation of drift lines or perennial vegetation of stony banks qualifying features is predicted. The chemical plumes are not predicted to interact with the Orfordness to Shingle Street SAC.	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		The inter-relationships between the various individual effects on marine water quality during the operational phase are assessed in Volume 2, Chapter 21 of the ES (Doc. Ref. 6.3), with effects on marine ecology and fisheries assessed in Volume 2, Chapter 22 of the ES (Doc. Ref. 6.3). This assessment included the following inter-relationships: • Cooling water thermal influence on dissolved oxygen. • Thermal elevation influence on proportion of un-ionised ammonia. • Synergistic effects of chlorinated discharges and treated sewage. • In-combination effects in the thermo-chemical plume.	

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		In summary, the assessed inter-relationships are not predicted to result in significant synergistic effects on water quality. Consideration of thermal uplift in combination with the toxicological effects of chlorination is not predicted to change the assessment of the chlorination discharge or thermal plume when considered separately. No adverse effect on integrity of the SAC is predicted due to effects on marine water quality.	
Changes in air quality.	Construction and decommissioning.	The SAC falls beyond the study area for the assessment of dust emissions and, therefore, there would be no effect on the European site due to dust. Effects of traffic were screened out for this European site as being insignificant.	The potential for inter-pathway effects with other pathways is discussed in this section.

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
	Operation	Any operational effects on the European site are predicted to be very low in relation to the relevant Critical Levels and Critical Loads, and no adverse effect is predicted.	
Disturbance due to an increase in recreational pressure.	Construction and decommissioning.	The main area where sensitive shingle vegetation is present is along the Orfordness to Shingle Street shingle spit. The main access point to the shingle spit is by boat from Orford. Once on the spit, access is controlled by the National Trust, with access to sensitive shingle vegetation prevented by fencing and signage. It is possible to access the spit by walking from Aldeburgh, but it is envisaged that most people would access the town beach rather than undertake a longer return walk to access the shingle spit. In addition, clear fencing and signage from the	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		National Trust indicate that access is prohibited from this direction. On this basis, it is concluded that there would not be an adverse effect on the integrity of the SAC.	
	Operation	The increased pressure during the operational phase would be substantially lower than for the construction phase. Consequently, no adverse effect on the integrity of the European site is concluded.	

3 BIRDS

3.1 Introduction

3.1.1 With respect to inter-pathway effects on birds, the **Shadow HRA Report** (Doc Ref. 5.10) concludes that when the potential effect pathways on habitats that support bird qualifying interest features are considered collectively, the outcome of the alone or in-combination assessment for each European site is unchanged from that reported in **section 8** of the **Shadow HRA Report** for the reasons set out in **section 11.2** of that report.

3.1.2 No other pathways were identified that could result in adverse effects on site integrity as a result of inter-pathway effects. Further detail relating to inter-pathway effects on SPA and Ramsar site qualifying features is presented in this section. This further consideration is structured to reflect the European sites, qualifying interest features and potential effect pathways (for birds) as assessed in the **Shadow HRA Report** (Doc Ref. 5.10).

3.2 Alde-Ore Estuary SPA and Ramsar site

a) Overview of qualifying features and effect pathways

3.2.1 The qualifying interest features screened into the Shadow HRA for the Alde-Ore Estuary SPA and Ramsar site are:

- For the SPA:
  - Breeding populations of:
    - Avocet.
    - Marsh harrier.
    - Little tern.
    - Sandwich tern.
    - Lesser black-backed gull.
  - Non-breeding populations of:
    - Avocet.
    - Redshank.
    - Ruff.
- For the Ramsar site:

- A notable assemblage of breeding and wintering wetland birds (under Ramsar criterion 3).
- The breeding population of lesser black-backed gull (under Ramsar criterion 6).

3.2.2 The effect pathways that were screened in for these qualifying features due to the potential influence of the Sizewell C Project are:

- Alteration of coastal processes / sediment transport, during construction, operation and decommissioning.
- Water quality effects – marine environment, during operation.
- Changes in air quality, during construction, operation and decommissioning.
- Disturbance due to increase in recreational pressure, during construction, operation and decommissioning.
- Physical interaction between species and project infrastructure, during operation.

3.2.3 The effect pathways which were screened in for these qualifying features due to the potential influence of the associated development sites are:

- Water quality effects – terrestrial environment (two village bypass), during construction.
- Alteration of local hydrology and hydro-geology, during construction, and operation (two village bypass).

3.2.4 **Table 3.1** summarises the pathways and predicted effects of the Sizewell C Project on the Alde-Ore Estuary SPA and Ramsar site, outlining the pathways relevant to each qualifying feature and identifying those with the potential to contribute to inter-pathway effects.

Table 3.1: Summary of pathways and predicted effects on the Alde-Ore Estuary SPA and Ramsar site

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Alteration of coastal processes / sediment transport.	• Breeding populations of little tern, Sandwich tern and lesser black-backed gull. • Non-breeding populations of avocet, redshank and ruff. • The assemblage of breeding and wintering wetland birds.	Construction, operation and decommissioning.	No effects of coastal processes and sediment transport were predicted on the supporting habitats for any of the SPA / Ramsar site qualifying features. As such, no effects from this pathway were predicted on these qualifying features.	As this effect pathway does not have any influence on the SPA / Ramsar site, and could not interact with other pathways to result in a different effect, it is not relevant to considerations for the assessment of inter-pathway effects.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Water quality effects – marine environment.	• Breeding populations of little tern, Sandwich tern and lesser black-backed gull. • The assemblage of breeding and wintering wetland birds.	Operation	The thermal plume intersects with the predicted breeding season foraging ranges of each of the three breeding seabird qualifying features. However, for all three species the extent of overlap with the foraging ranges over the full course of the relevant breeding period is small or negligible (particularly when considering the 3° uplift). For TRO, bromoform and hydrazine, the extent of overlap with the foraging ranges of the three qualifying features is negligible (≤ 0.1%) or non-existant. The different chemical plumes are effectively encompassed by the thermal plume, so that when considered together the overlap with the foraging	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			ranges was no greater than when the thermal plume was considered alone. Furthermore, assessments of the inter-relationships between several of the different emissions (see **Table 2.1**) predicted no significant synergistic effects on water quality or on marine ecology and fisheries (**Volume 2, Chapter 21** of the **ES** (Doc Ref. 6.3), V**olume 2, Chapter 22** of the **ES** (Doc Ref. 6.3)). Therefore, changes in marine water quality during operation are considered to have the potential to cause, at most, small effects on the SPA / Ramsar site qualifying features and, on this basis, no adverse effect on the integrity of the	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			SPA / Ramsar site is concluded.	
Disturbance due to an increase in recreational pressure.	• Breeding populations of avocet, marsh harrier, little tern, Sandwich tern and lesser black-backed gull. • Non-breeding populations of avocet, redshank and ruff. • The assemblage	Construction and decommissioning.	Any increase in recreational visits is predicted to be small in the context of the estimated existing number of recreational visits. In addition, any increase in pressure would be diffuse and spread across a large number of potential car park access points. For some qualifying features, access to areas of the SPA / Ramsar site in which they nest (and where they are potentially most vulnerable to disturbance) is controlled, further reducing the likelihood of effect. Therefore, direct effects of increased recreational disturbance on the qualifying features of the SPA and	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
	of breeding and wintering wetland birds.		Ramsar site are predicted to be, at most, small. Additionally, indirect effects via effects on supporting habitats are considered unlikely. On this basis, no adverse effect on the integrity of the European site is concluded.	
		Operation	The increase in pressure during the operational phase would be substantially lower than for the construction phase. Consequently, no adverse effect on the integrity of the European site is concluded.	
Water quality effects – terrestrial environment.	• Breeding populations of little tern, Sandwich tern and	Construction	This pathway is only relevant to the construction of the two village bypass, which includes a bridge over the River Alde upstream of the SPA / Ramsar site. The potential effect on water quality would be	As this effect pathway does not have any influence on the SPA / Ramsar site, and it could not interact with other pathways to result in a different effect, it is not a relevant consideration for

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
	lesser black-backed gull. • Non-breeding populations of avocet, redshank and ruff. • The assemblage of breeding and wintering wetland birds.		mitigated by carrying out the construction in line with the **Code of Construction Practice (CoCP)** (Doc Ref. 811). With this mitigation in place, no effects of terrestrial water quality on the supporting habitats of the qualifying features are predicted. Therefore, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	the assessment of inter-pathway effects.
Alteration of local hydrology and hydrogeology.	• Breeding populations of little tern, Sandwich tern and	Construction and operation.	This pathway is only relevant to the construction of the two village bypass, which includes a bridge over the River Alde upstream of the SPA / Ramsar site. The design of the crossing	As this effect pathway does not have any influence on the SPA / Ramsar site, and it could not interact with other pathways to result in a different effect, it is not a

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
	lesser black-backed gull. • Non-breeding populations of avocet, redshank and ruff. • The assemblage of breeding and wintering wetland birds.		ensures no direct disturbance to the river and the natural integrity of the banks of the river, bed and bankside would be preserved. No effects of hydrological processes on the supporting habitats of the qualifying features are predicted. Therefore, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	relevant consideration for the assessment of inter-pathway effects.
Changes in air quality.	• Breeding populations of avocet, marsh harrier, little	Construction and decommissioning	The SPA / Ramsar site is beyond the study area for the assessment of dust emissions and effects of traffic were screened out for the SPA / Ramsar site. Consequently,	As this effect pathway does not have any influence on the qualifying features of the SPA / Ramsar site, and it could not interact with other pathways to result in

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
	tern, Sandwich tern and lesser black-backed gull. • Non-breeding populations of avocet, redshank and ruff. • The assemblage of breeding and wintering wetland birds.		there would be no effects on the supporting habitats of the qualifying features. As such, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	a different effect, it is not a relevant consideration for the assessment of inter-pathway effects.
		Operation	Any operational effects on the supporting habitats for the SPA / Ramsar site qualifying features are predicted to be very low in relation to the relevant Critical Levels and Critical Loads, and no changes to the vegetation composition and structure of these habitats is predicted. As such, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	
Physical interaction between	• Breeding populations of little tern,	Operation	Impingement and entrainment of fish and invertebrates may occur within the cooling water	The potential for inter-pathway effects with other

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
species and project infrastructure.	Sandwich tern and lesser black-backed gull. • The assemblage of breeding and wintering wetland birds.		intake during the operational phase. These sources of mortality are predicted to have, at most, small effects on the fish and invertebrate prey populations of the marine bird qualifying features of the SPA / Ramsar site. As such, no adverse effect on site integrity is concluded.	pathways is discussed in this section.

b) Consideration of the potential for inter-pathway effects

3.2.5 Based upon the above consideration of the effect pathways which are relevant to the Alde-Ore Estuary SPA and Ramsar site, the potential for inter-pathway effects exists in relation to:

- Water quality effects – marine environment, during operation.
- Disturbance due to increase in recreational pressure, during construction, operation and decommissioning.
- Physical interaction between species and project infrastructure, during operation.

3.2.6 Of the above pathways, those which concern marine water quality and interaction with project infrastructure affect only the marine bird qualifying features, and so the potential for inter-pathway effects is limited to those qualifying features. This essentially limits further consideration to the SPA breeding populations of Sandwich tern, little tern and lesser black-backed gull.

3.2.7 As detailed in **Table 3.1**, effects of increased recreational disturbance on the SPA / Ramsar site qualifying features are considered to be unlikely and, where any effects do occur, they are predicted to be small. In relation to the marine bird qualifying features, specifically, the main breeding areas for both Sandwich tern and lesser black-backed gull are on Havergate Island, where access is controlled. Furthermore, increases in recreational pressure would be greatest during the construction (and decommissioning) phases, whereas any effects associated with marine water quality and interaction with project infrastructure would occur during operation. Therefore, it is considered that there is little, or no, potential for increases in recreational disturbance to interact with (or add to) effects from other pathways and contribute to inter-pathway effects.

3.2.8 Potential effects associated with marine water quality and the interaction with project infrastructure would occur through changes in the foraging conditions and / or food availability for the marine bird qualifying features. For both pathways, the effects on the relevant qualifying features are predicted to be small and consequently no adverse effect on site integrity is predicted when the respective effects are considered in-combination.

3.3 Benacre to Easton Bavents SPA

a) Overview of qualifying features and effect pathways

3.3.1 The qualifying features screened into the Shadow HRA for the Benacre to Easton Bavents SPA are:

- Breeding populations of:
  - Bittern.
  - Marsh harrier.
  - Little tern.

3.3.2 The effect pathways which were screened in for these qualifying features due to the potential influence of the Sizewell C main development site are:

- Alteration of coastal processes / sediment transport, during construction, operation and decommissioning.
- Water quality effects – marine environment, during operation.
- Disturbance due to increase in recreational pressure, during construction, operation and decommissioning.
- Physical interaction between species and project infrastructure, during operation.

3.3.3 No potential effects were screened in for appropriate assessment in relation to the associated development sites.

3.3.4 **Table 3.2** summarises the pathways and predicted effects of the Sizewell C Project on the Benacre to Easton Bavents SPA, outlining the pathways relevant to each qualifying feature and identifying those with the potential to contribute to inter-pathway effects.

Table 3.2: Summary of pathways and predicted effects on the Benacre to Easton Bavents SPA

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Alteration of coastal processes / sediment transport.	Breeding populations of little tern.	Construction, operation and decommissioning.	The SPA is approximately 15 km north-east of the main development site, and no effects are predicted on the coastal processes and sediment transport, so that there is no change predicted in the extent of the coastal habitats used by little tern. As such, no effects from this pathway are predicted on this qualifying feature.	As this effect pathway does not have any influence on the SPA, and could not interact with other pathways to result in a different effect, it is not relevant to considerations for the assessment of inter-pathway effects.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Water quality effects – marine environment.	Breeding populations of little tern.	Operation	There is no intersection of the thermal plumes (for the 2° and 3° uplifts) or of any of the chemical plumes with the predicted breeding season foraging range of little terns from this SPA. Therefore, changes in marine water quality as a result of the operation of the Sizewell C Project are highly unlikely to have any effect on this qualifying feature. On this basis, no adverse effect on the integrity of the SPA is concluded.	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Disturbance due to an increase in recreational pressure.	Breeding populations of bittern, marsh harrier and little tern.	Construction and decommissioning.	Given the distance of this site (and the associated access points for visitors) from the main development site, and based upon the results of the 'visitor displacement' survey, any increase in visitor numbers to this site due to the construction works is considered likely to be so small as to be undetectable. Therefore, effects of increased recreational disturbance on the qualifying features of the SPA (either via direct effects or indirectly via effects on supporting habitast) are highly unlikely and no adverse effect on site integrity is concluded.	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		Operation	The increase in pressure during the operational phase would be substantially lower than for the construction phase. Consequently, no adverse effect on the integrity of the European site is concluded.	
Interaction with project infrastructure.	Breeding populations of little tern.	Operation	Impingement and entrainment of fish and invertebrates may occur within the cooling water intake during the SZC operational phase. These sources of mortality are predicted to have, at most, small effects on the fish and invertebrate prey populations of the SPA little tern population. As such, no adverse effect on site integrity is concluded.	The potential for inter-pathway effects is discussed in this section.

b) Consideration of the potential for inter-pathway effects

3.3.5 Based upon the consideration of the effect pathways which are relevant to the Benacre to Easton Bavents SPA, the potential for inter-pathway effects exists in relation to:

- Water quality effects – marine environment, during operation.
- Disturbance due to increase in recreational pressure, during construction, operation and decommissioning.
- Physical interaction between species and project infrastructure, during operation.

3.3.6 Breeding little tern is the only qualifying feature for which the consideration of inter-pathway effects is relevant, as the other qualifying features are screened in only for increases in recreational pressure (**Table 3.2**).

3.3.7 Each of the above pathways are considered highly unlikely to lead to any effects on the SPA little tern population (**Table 3.2**) and, as such, there is considered to be no potential for inter-pathway effects to result in an adverse effect on site integrity.

3.4 Deben Estuary SPA and Ramsar site

a) Overview of qualifying features and effect pathways

3.4.1 The qualifying features screened into the Shadow HRA for the Deben Estuary SPA and Ramsar site are:

- For the SPA:
  - Non-breeding populations of:
    - Avocet.
    - Dark-bellied brent goose.
- For the Ramsar site:
  - The non-breeding population of dark-bellied brent goose (under Ramsar criterion 6).

3.4.2 No potential effects were screened in for appropriate assessment in relation to the Sizewell C main development site.

3.4.3 The effect pathways which were screened in for these qualifying features due to the potential influence of the associated development sites are:

- Disturbance effects on species populations, during construction, operation and decommissioning for non-breeding populations of avocet and dark-bellied brent goose (Freight Management Facility).

3.4.4 Given that only a single effect pathway was screened in for assessment, there is no potential for inter-pathway effects in relation to the Deben Estuary SPA and Ramsar site.

3.5 Minsmere-Walberswick SPA and Ramsar site

a) Overview of qualifying features and effect pathways

3.5.1 The qualifying features screened into the Shadow HRA for the Minsmere-Walberswick SPA and Ramsar site are:

- For the SPA:
  - Breeding populations of:
    - Avocet.
    - Bittern.
    - Marsh harrier.
    - Little tern.
    - Gadwall.
    - Shoveler.
    - Teal.
    - Nightjar.
  - Non-breeding populations of:
    - Hen harrier.
    - Gadwall.
    - Shoveler.
    - White-fronted goose.
- For the Ramsar site:
  - An important assemblage of rare breeding birds associated with marshland and reedbeds, including: bittern, gadwall, teal, shoveler, marsh harrier, avocet and bearded tit (under Ramsar criterion 2).

3.5.2 The effect pathways which were screened in for these qualifying features due to the potential influence of the Sizewell C main development site are:

- Alteration of coastal processes / sediment transport, during construction, operation and decommissioning.
- Water quality effects – marine environment, during operation.
- Water quality effects – terrestrial environment, during construction, operation and decommissioning.
- Alteration of local hydrology and hydro-geology, during construction, operation and decommissioning.
- Changes in air quality, during construction, operation and decommissioning.
- Direct habitat loss and fragmentation, during construction, operation and decommissioning.
- Disturbance effects on species populations, during construction, operation and decommissioning.
- Disturbance due to increase in recreational pressure, during construction, operation and decommissioning.
- Physical interaction between species and project infrastructure, during operation.

3.5.3 No potential effects were screened in for appropriate assessment in relation to the associated development sites.

3.5.4 **Table 3.3** summarises the pathways and predicted effects of the Sizewell C Project on the Minsmere-Walberswick SPA and Ramsar site, outlining the pathways relevant to each qualifying feature and identifying those with the potential to contribute to inter-pathway effects.

Table 3.3: Summary of pathways and predicted effects on the Minsmere-Walberswick SPA and Ramsar site

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Alteration of coastal processes / sediment transport.	• Breeding population of little tern. • The assemblage of rare breeding birds associated with marshland and reedbeds.	Construction, operation and decommissioning.	Minimal effects are predicted on the coastal processes and sediment transport as a result of the construction, operation and decommissioning of the main development site, with no changes predicted in the extent of the supporting habitats for the SPA / Ramsar site qualifying features screened into the Shadow HRA. As such, no effects from this pathway were predicted on these qualifying features.	As this effect pathway does not have any influence on the SPA / Ramsar site, and could not interact with other pathways to result in a different effect, it is not relevant to the assessment of inter-pathway effects.

Water quality effects – marine environment.	• Breeding population of little tern. • The assemblage of rare breeding birds associated with marshland and reedbeds.	Construction (including commissioning) and decommissioning.	Potential effects on marine water quality during construction and decommissioning would arise from SSC as a result of dredging and hydrazine from cold flush testing at commissioning. For little tern, the resulting instantaneous plumes would overlap with the predicted breeding season foraging ranges from both of the main SPA / Ramsar site colony populations, although the extent of overlap is small in all cases. Other species associated with the Ramsar site assemblage which forage in the marine environment have larger foraging ranges than little tern (whilst some also use terrestrial environments as well). Thus, the potential for effects from the SSC and hydrazine plumes is lower than for little tern.	The potential for inter-pathway effects with other pathways is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			Furthermore, the SSC and hydrazine plumes are present for relatively short durations only (i.e. a few days and a few hours, respectively). On this basis, no adverse effect on the integrity of the SPA is concluded.	

		Operation	The thermal plumes (2º and 3º uplifts) intersect with the predicted breeding season foraging ranges from both of the main little tern colonies in the SPA / Ramsar site. The extent of overlap over the full course of the breeding period is of small to moderate extent and / or represents a small increase relative to the overlap with the existing plumes associated with the operation of SZB. This is particularly so when considering the 3º uplift. There is no overlap of the predicted little tern foraging ranges with the SZC TRO, bromoform or hydrazine plumes. Other species associated with the Ramsar site assemblage which forage in the marine environment have larger foraging ranges than little tern (whilst some also use terrestrial environments as well). Thus, the potential for effects	

			associated with the thermal plumes is likely to be lower for these species than for little tern. Overlap of the chemical plumes with the predicted foraging ranges of these species would also be small. The different chemical plumes were effectively encompassed by the thermal plume, so that when considered together the overlap with the foraging ranges was no greater than when the thermal plume was considered alone. Furthermore, assessments of the inter-relationships between several of the different emissions (see **Table 2.1**) predicted no significant synergistic effects on water quality or on marine ecology and fisheries (**Volume 2, Chapter 21** of the **ES** (Doc Ref. 6.3), **Volume 2, Chapter 22** of the **ES** (Doc Ref. 6.3)).	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			Therefore, changes in marine water quality as a result of the SZC operation are considered to have the potential to cause, at most, small effects on the SPA / Ramsar site qualifying features and, on this basis, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	

Water quality effects – terrestrial environment.	• Breeding populations of avocet, bittern, little tern, marsh harrier, gadwall, shoveler and teal. • Non-breeding populations of hen harrier, gadwall, shoveler and white-fronted goose. • The assemblage of rare breeding birds associated with	Construction and decommissioning	Changes in water quality in the terrestrial environment were considered to have the potential to affect supporting freshwater and marshland habitats for the SPA / Ramsar site qualifying features (although there was considered to be no potential to affect other supporting habitats, such as dry heaths). Measures would be taken to ensure all surface run-off and foul water is captured and treated, as part of the **Outline Drainage Strategy** (**Volume 2, Chapter 2** of the **ES; Appendix 2A**) (Doc Ref. 6.3), so ensuring that these supporting habitats remain unaffected. Consequently, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	As this effect pathway does not have any influence on the SPA / Ramsar site, and could not interact with other pathways to result in a different effect, it is not relevant to considerations for the assessment of inter-pathway effects.
		Operation	The principles of the **Outline Drainage Strategy** described for the construction phase are expected to apply during the	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
	marshland and reedbeds.		operational phase and, consequently, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	

Alteration of local hydrology and hydrogeology.	• Breeding populations of avocet, bittern, little tern, marsh harrier, gadwall, shoveler and teal. • Non-breeding populations of hen harrier, gadwall, shoveler and white-fronted goose. • The assemblage of rare breeding birds associated	Construction and decommissioning.	Changes in local hydrology and hydrogeology were considered to have the potential to affect supporting freshwater and marshland habitats for the SPA / Ramsar site qualifying features (although there was considered to be no potential to affect other supporting habitats, such as dry heaths). Primary mitigation measures embedded in the design would manage surface water discharges from the proposed development and, combined with the proposed Sizewell Drain realignment, would largely isolate the proposed development from the surrounding areas. The mitigation measures also ensure that any flows discharged to an existing surface water receptor would have passed through water quality treatment measures and	The potential for inter-pathway effects is discussed in this section.

	with marshland and reedbeds.		would be discharged at greenfield rates. The proposed water management structures would also allow for easy manipulation of the water levels and flows, so that levels/flows within the Leiston Drain could be reduced as and when required to allow for the Scott's Hall Drain to discharge efficiently when required. With these measures in place no effects are predicted on supporting habitats for the SPA / Ramsar site qualifying features. There is a predicted drawdown in groundwater level of <10cm affecting an area of 0.6ha (equating to <0.3% of the SPA area). This effect on groundwater is predicted to be short-term and reversible. On this basis, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		Operation	No effects of changes in local hydrology and hydrogeology on the supporting habitats of the qualifying features of the SPA / Ramsar site are predicted during the SZC operational phase. Consequently, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	As this effect pathway does not have any influence on the SPA / Ramsar site, and could not interact with other pathways to result in a different effect, it is not relevant to considerations for the assessment of intra-Project in-combination effects.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Changes in air quality.	• Breeding populations of avocet, bittern, little tern, marsh harrier, nightjar, gadwall, shoveler and teal. • Non-breeding populations of hen harrier, gadwall, shoveler and white-fronted goose.	Construction and decommissioning	Dust deposition is predicted to be localised to within tens of metres, with no adverse effects predicted on supporting habitats for the SPA / Ramsar site qualifying features. Background levels of nutrient and acid deposition already exceed the Critical Load. Given the background rates of high chronic deposition, the contributions from road traffic are unlikely to result in significant changes in species composition or condition of supporting habitats for the SPA / Ramsar site qualifying features. On this basis, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
	• The assemblage of rare breeding birds associated with marshland and reedbeds.	Operation	It is predicted that there would be exceedance of Critical Levels over a small area of the SPA / Ramsar site for short-term (daily) NOx. The predicted annual average, or long-term, NOx concentration would not exceed the Critical Level. Critical Loads for nitrogen and acid deposition are predicted to be exceeded. However, given the background rates of high chronic deposition, it is very unlikely that the increases predicted would lead to significant changes in the supporting habitats of the SPA / Ramsar site qualifying features. On this basis, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	

Direct habitat loss and fragmentation.	• Breeding populations of marsh harrier and nightjar. • Non-breeding populations of hen harrier, gadwall and shoveler. • The assemblage of rare breeding birds associated with marshland and reedbeds.	Construction, operation and decommissioning.	Construction works at the main development site would lead to the loss of habitats that may be functionally linked to the SPA / Ramsar site (although there would be no loss of areas within the SPA / Ramsar site). This includes 7.03ha of the Sizewell Marshes, which represents *c.*8% of the coastal grazing marsh and reedbed habitats within the Sizewell Marshes. This loss represents a small proportion (considerably less than 8%) of the wetland habitats available to the SPA / Ramsar site qualifying features). Baseline surveys provided no evidence that habitats within or close to the main development sites were important for or extensively used by the SPA / Ramsar site qualifying features. This included the 7.03ha of wetland within the Sizewell Marshes.	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			On this basis, no adverse effect on the SPA / Ramsar site is concluded. In addition, primary mitigation has involved creation of replacement reedbed and ditch habitat at Aldhurst Farm which is contiguous with the Sizewell Marshes (although this mitigation is not required to reach a conclusion of no adverse effect on the integrity of the SPA / Ramsar site).	

Disturbance effects on species populations.	• Breeding populations of avocet, bittern, little tern, marsh harrier, nightjar, gadwall, shoveler and teal. • Non-breeding populations of gadwall, shoveler, white-fronted goose and hen harrier. • The assemblage of rare breeding birds associated	Construction and decommissioning.	Noise and visual disturbance from construction (and decommissioning) activities at levels considered likely to cause effects on qualifying features is predicted to occur across a small part of the SPA / Ramsar site only, and would not affect SPA / Ramsar site habitats of importance to the qualifying species. However, for some qualifying species there is functional linkage with habitats in the Minsmere South Levels and Sizewell Marshes where there is greater potential for effects of noise and visual disturbance to arise. For all qualifying features other than breeding marsh harrier, the potential impacts on birds using these functionally linked habitats would have, at most, only small effects on the respective SPA / Ramsar site populations.	The potential for inter-pathway effects is discussed in this section.

	with marshland and reedbeds.		For breeding marsh harrier, noise and visual disturbance may cause displacement from wetland foraging habitats within the Minsmere South Levels and (particularly) the Sizewell Marshes. When considering the peak noise levels predicted during construction (and basing the assessment on precautionary assumptions), adverse effects on this qualifying feature cannot be excluded for the construction phase. Consequently, habitat improvement measures have been proposed which are predicted to be sufficent to compensate for the foraging resource potentially lost as a result of noise and visual disturbance during construction. This alternative foraging habitat would be available during decommissioning, so that the no adverse effects on this qualifying feature are predicted	

			during the decommissioning phase. There is also the potential for disturbance effects on breeding little terns to occur when birds are foraging in the marine environment. Direct effects of disturbance from increased vessel traffic are unlikely, given existing levels of vessel traffic in the waters around Sizewell and the relative insensitivity of foraging little terns to anthropogenic disturbance. Underwater noise (e.g. from dredging and piling) could affect fish prey of little terns, but any such effects with the potential to extend across relatively large parts of the little tern foraging range would be of short-term duration. Due to the potential effects of noise and visual disturbance on the breeding marsh harrier population, adverse effects on the integrity of the SPA /	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			Ramsar site cannot be excluded for the construction phase. However, habitat improvement measures will be undertaken to compensate for this effect. For the decommissioning phase, no adverse effect on the integrity of the SPA / Ramsar site is concluded (with the alternative marsh harrier foraging habitat being available during this phase).	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		Operation	During operation, noise levels are unlikely to differ substantially from the existing baseline situation, for both airborne and underwater sources). This is also considered to be the case for visual disturbance, except in relation to artifical lighting for which levels would increase in the vicinity of some areas of the Sizewell C power station. However, this increase in lightspill would not affect habitats used by qualifying features at night. On this basis, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	

Disturbance due to an increase in recreational pressure.	• Breeding populations of avocet, bittern, little tern, marsh harrier, nightjar, gadwall, shoveler and teal. • Non-breeding populations of gadwall, shoveler, white-fronted goose and hen harrier. • The assemblage of rare breeding birds associated	Construction and decommissioning.	An increase in recreational visits is predicted following the displacement of visitors from areas affected by construction activity, with the Minsmere to Walberswick area identified as potentially receiving the highest number of displaced visitors. It is considered likely that a high proportion of those visitors relocating to Minsmere would use sites on the periphery of the RSPB Minsmere Reserve (which has considerable overlap with the SPA / Ramsar site), rather than the main area of the Reserve (and hence key habitats for several of the qualifying features). Additionally, a Rights of Way and Access Strategy is being developed to minimise displacement of visitors and construction workers to the SPA / Ramsar site for recreation. This strategy includes a monitoring	The potential for inter-pathway effects is discussed in this section.

	with marshland and reedbeds.		programme to identify locally agreed mitigation measures which could be introduced. The main areas used by several of the qualifying features of the SPA / Ramsar site (particularly for breeding or roosting) occur within nature reserves where access is controlled, and increased disturbance unlikely. In other areas important to some qualifying features, there is already considerable visitor usage (so existing disturbance effects are likely) whilst in other situations it is recommended that existing management measures be maintained (e.g. to protect nesting little tern) or else enhanced (e.g. in relation to recreational management measures for breeding nightjar at Westleton Heath and other heathland areas within the Minsmere (southern) section of	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			the Minsmere-Walberswick SPA / Ramsar site). Indirect effects of increased recreational disturbance via effects on supporting habitats are considered unlikely to occur (e.g. see **Table 2.3**). On this basis, no adverse effect on the integrity of the SPA / Ramsar site is concluded.	
		Operation	The increase in pressure during the operational phase would be substantially lower than for the construction phase. Consequently, no adverse effect on the integrity of the European site is concluded.	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Interaction with project infrastructure.	• Breeding populations of little tern. • The assemblage of rare breeding birds associated with marshland and reedbeds.	Operation	Impingement and entrainment of fish and invertebrates may occur within the cooling water intake during the operational phase. These sources of mortality are predicted to have, at most, small effects on the fish and invertebrate prey populations of the marine bird qualifying features of the SPA / Ramsar site. As such, no adverse effect on site integrity is concluded.	The potential for inter-pathway effects is discussed in this section.

b) Consideration of the potential for inter-pathway effects

i. Relevant effect pathways

3.5.5 Based upon the above consideration of the effect pathways which are relevant to the Minsmere-Walberswick SPA and Ramsar site, the potential for inter-pathway effects exists in relation to:

- Water quality effects – marine environment, during construction, operation and decommissioning.
- Alteration of local hydrology and hydrogeology, during construction and decommissioning.
- Changes in air quality, during construction, operation and decommissioning.
- Direct habitat loss and fragmentation, during construction, operation and decommissioning.
- Disturbance effects on species populations, during construction, operation and decommissioning.
- Disturbance due to increase in recreational pressure, during construction, operation and decommissioning.
- Physical interaction between species and project infrastructure, during operation.

3.5.6 As detailed in **Table 3.3**, several of the above pathways each have the potential to affect a number of the SPA / Ramsar site qualifying features, which means that the consideration of inter-pathway is relatively complex in this case. In addition, an adverse effect of noise and visual disturbance on the SPA breeding marsh harrier population (and hence also the Ramsar site assemblage of rare breeding birds associated with marshland and reedbeds) cannot be excluded for the construction phase, although the proposed habitat improvement measures are predicted to provide sufficient compensation for this effect (**Table 3.3**). Therefore, in relation to the SPA breeding marsh harrier population, it is important to determine whether inter-pathway effects during construction would alter the conclusion of the **Shadow HRA Report** (Doc Ref. 5.10) with respect to this species.

ii. Construction and decommissioning

3.5.7 During the construction and decommissioning phases, the potential for certain pathways to lead to effects on the SPA / Ramsar site qualifying features is extremely limited and it is reasonable to discount these in terms of their likely contribution to inter-pathway effects, as they are essentially inconsequential. This is considered to apply to, alteration of

local hydrology and hydrogeology, changes in air quality and direct habitat loss and fragmentation. In relation to the latter pathway, it is also the case that the area of land which would be affected is largely encompassed by the area within which noise and visual disturbance during construction and decommissioning is predicted to have the potential to affect the SPA / Ramsar site qualifying features.

3.5.8 Within terrestrial habitats, noise and visual disturbance from construction and decommissioning activities has the potential to result in small effects on a number of the SPA populations of breeding and non-breeding waterbirds (and via the breeding waterbird populations, also the Ramsar site assemblage of rare breeding birds associated with marshland and reedbeds). These potential effects on the waterbird populations occur via impacts on the functionally linked habitats within the Minsmere South Levels and Sizewell Marshes. There is little indication that increases in recreational disturbance during construction and decommissioning could add, in more than a very small way, to the small potential effects predicted to occur on these qualifying features as a result of noise and visual disturbance (**Table 3.3**).

3.5.9 Similarly, it is considered highly unlikely that increases in recreational disturbance would add to the potential effects of noise and visual disturbance on the SPA breeding marsh harrier population and alter the conclusions of the **Shadow HRA Report** (Doc Ref. 5.10). This possibility is further minimised by the fact that the nesting areas, together with much of the key wetland foraging habitat, for this population occur within nature reserves where visitor access is controlled.

3.5.10 Within marine habitats, there is the potential for disturbance to affect the foraging conditions and foraging efficiency of the SPA breeding little tern population (both directly and indirectly, via underwater noise effects on little tern prey). There are also potential effects on marine water quality during construction (including commissioning) and decommissioning. However, both pathways are predicted to have limited potential to affect foraging little terns and could result in, at most, very small effects on foraging conditions and efficiency (**Table 3.3**). This is considered to remain the case when these effects are considered together.

3.5.11 Little tern colonies within the SPA / Ramsar site are located within parts of nature reserves where access is controlled or are subject to existing management measures to protect them from recreational disturbance (**Table 3.3**). Given this (together with the small potential for effects on foraging birds), it is considered highly unlikely that increased recreational disturbance would interact with the effect pathways relevant to marine habitats to result in adverse effects.

3.5.12 Based on the above (and acknowledging the potential effects of noise and visual disturbance on the SPA breeding marsh harrier population), there is considered to be no potential for inter-pathway effects to result in an adverse effect on site integrity during the construction or decommissioning phases.

iii. Operation

3.5.13 For effect pathways relevant to terrestrial habitats, the likelihood and extent of potential effects on the SPA / Ramsar site qualifying features during operation are similar to, or considerably less than, those during the construction and decommissioning phases (**Table 3.3**). As such, there is considered to be no potential for inter-pathway effects amongst these pathways to result in an adverse effect on site integrity during operation.

3.5.14 Within marine habitats, marine water quality effects and physical interaction with project infrastructure both have the potential to affect the foraging conditions and / or food availability of the SPA breeding little tern population during the operational phase. However, the effects from both pathways on this qualifying feature are predicted to be small and consequently no adverse effect on site integrity is predicted when these effects are considered together. As for the construction and decommissioning phases, there is considered to be no potential for inter-pathway effects between either of these two effect pathways and increased recreational disturbance (or other effect pathways relevant to terrestrial habitats) to result in adverse effects on the SPA breeding little tern population.

3.5.15 Based on the above, there is considered to be no potential for inter-pathway effects to result in an adverse effect on site integrity during the operational phase.

3.6 Outer Thames Estuary SPA

a) Overview of qualifying features and effect pathways

3.6.1 The qualifying features screened into the Shadow HRA for the Outer Thames Estuary SPA are:

- Breeding populations of:
  - Little tern.
  - Common tern.
- Non-breeding populations of:
  - Red-throated diver.

3.6.2 The effect pathways which were screened in for these qualifying features due to the potential influence of the Sizewell C main development site are:

- Water quality effects – marine environment, during construction (including commissioning) and operation.
- Disturbance effects on species populations, during construction and operation and decommissioning.
- Physical interaction between species and project infrastructure, during operation.

3.6.3 No potential effects were screened in for appropriate assessment in relation to the associated development sites.

3.6.4 **Table 3.4** summarises the pathways and predicted effects of the Sizewell C Project on the Outer Thames Estuary SPA, outlining the pathways relevant to each qualifying feature and identifying those with the potential to contribute to inter-pathway effects.

Table 3.4: Summary of pathways and predicted effects on the Outer Thames Estuary SPA

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Water quality effects – marine environment.	• Breeding populations of little tern and common tern. • Non-breeding population of red-throated diver.	Construction (including commissioning) and decommissioning.	Potential effects on marine water quality during construction and decommissioning would arise from SSC as a result of dredging and hydrazine from cold flush testing at commissioning. For the two tern species, the resulting instantaneous plumes would overlap with the predicted breeding season foraging ranges of only some of the colony populations contributing to the SPA populations. For colonies where overlap did occur, the overlap would represent a small or neglible (<0.5%) part of the foraging range.	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			For non-breeding red-throated diver, overlap is considered at the level of the entire SPA, with the SSC and hydrazine plumes encompassing a small area of the SPA only. Furthermore, the SSC and hydrazine plumes are present for relatively short durations only (i.e. a few days and a few hours, respectively). On this basis, no adverse effect on the integrity of the SPA is concluded.	

		Operation	For the two species of tern, the thermal and chemical plumes intersect with the breeding season foraging ranges for only some of the colony populations which contribute to the SPA population, so limiting the potential extent of any marine water quality effects. Where the predicted foraging ranges do overlap with the thermal (2^o and 3^o uplifts) and chemical plumes, the different chemical plumes were effectively encompassed by the thermal plume, so that when considered together the overlap with the foraging ranges (or SPA) was no greater than when the thermal plume was considered alone. For non-breeding red-throated diver, the thermal and chemical plumes extend over a small proportion of the SPA, and occur within a discrete block of the SPA in which densities of	

			red-throated diver are low (relative to other parts of the SPA). Furthermore, assessments of the inter-relationships between several of the different emissions (see **Table 2.1**) predicted no significant synergistic effects on water quality or on marine ecology and fisheries (**Volume 2, Chapter 21** of the **ES** (Doc. Ref. 6.3), **Volume 2, Chapter 22** of the **ES** (Doc. Ref. 6.3)). Therefore, changes in marine water quality as a result of the SZC operation are considered to have the potential to cause, at most, small effects on the SPA qualifying features and, on this basis, no adverse effect on the integrity of the SPA is concluded.	
Disturbance effects on	• Breeding populations of little tern	Construction and decommissioning.	Disturbance to the qualifying features within the marine environment may occur as a result of direct disturbance from	The potential for inter-pathway effects is discussed in this section.

species populations.	and common tern. • Non-breeding population of red-throated diver.		vessel traffic or indirectly from effects of underwater noise (due mainly to piling and dredging) on their fish prey species. Increases in vessel traffic are predicted to represent a relatively small increase relative to existing vessel movements, whilst foraging terns are considered relatively insensitive to such anthropogenic disturbance. The main period of increased vessel traffic would occur outside the winter period and so have limited overlap with the main period of the year when red-throated diver are present in the SPA. Effects of underwater noise on fish prey species of the qualifying features would extend across a limited part of the SPA only (e.g. predicted to be up to *c.*0.5% for behavioural responses). Thus, for the tern species, the potential effects	

			are limited to birds from only a proportion of the colony populations that contribute to the SPA population. Although some effects of underwater noise on fish prey could potentially extend across a large part of the predicted foraging range of some colonies (i.e. almost 50% for the Minsmere little tern colony), the indivdual activities causing these effects are relatively short term (a few days at most) and such effects on the fish are themselves temporary (with mortality and injury being restricted to much smaller areas in closer proximity to the noise generating activities). On this basis, no adverse effect on the integrity of the SPA is concluded.	
		Operation	Underwater noise levels predicted to be generated with SZC and SZB operational, are not expected to differ markedly	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			from current baseline levels resulting from the operation of Sizewell B alone. Consequently, no adverse effect on the integrity of the SPA is concluded.	
Interaction with project infrastructure.	• Breeding populations of little tern and common tern. • Non-breeding population of red-throated diver.	Operation	Impingement and entrainment of fish and invertebrates may occur within the cooling water intake during the SZC operational phase. These sources of mortality are predicted to have, at most, small effects on the fish and invertebrate prey populations of the SPA qualifying features. As such, no adverse effect on site integrity is concluded.	The potential for inter-pathway effects is discussed in this section.

b) Consideration of the potential for inter-pathway effects

3.6.5 Based upon the above consideration of the effect pathways which are relevant to the Outer Thames Estuary SPA, the potential for inter-pathway effects exists in relation to:

- Water quality effects – marine environment, during construction, operation and decommissioning.
- Disturbance effects on species populations, during construction, operation and decommissioning.
- Physical interaction between species and project infrastructure, during operation.

3.6.6 Of the above pathways, marine water quality effects during construction and decommissioning and disturbance effects on species populations during operation are essentially inconsequential. Therefore, inter-pathway effects could only occur via the pathways for the marine water quality effects and interaction with project infrastructure during the operational phase. These pathways both have the potential to affect the foraging conditions and / or food availability for the qualifying features of the Outer Thames SPA. However, the effects from both pathways on each of the qualifying features are predicted to be small and consequently no adverse effect on site integrity is predicted when the respective effects are considered together.

3.7 Sandlings SPA

a) Overview of qualifying features and effect pathways

3.7.1 The qualifying features screened into the Shadow HRA for the Sandlings SPA are:

- Breeding populations of:
  - Nightjar.
  - Woodlark.

3.7.2 The effect pathways which were screened in for these qualifying features due to the potential influence of the Sizewell C main development site are:

- Changes in air quality during construction, operation and decommissioning.
- Direct habitat loss and fragmentation during construction, operation and decommissioning.

- Disturbance effects on species populations during construction, operation and decommissioning.
- Disturbance due to increase in recreational pressure during construction, operation and decommissioning.

3.7.3 No potential effects were screened in for appropriate assessment in relation to the associated development sites.

3.7.4 **Table 3.5** summarises the pathways and predicted effects of the Sizewell C Project on the Sandlings SPA, outlining the pathways relevant to each qualifying feature and identifying those with the potential to contribute to inter-pathway effects.

b) Consideration of the potential for inter-pathway effects

3.7.5 Based upon the above consideration of the effect pathways which are relevant to the Sandlings SPA, the potential for inter-pathway effects exists in relation to:

- Changes in air quality, during construction, operation and decommissioning.
- Disturbance effects on species populations, during construction, operation and decommissioning.
- Disturbance due to increase in recreational pressure, during construction, operation and decommissioning.

3.7.6 Of the above pathways, disturbance effects on species populations during operation is essentially inconsequential, whilst during the construction (and decommissioning) phases there is essentially only potential for effects to arise on the small numbers of SPA nightjar and woodlark which breed in closest proximity to the main development site. In relation to the predicted changes in air quality, it is considered highly unlikely that this could result in any substantive changes to the supporting habitats for the qualifying features across the bulk of the SPA area during either the construction (and decommissioning) phases or the operational phase.

3.7.7 As such, there is considered to be no potential for inter-pathway effects to result in an adverse effect on site integrity.

Table 3.5: Summary of pathways and predicted effects on the Sandlings SPA

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Changes in air quality.	Breeding populations of nightjar and woodlark.	Construction and decommissioning.	The SPA is beyond the study area for the assessment of dust emissions and so beyond the area within which detailed consideration of construction or decommissioning dust is deemed to be required. During construction it is predicted that NO_x concentrations will be lower than the predicted current baseline but background levels of nutrient and acid deposition already exceed the Critical Load. Given the background rates of high chronic deposition, the PCs are unlikely to result in significant changes in species composition or habitat condition. Consequently, the predicted increases are highly unlikely to lead to significant changes in	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			species composition or to noticeable damage to the constituent plants. Thus, no effects are predicted on the supporting habitats of the qualifying features. On this basis, no adverse effect on the integrity of the SPA is concluded.	
		Operation	Increases in various emissions during commissioning would be short-term and highly unlikely to be at sufficient levels for sufficient duration to affect the supporting habitats for the qualifying features. Consequently, no adverse effect on the integrity of the SPA is concluded.	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Direct habitat loss and fragmentation.	Breeding populations of nightjar and woodlark.	Construction, operation and decommissioning.	Baseline surveys provide no evidence that either nightjar or woodlark breed within the main development site or make substantive use of habitats on this site for other purposes (e.g. foraging). Therefore, habitats on the main development site do not appear to be functionally linked and the SPA populations would be unaffected by habitat loss and fragmentation. On this basis, no adverse effect on the integrity of the SPA is concluded.	As this effect pathway does not have any influence on the qualifying features of the SPA / Ramsar site, and it could not interact with other pathways to result in a different effect, it is not a relevant consideration for the assessment of inter-pathway effects.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
Disturbance effects on species populations.	Breeding populations of nightjar and woodlark.	Construction and decommissioning.	The vast majority of the SPA is distant (>9km) from the main development site. Only the extremity of a relatively small, discrete, block of the SPA occurs within, or close to, the identified zones of potential visual and noise disturbance. This discrete block of the SPA is likely to support *c.*3% and *c.*9% of the SPA populations of nightjar and woodlark, respectively, but it is only within the very extremities of this block where there is potential for effects of noise and visual disturbance to occur. On this basis, no adverse effect on the integrity of the SPA is concluded.	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		Operation	Noise and visual disturbance during operation of SZC are unlikely to differ substantially from the existing situation, except in relation to artificial lighting. Artificial lighting would not extend into areas known to be used by the SPA qualifying features.	

Disturbance due to an increase in recreational pressure.	Breeding populations of nightjar and woodlark.	Construction and decommissioning.	The Sandlings SPA is already subject to considerable visitor use, with there being extensive path networks and access to woodland and open habitats across the site. An increase in recreational visits is predicted following displacement of visitors from areas affected by construction activity. Precautionary predictions suggest these increases will be relatively small (<6%) at all but one of the seven main access points. At the Thorpeness Village access point the visitor displacement survey suggests a 9 – 37% increase in recreational visits but this access point is relatively far from suitable habitat for the qualifying features and much of the increase in visits is considered to be focussed on the village and beachfront. Arrangements to manage recreational access currently exist at the North Warren and	The potential for inter-pathway effects is discussed in this section.

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
			Aldringham Walks RSPB reserve (within the SPA). With enhancement of these arrangements (as part of the Rights of Way and Access Strategy), it is considered that direct effects of increases in recreational disturbance on the SPA qualifying features would be, at most, small. Additionally, indirect effects via effects on supporting habitats are considered unlikely to occur. On this basis, no adverse effect on the integrity of the SPA is concluded.	

Effect Pathway	Qualifying Features Of Relevance	Phase	Summary Description Of Potential Effect (Based On Assessment Reported In The Shadow HRA Report)	Relevance Of Effect Pathway To Potential Inter-Pathway Effects
		Operation	The increase in pressure during the operational phase would be substantially lower than for the construction phase. However, it is considered that the proposed enhancement to existing arrangements to manage recreational access at North Warren and Aldringham Walks should continue during the SZC operational phase (as part of the Rights of Way and Access Strategy). Consequently, no adverse effect on the integrity of the SPA is concluded.	

3.8 Stour and Orwell Estuaries SPA and Ramsar site

a) Overview of qualifying features and effect pathways

3.8.1 The qualifying features screened into the Shadow HRA for the Stour and Orwell Estuaries SPA and Ramsar site are:

- For the SPA:
  - Breeding populations of:
    - Avocet.
  - Non-breeding populations of:
    - Black-tailed godwit.
    - Dark-bellied brent goose.
    - Dunlin.
    - Grey plover.
    - Knot.
    - Pintail.
    - Redshank.
  - Wintering waterbird assemblage
- For the Ramsar site:
  - A waterfowl assemblage of over 20,000 birds (under Ramsar criterion 5).
  - Non-breeding populations of the following species (under Ramsar criterion 6):
    - Black-tailed godwit.
    - Dark-bellied brent goose.
    - Dunlin.
    - Grey plover.
    - Redshank.

3.8.2 No potential effects were screened in for appropriate assessment in relation to the Sizewell C main development site.

3.8.3 The effect pathways which were screened in for these qualifying features due to the potential influence of the Sizewell C associated development sites are:

- Disturbance effects on species populations, during construction, operation and decommissioning for non-breeding populations of black-tailed godwit; dunlin; grey plover; pintail; redshank; ringed plover; shelduck; and turnstone; and the assemblage of non-breeding waterbirds (Freight Management Facility).

3.8.4 Given that only a single effect pathway was screened in for assessment, there is no potential for inter-pathway effects in relation to the Stour and Orwell Estuaries SPA and Ramsar site.

4 MARINE MAMMALS

4.1.1 There would be no further overall effects for marine mammals during construction of Sizewell C alone, than those assessed in the HRA.

4.1.2 For construction (and decommissioning), the maximum area of potential effect has been based on the maximum potential area for disturbance from underwater noise for piling of pin-piles (15km EDR), any other potential effects, including any potential disturbance from vessels, increased collision risk with vessels, any changes in prey availability and water quality are within the maximum area assessed. For example, if marine mammals are disturbed from the area as a result of underwater noise they cannot also be displaced as a result of changes in water quality within the same area, similarly if marine mammals are disturbed from an area there cannot be an increased risk of collision within the area. As a worst-case the assessment for proposed piling has been based on the precautionary assumption that piling could occur for up to 120 days, based on one pile per day. However, piling duration is likely to be considerably less of approximately 40 to 60 days, based on a more realistic two or three piles pee day, with 45 minutes piling duration to install a single pile (total active piling time for 120 piles would be 90 hours, approximately 4 days). Assuming a worst-case of 120 days includes any additional time for vessels on site and any changes to water quality or prey as a result of the marine piling works. The assessment for the potential effects during construction have been based on this maximum area and duration of potential effects for construction and decommissioning.

4.1.3 During operation, the maximum area of potential effect has been based on the maximum area for any changes in water quality for all potential sources. Therefore, there would be no additional effects. For example, if marine mammals are displaced from the area as a result of changes in water quality during operation, any changes in prey availability would occur over the same or smaller area.

4.1.4 Therefore, there would be no additional inter-pathway effects during the construction, operation and decommissioning of Sizewell C for marine mammals as all potential effects are within the maximum area and duration assessed.

Table 4.1: Summary of potential inter-pathway effects for marine mammals from Sizewell C Project alone for in-project effects during construction, operation and decommissioning

Potential Effect	Maximum Predicted Area	Potential for Inter-Pathway Effects for Sizewell C Project Alone
Construction and Decommissioning		
Changes in water quality – worst-case for all potential sources	7.26km^2	No – all potential effects are within maximum area assessed. Any changes in prey availability would occur over the same or smaller area.
Habitat loss – worst-case based on dredging works	0.022km^2	
Underwater noise – worst-case based on 15km EDR	456.33km^2 for foraging grey and harbour seal 341.07km^2 in SNS SAC	
Increased collision risk with vessels	6.5km^2	
Operation		
Water quality – worst-case for all potential sources	7.26km^2	No – all potential effects are within maximum area assessed. Any changes in prey availability would occur over the same or smaller area.
Habitat loss – maximum area based on all potential changes	0.02km^2	
Increased collision risk with vessels	6.5km^2	

APPENDIX 5A: SCREENING MATRICES

Habitats Regulations Assessment

Appendix B.1: Planning Inspectorate HRA Screening Matrices for SACs

Potential Effects

Potential effects upon the European sites* which are considered within the submitted Shadow HRA report (**Doc Ref 5.10**) for the Sizewell C Project are provided in the table below.

* As defined in Advice Note 10

Effects considered within the screening matrices

Designation	Effects described in submission information	Presented in screening matrices as
All European sites and qualifying interest features scoped in to the assessment; see **Table 4.5** (**Doc Ref 5.10**).	• Potential for erosion, accretion and sedimentation (short and long term). • The focus is on indirect effects (rather than direct effects which are covered under 'Direct habitat loss and fragmentation'). This distinction has been made to avoid the double counting of effects.	• Alteration of coastal processes / sediment transport.
	• This covers potential thermal and chemical (non-radiological and radiological) effects on water quality and indirect effects on habitats and species (including prey species), as well as water quality effects due to change in suspended sediment concentrations (SSC) (it does not include sedimentation, which is covered as part of 'Alteration of coastal processes / sediment transport'). • Includes water quality (chlorination) effects associated with the entrainment and impingement of organisms in cooling water intake.	• Water quality effects – marine environment.
	• Covers potential supporting parameters and chemical effects on freshwater (surface and groundwater) – namely SSC and nutrient concentrations in addition to chemical status – as well as any potential indirect effects on habitats and species. • Covers potential changes in supporting parameters (long term flow changes associated with the cut-off wall and realignment of ditches), as well as any consequential indirect effects on	• Water quality effects – terrestrial environment.

Designation	Effects described in submission information	Presented in screening matrices as
	habitats and species. • No chemical effects are predicted during the operational phase in this context (as all discharge would be via the cooling water system).	
	• Covers potential physical effects on freshwater (surface and groundwater resources), i.e. effects on flows and water levels, as well as any consequential indirect effects on habitats and species.	• Alteration of local hydrology and hydrogeology.
	• Change in air quality through radioactive and non-radioactive emissions to air and any consequential direct or indirect effects on habitats and species (e.g. lichens). • Potential non-radiological air quality effects have been 'scoped in' where the site is within 10 kilometres (km) of the main development site (and scoped out beyond this distance). The zone of influence (ZOI) for particulate (dust) emissions is smaller (<200 metres (m) from the emission source).	• Changes in air quality.
	• Relates to the direct and indirect effects of radiological emissions to soils, water and air (construction phase). • Relates to the direct and indirect effects of radiological emissions to air and the marine environment (operational phase). These emissions will be regulated by the Environment Agency under Schedule 23 of the Environmental Permitting (England and Wales) Regulations 2016. • Note that commissioning impacts are covered under 'Operations', since fuelling of the nuclear	• Radiological effects.

Designation	Effects described in submission information	Presented in screening matrices as
	power station marks the start of the operational phase.	
	• Limited to direct effects on habitats (not species). Indirect effects are covered in elsewhere, as noted above.	• Direct habitat loss and fragmentation.
	• Limited to potential disturbance effects on target species (not habitats), e.g. noise, light and human activity, and includes species displacement. • Potential recreational effects are covered separately below.	• Disturbance effects on species populations.
	• Potential effects due to increased recreational pressure where the site in question is within the ZOI for potential recreational effects (e.g. Zone of Physical Change: 2km buffer around main development site; Displacement Zone: 8km buffer around main development site; Buffer Zone: 8km buffer around settlements within the Displacement Zone). • Potential effects include trampling of supporting habitat, as well as disturbance effects to species and populations.	• Disturbance due to increased recreational pressure.
	• Potential direct or indirect effects on qualifying features arising due to interactions (e.g. collisions) with the infrastructure or machinery associated with the Sizewell C Project. Indirect effects could arise via effects on prey species (e.g. impingement and entrainment of small fish and their larvae and eggs).	• Physical interaction between species and the Sizewell C Project infrastructure.

STAGE 1: SCREENING MATRICES FOR SACs

The European sites included within the screening assessment are:

- Alde-Ore and Butley Estuaries SAC
- Benacre to Easton Bavents Lagoons SAC
- Dew's Ponds SAC
- Humber Estuary SAC
- Minsmere to Walberswick Heaths and Marshes SAC
- Orfordness to Shingle Street SAC
- Staverton Park and the Thicks, Wantisden SAC
- Southern North Sea SAC
- The Wash and North Norfolk Coast SAC
- Schelde- en Durmeëstuarium van de Nederlandse grens tot Gent SCI
- Unterweser SCI
- Weser bei Bremerhaven SCI
- Nebenarme der Weser mit Strohauser Plate und Juliusplate SCI
- Schleswig-Holsteinisches Elbästuar und angrenzende Flächen SCI

- Unterelbe SCI
- Mühlenberger Loch/Neßsand SCI
- Rapfenschutzgebiet Hamburger Stromelbe SCI
- Hamburger Unterelbe SCI
- Elbe zwischen Geesthacht und Hamburg SCI
- Rivière Laïta, Pointe du Talud, étangs du Loc'h et de Lannenec SAC
- Estuaire de la Rance SAC
- Rivière Elle SAC
- Rivière Elorn SAC
- Marais du Cotentin et du Bessin - Baie des Veys SAC
- Rivière Leguer, forêts de Beffou, Coat an Noz et Coat an Hay SAC
- Tregor Goëlo SAC
- Plymouth Sound and Estuaries SAC
- Havre de Saint-Germain-sur-Ay et Landes de Lessay SAC
- Marais Vernier, Risle Maritime SAC
- Treene Winderatter See bis Friedrichstadt und Bollingstedter Au SAC
- Untereider SAC

- Lesum SAC
- Bremische Ochtum SAC
- Weser zwischen Ochtummündung und Rekum SAC
- Unterems und Außenems SCI
- Ems SCI

Evidence for, or against, likely significant effects on the European site(s) and its qualifying feature(s) is detailed within the footnotes to the screening matrices below.

Matrix Key:

✓ = Likely significant effect **cannot** be excluded
✗ = Likely significant effect **can** be excluded

C = construction
O = operation
D = decommissioning

Where effects are not relevant to a particular feature they are greyed out and an explanation is provided as to why the effect is not relevant.

HRA Screening Matrix B1.1: Alde-Ore and Butley Estuaries SAC

Name of European site and designation: Alde-Ore and Butley Estuaries SAC

EU Code: UK0030076

Distance to NSIP: 6.5 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	✓ **a**	✓ **b**	✓ **a**	x **c**	✓ **d**	x **c**	✓ **e**	x **f**	**g**	✓ **h**	✓ **h**	**i**	✓ **j**	✓ **j**	✓ **j**	x **k**	x **l**	x **k**	**m**	**m**	**m**	**n**	**n**	**n**	x **o**	x **o**	x **o**	**p**	**p**	**p**	x **q**	✓ **r**	x **q**
1140 Mudflats and sandflats not covered by seawater at low tide	✓ **a**	✓ **b**	✓ **a**	x **c**	✓ **d**	x **c**	✓ **e**	x **f**	**g**	✓ **h**	✓ **h**	**i**	✓ **j**	✓ **j**	✓ **j**	x **k**	x **l**	x **k**	**m**	**m**	**m**	**n**	**n**	**n**	x **o**	x **o**	x **o**	**p**	**p**	**p**	x **q**	✓ **r**	x **q**
1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)	✓ **a**	✓ **b**	✓ **a**	x **c**	✓ **d**	x **c**	✓ **e**	x **f**	**g**	✓ **h**	✓ **h**	**i**	✓ **j**	✓ **j**	✓ **j**	x **k**	x **l**	x **k**	**m**	**m**	**m**	**n**	**n**	**n**	x **o**	x **o**	x **o**	**p**	**p**	**p**	x **q**	✓ **r**	x **q**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** There is potential for interruption to/alteration of coastal hydrodynamics and sediment transport processes as a result of the influence of marine infrastructure (outfall, intake and coastal defences). Likely Significant Effect cannot be excluded (**Table 5.2, item 1a**) (**Doc Ref 5.10**).

b. **Alteration of coastal processes/sediment transport:** The presence of new structures in the marine environment in the operational phase has the potential for a localised effect on coastal processes and sediment transport. Likely Significant Effect cannot be excluded (**Table 5.2, item 1b**) (**Doc Ref 5.10**).

c. **Water quality effects – marine environment:** Any uncontrolled discharges to the marine environment during the construction phase in the vicinity of Sizewell (including sediment plumes from dredging) could affect water quality, leading to indirect effects on SAC qualifying features. However, due to a weak pathway, low magnitude and dilution, no Likely Significant Effect is predicted (**Table 5.2, item 2b**) (**Doc Ref 5.10**).

d. **Water quality effects – marine environment:** The cooling water discharge would raise ambient water temperature and introduce potential pollutants into the water column. Likely Significant Effect cannot be excluded (**Table 5.2, item 2c**) (**Doc Ref 5.10**).

e. **Water quality effects – terrestrial environment:** There is potential for associated development to affects water quality which may cause secondary effects on the qualifying habitat features of the SAC. Likely Significant Effect cannot be excluded (**Table 5.2, item 3a**) (**Doc Ref 5.10**).

f. **Water quality effects – terrestrial environment:** The operational phase of the associated development is not expected to cause any effect on water quality. No Likely Significant Effect is predicted (**Table 5.2, item 3d**) (**Doc Ref 5.10**).

g. **Water quality effects – terrestrial environment:** The Two Village Bypass will not be decommissioned and, instead, it will form part of the highway network. Therefore, there is no impact pathway.

h. **Alteration of local hydrology and hydrogeology:** The construction (**Table 5.2, item 4a**) (**Doc Ref 5.10**) and operation (**Table 5.2, item 4d**) (**Doc Ref 5.10**) of the associated development has the potential to alter the local hydrology and hydrogeology which may cause secondary effects on the qualifying habitat features of the SAC. Likely Significant Effect cannot be excluded (**Table 5.2, item 4a and 4d**) (**Doc Ref 5.10**).

i. **Alteration of local hydrology and hydrogeology:** The Two Village Bypass will not be decommissioned and, instead, it will form part of the highway network. Therefore, there is no impact pathway.

j. **Changes in air quality:** During the construction phase, the main potential emissions would be from road traffic and dust from construction activities which could affect habitats within European sites. Likely Significant Effect cannot be excluded (**Table 5.2, item 5a**) (**Doc Ref 5.10**).

   During the operational phase, the main potential emissions may arise as a result of increased traffic flows and use of diesel generators for testing or as required. Likely Significant Effect cannot be excluded (**Table 5.2, item 5b**) (**Doc Ref 5.10**).

k. **Radiological effects:** Background levels around the Sizewell C Main Development Site are negligible and consistent with the results of long-term operator monitoring which is subject to Environment Agency surveillance. Therefore, any disturbance associated with construction or decommissioning is not predicted to give rise to a radiological effect on non-human biota. No Likely Significant Effect is predicted (**Table 5.2, item 6a**) (**Doc Ref 5.10**).

l. **Radiological effects:** Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.2, item 6b**) (**Doc Ref 5.10**).

m. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident as there will be no direct or indirect habitat loss of the qualifying features of the Alde-Ore and Butley Estuaries SAC as a result of the Sizewell C Project.

n. **Disturbance effects on species populations:** No discernible impact pathway is evident as there will be no direct or indirect disturbance effects that could affect the qualifying features of the Alde-Ore and Butley Estuaries SAC as a result of Sizewell C.

o. **Disturbance due to increase in recreational pressure:** It is considered that the majority of additional visits undertaken by people displaced from Sizewell, or potentially the RSPB Minsmere Reserve, to Aldeburgh would involve activities on the immediate beach frontage around the town, rather than the estuarine habitats and landscape of the Alde-Ore Estuary. No Likely Significant Effect is predicted for the construction phase (**Table 5.2, item 9d**) (**Doc Ref 5.10**) or operational phase (**Table 5.2, item 9h**) (**Doc Ref 5.10**).

p. **Physical interaction between species and project infrastructure:** As the designated features are habitats and not species, no discernible impact pathway is evident and, therefore, there is no Likely Significant Effect with the Sizewell C Project.

q. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified no plan or project that could act in-combination with the construction and decommissioning of the Sizewell C Project to potentially

result in Likely Significant In-combination Effects . No Likely Significant In-combination Effects is predicted (**Section 5.6**) (**Doc Ref 5.10**).

r. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified at least one other plan or project that could act in-combination with the operation of the Sizewell C Project to potentially result in Likely Significant In-combination Effects . Likely Significant In-combination Effects cannot be excluded (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.2: Benacre to Easton Bavents Lagoons SAC

Name of European site and designation: Benacre to Easton Bavents Lagoons SAC

EU Code: UK0013104

Distance to NSIP: 14.6 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1150 Coastal lagoons * Priority feature	✓ **a**	✓ **a**	✓ **a**	**b**	✓ **c**	**b**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	x **h**	**g**	**i**	**i**	**i**	**j**	**j**	**j**	**k**	**k**	**k**	**l**	**l**	**l**	✓ **m**	✓ **m**	✓ **m**

Evidence supporting conclusions:

a. Alteration of coastal processes/sediment transport: There is potential for interruption to/alteration of coastal hydrodynamics and sediment transport processes as a result of the influence of marine infrastructure (outfall, intake and coastal defences). Likely Significant Effect cannot be excluded (**Table 5.2, item 1a**) (**Doc Ref 5.10**).

b. **Water quality effects – marine environment:** No discernible impact pathway is evident from construction or decommissioning activities due to distance of the qualifying habitat of the SAC from the proposed development.

c. **Water quality effects – marine environment:** The cooling water discharge would raise ambient water temperature and introduce potential pollutants into the water column. Likely Significant Effect cannot be excluded (**Table 5.2, item 2c**) (**Doc Ref 5.10**).

d. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

e. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

f. **Changes in air quality:** No discernible impact pathway is evident.

g. **Radiological effects:** Potential radiological effects resulting from construction and decommissioning activities relate to the disturbance of any existing (baseline) radiological contamination associated with soils, sediment and water. Due to the distance of the designated site from construction sites, no discernible impact pathway is evident.

h. **Radiological effects:** Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.2, item 6b**) (**Doc Ref 5.10**)

i. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

j. **Disturbance effects on species populations:** No discernible impact pathway is evident.

k. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

l. **Physical interaction between species and project infrastructure:** As the designated features are habitats and not species, no discernible impact pathway is evident.

m. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified at least one other plan or project that could act in-combination with the operation of the Sizewell C Project to potentially result in Likely Significant In-combination Effects . Likely Significant In-combination Effects cannot be excluded (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.3: Dew's Ponds SAC

Name of European site and designation: Dew's Ponds SAC																																
EU Code: UK0030133																																
Distance to NSIP: 11.2 km																																
European site features	**Likely effects of NSIP**																															
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1166 Great crested newt *Triturus cristatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	c	**c**	✓ **d**	✓ **d**	✓ **d**	**e**	**e**	**e**	**f**	x **g**	**f**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**k**	**k**	**k**	x **l**	x **l**	x **l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

d. **Alteration of local hydrology and hydrogeology:** The construction (**Table 5.2, item 4b**) (**Doc Ref 5.10**) and operation (**Table 5.2, item 4e**) (**Doc Ref 5.10**) of the associated development has the potential to alter the local hydrology and hydrogeology which may cause secondary effects on the qualifying habitat features of the SAC. Likely Significant Effect cannot be excluded (**Table 5.2, item 4b and 4e**) (**Doc Ref 5.10**).

e. **Changes in air quality:** No discernible impact pathway is evident due to distance of the SAC from the proposed development (>10km from the 'installation boundary').

f. **Radiological effects:** Potential radiological effects resulting from construction or decommissioning activities relate to the disturbance of any existing (baseline) radiological contamination associated with soils, sediment and water. Due to the distance of the designated site from construction sites, no discernible impact pathway is evident.

g. **Radiological effects:** Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.2, item 6b**) (**Doc Ref 5.10**).

h. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

i. **Disturbance effects on species populations:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

j. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

k. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident due to the distance of the SAC from the proposed development.

l. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified no plan or project that could act in-combination with the construction and decommissioning of the Sizewell C Project to potentially result in Likely Significant In-combination Effects . No Likely Significant In-combination Effects is predicted (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.4: Humber Estuary SAC

Name of European site and designation: Humber Estuary SAC

EU Code: UK0030170

Distance to NSIP: 162.9 km

European site features	**Likely effects of NSIP**																															
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**
1110 Sandbanks which are slightly covered by sea water all the time	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**

1150 Coastal lagoons *Priority feature	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**
1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**
1330 Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)*	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**
2110 Embryonic shifting dunes	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**
2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**
2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes")	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**

*Priority feature																																			
2160 Dunes with *Hippopha rhamnoides*	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**t**	**t**	**t**
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	✓ **s**	**p**	**t**	**t**	**t**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	✓ **s**	**p**	**t**	**t**	**t**
1364 Grey seal *Halichoerus grypus*	**a**	**a**	**a**	✓ **c**	✓ **d**	✓ **c**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	x **i**	x **j**	x **i**	**k**	**k**	**k**	✓ **m**	✓ **n**	✓ **m**	**o**	**o**	**o**	✓ **q**	✓ **r**	✓ **q**	✓ **u**	✓ **u**	✓ **u**

Evidence supporting conclusions:

a. Alteration of coastal processes/sediment transport: No discernible impact pathway is evident due to the distance between the SAC and the Sizewell C Project.

b. Water quality effects – marine environment: No discernible impact pathway is evident due to distance of the SAC from the proposed development.

c. Water quality effects – marine environment: Any uncontrolled discharges to the marine environment (including sediment plumes from dredging) could affect prey species for foraging grey seal. Likely Significant Effect cannot be excluded (**Table 5.4, item 2b**) (**Doc Ref 5.10**)

d. Water quality effects – marine environment: The cooling water discharge would raise ambient water temperature and introduce potential pollutants into the water column. Likely Significant Effect cannot be excluded (**Table 5.4, item 2c**) (**Doc Ref 5.10**).

e. Water quality effects – terrestrial environment: No discernible impact pathway is evident on the qualifying features of the Humber Estuary SAC.

f. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident on the qualifying features of the Humber Estuary SAC.

g. **Changes in air quality:** No discernible impact pathway is evident due to the distance between the SAC and the Sizewell C Project.

h. **Radiological effects:** No discernible impact pathway is evident due to the distance between the qualifying habitats of the SAC and the Sizewell C Project.

i. **Radiological effects:** Background levels around the Sizewell C Main Development Site are negligible and consistent with the results of long-term operator monitoring which is subject to Environment Agency surveillance. Therefore, any disturbance associated with construction or decommissioning is not predicted to give rise to a radiological effect on non-human biota. No Likely Significant Effect is predicted (**Table 5.4, item 6a**) (**Doc Ref 5.10**).

j. **Radiological effects:** Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.4, item 6b**) (**Doc Ref 5.10**).

k. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

l. **Disturbance effects on species populations:** No discernible impact pathway is evident on the qualifying habitat or fish features of the Humber Estuary SAC.

m. **Disturbance effects on species populations:** Construction and decommissioning activities may cause disturbance to marine mammals and prey species. Likely Significant Effect cannot be excluded (**Table 5.4, item 8a**) (**Doc Ref 5.10**).

n. **Disturbance effects on species populations:** Operation of the cooling water system could lead to effects on prey for marine mammals. Likely Significant Effect cannot be excluded (**Table 5.4, item 8b**) (**Doc Ref 5.10**).

o. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

p. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

q. **Physical interaction between species and project infrastructure:** There is the potential for direct physical interaction between foraging grey seal and vessels and indirect effects on prey items. Likely Significant Effect cannot be excluded (**Table 5.4, item 10a**) (**Doc Ref 5.10**).

r. **Physical interaction between species and project infrastructure:** Impingement and entrainment could affect populations of prey species. Likely Significant Effect cannot be excluded (**Table 5.4, item 10b**) (**Doc Ref 5.10**).

s. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

t. **In-combination effects:** No discernible impact pathway is evident.

u. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified at least one other plan or project that could act in-combination with the operation of the Sizewell C Project to potentially result in Likely Significant In-combination Effects . Likely Significant In-combination Effects cannot be excluded (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.5: Minsmere to Walberswick Heaths and Marshes SAC

Name of European site and designation: Minsmere to Walberswick Heaths and Marshes SAC

EU Code: UK0012809

Distance to NSIP: Adjacent

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastructu re			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1210 Annual vegetation of drift lines	✓ **a**	✓ **a**	✓ **a**	✓ **c**	✓ **d**	✓ **c**	**f**	**f**	**f**	**g**	**g**	**g**	✓ **i**	x **h**	✓ **i**	x **j**	x **k**	x **j**	**l**	**l**	**l**	**m**	**m**	**m**	✓ **n**	✓ **n**	✓ **n**	**o**	**o**	**o**	✓ **p**	✓ **p**	✓ **p**
4030 European dry heaths	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	✓ **i**	✓ **i**	✓ **i**	x **j**	x **k**	x **j**	**l**	**l**	**l**	**m**	**m**	**m**	✓ **n**	✓ **n**	✓ **n**	**o**	**o**	**o**	✓ **p**	✓ **p**	✓ **p**
1220 Perennial vegetation of stony banks	✓ **a**	✓ **a**	✓ **a**	✓ **c**	✓ **d**	✓ **c**	**f**	**f**	**f**	**g**	**g**	**g**	✓ **i**	✓ **i**	✓ **i**	x **j**	x **k**	x **j**	**l**	**l**	**l**	**m**	**m**	**m**	✓ **n**	✓ **n**	✓ **n**	**o**	**o**	**o**	✓ **p**	✓ **p**	✓ **p**

Evidence supporting conclusions:

a. **Alteration of coastal processes / sediment transport**: There is potential for interruption to/alteration of coastal hydrodynamics and sediment transport processes as a result of the influence of marine infrastructure (outfall, intake and coastal defences) during the construction phase (**Table 5.2, item 1a**) (**Doc Ref 5.10**). The presence of new structures in the marine environment in the operational phase has the potential for a localised effect on coastal processes and sediment transport (**Table 5.2, item 1b**) (**Doc Ref 5.10**). Likely Significant Effect cannot be excluded (**Table 5.2, item 1a and item 1b**) (**Doc Ref 5.10**).

b. **Alteration of coastal processes / sediment transport**: No discernible impact pathway is evident for this qualifying interest feature of the SAC.

c. **Water quality effects – marine environment:** Any uncontrolled discharges to the marine environment in the vicinity of Sizewell (including sediment plumes from dredging) could affect water quality, leading to indirect effects on designated habitats along the Minsmere-Walberswick frontage. Likely Significant Effect cannot be excluded (**Table 5.2, item 2a**) (**Doc Ref 5.10**).

d. **Water quality effects – marine environment:** The cooling water discharge would raise ambient water temperature and introduce potential pollutants into the water column. Likely Significant Effect cannot be excluded (**Table 5.2, item 2c**) (**Doc Ref 5.10**).

e. **Water quality effects – marine environment:** No discernible impact pathway is evident.

f. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

g. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

h. **Changes in air quality:** This qualifying feature is not considered to be sensitive to changes in air quality. No Likely Significant Effect is predicted (**Table 5.2, item 5c**) (**Doc Ref 5.10**).

i. **Changes in air quality:** During the construction phase, the main potential emissions would be from road traffic and dust from construction activities which could affect habitats within European sites. Likely Significant Effect cannot be excluded (**Table 5.2, item 5a**) (**Doc Ref 5.10**).

   During the operational phase, the main potential emissions may arise as a result of increased traffic flows and use of diesel generators for testing or as required. Likely Significant Effect cannot be excluded (**Table 5.2, item 5b**) (**Doc Ref 5.10**)

j. **Radiological effects:** Background levels around the Sizewell C Main Development Site are negligible and consistent with the results of long-term operator monitoring which is subject to Environment Agency surveillance. Therefore, any

disturbance associated with construction or decommissioning is not predicted to give rise to a radiological effect on non-human biota. No Likely Significant Effect is predicted (**Table 5.2, item 6a**) (**Doc Ref 5.10**).

k. **Radiological effects:** Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.2, item 6b**) (**Doc Ref 5.10**).

l. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

m. **Disturbance effects on species populations:** No discernible impact pathway is evident.

n. **Disturbance due to increase in recreational pressure:** Additional visitors to these locations resulting from the Sizewell C Project would be expected to follow similar behaviours to existing visitors and use the defined path network/beach. Further incursion by people into areas supporting sensitive vegetated shingle habitat would not be expected and additional loss of vegetation as a result of trampling is therefore considered unlikely to arise. However, Likely Significant Effect cannot be excluded for the construction phase (**Table 5.2, item 9a**) (**Doc Ref 5.10**) or the operational phase (**Table 5.2, item 9e**) (**Doc Ref 5.10**).

o. **Physical interaction between species and project infrastructure:** As the designated features are habitats and not species, no discernible impact pathway is evident.

p. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified at least one other plan or project that could act in-combination with the operation of the Sizewell C Project to potentially result in Likely Significant In-combination Effects . Likely Significant In-combination Effects cannot be excluded (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.6: Orfordness to Shingle Street SAC

Name of European site and designation: Orfordness to Shingle Street SAC

EU Code: UK0014780

Distance to NSIP: 8.9 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1150 Coastal lagoons **Priority feature*	✓ **a**	✓ **b**	✓ **a**	✓ **c**	✓ **d**	✓ **c**	**f**	**f**	**f**	**g**	**g**	**g**	✓ **h**	✓ **h**	✓ **h**	x **k**	x **l**	x **k**	**m**	**m**	**m**	**n**	**n**	**n**	**o**	**o**	**o**	**q**	**q**	**q**	✓ **r**	✓ **r**	✓ **r**
1210 Annual vegetation of drift lines	✓ **a**	✓ **b**	✓ **a**	✓ **c**	✓ **d**	✓ **c**	**f**	**f**	**f**	**g**	**g**	**g**	✓ **i**	x **j**	✓ **i**	x **k**	x **l**	x **k**	**m**	**m**	**m**	**n**	**n**	**n**	✓ **p**	✓ **p**	✓ **p**	**q**	**q**	**q**	✓ **r**	✓ **r**	✓ **r**
1220 Perennial vegetation of stony banks	✓ **a**	✓ **b**	✓ **a**	✓ **c**	**e**	✓ **c**	**f**	**f**	**f**	**g**	**g**	**g**	✓ **h**	✓ **h**	✓ **h**	x **k**	x **l**	x **k**	**m**	**m**	**m**	**n**	**n**	**n**	✓ **p**	✓ **p**	✓ **p**	**q**	**q**	**q**	✓ **r**	✓ **r**	✓ **r**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** There is potential for interruption to/alteration of coastal hydrodynamics and sediment transport processes as a result of the influence of marine infrastructure (outfall, intake and coastal defences). Likely Significant Effect cannot be excluded (**Table 5.2, item 1a**) (**Doc Ref 5.10**).

b. **Alteration of coastal processes / sediment transport:** The presence of new structures in the marine environment in the operational phase has the potential for a localised effect on coastal processes and sediment transport. LSE cannot be excluded (**Table 5.2, item 1b**) (**Doc Ref 5.10**).

c. **Water quality effects – marine environment:** Any uncontrolled discharges to the marine environment in the vicinity of Sizewell (including sediment plumes from dredging) could affect water quality, leading to indirect effects on designated habitats along the Minsmere-Walberswick frontage. Likely Significant Effect cannot be excluded (**Table 5.2, item 2a**) (**Doc Ref 5.10**).

d. **Water quality effects – marine environment:** The cooling water discharge would raise ambient water temperature and introduce potential pollutants into the water column. Likely Significant Effect cannot be excluded (**Table 5.2, item 2c**) (**Doc Ref 5.10**).

e. **Water quality effects – marine environment:** No discernible impact pathway is evident during the operational phase.

f. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident on the qualifying features of the Orfordness to Shingle Street SAC.

g. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident on the qualifying features of the Orfordness to Shingle Street SAC.

h. **Changes in air quality:** During the construction phase, the main potential emissions would be from road traffic and dust from construction activities which could affect habitats within European sites. Likely Significant Effect cannot be excluded (**Table 5.2, item 5a**) (**Doc Ref 5.10**).

   During the operational phase, the main potential emissions may arise as a result of increased traffic flows and use of diesel generators for testing or as required. Likely Significant Effect cannot be excluded (**Table 5.2, item 5b**) (**Doc Ref 5.10**)

i. **Changes in air quality:** Likely Significant Effect cannot be excluded from potential impacts due to the generation of dust from construction and decommissioning activities (**Table 5.2, item 5a**) (**Doc Ref 5.10**).

j. **Changes in air quality:** This qualifying feature is not considered to be sensitive to changes in air quality. No Likely Significant Effect is therefore predicted (**Table 5.2, item 5c**) (**Doc Ref 5.10**).

k. **Radiological effects:** Background levels around the Sizewell C Main Development Site are negligible and consistent with the results of long-term operator monitoring which is subject to Environment Agency surveillance. Therefore, any disturbance associated with construction or decommissioning is not predicted to give rise to a radiological effect on non-human biota. No Likely Significant Effect is predicted (**Table 5.2, item 6a**) (**Doc Ref 5.10**).

l. **Radiological effects:** Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.2, item 6b**) (**Doc Ref 5.10**).

m. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

n. **Disturbance effects on species populations:** No discernible impact pathway is evident.

o. **Disturbance due to increase in recreational pressure:** There is no discernible impact pathway evident from disturbance due to an increase in recreational pressure on the coastal lagoons of the SAC.

p. **Disturbance due to increase in recreational pressure:** Very few people indicated that they would potentially undertake recreational activity on Orfordness. Access to Orfordness is effectively controlled and restricted by the National Trust to specific areas. The potential for the Sizewell C Project to generate additional disturbance to habitat features of the Orfordness to Shingle Street SAC is considered to be negligible. However, Likely Significant Effect cannot be excluded for the constructio phase (**Table 5.2, item 9b**) (**Doc Ref 5.10**) or operational phase (**Table 5.2, item 9f**) (**Doc Ref 5.10**).

q. **Physical interaction between species and project infrastructure:** As the designated features are habitats and not species, no discernible impact pathway is evident.

r. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified at least one other plan or project that could act in-combination with the operation of the Sizewell C Project to potentially result in Likely Significant In-combination Effects . Likely Significant In-combination Effects cannot be excluded (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.7: Staverton Park and the Thicks, Wantisden SAC

Name of European site and designation: Staverton Park and the Thicks, Wantisden SAC																																		
EU Code: UK0012741																																			
Distance to NSIP: 17 km																																			
European site features	**Likely effects of NSIP**																																		
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastructu re			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
9190 Old acidophilous oak woods with *Quercus robur* on sandy plains	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	x **f**	x **g**	x **f**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**k**	**k**	**k**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident due to distance of the SAC from the proposed development and the terrestrial qualifying interest feature.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident due to distance of the qualifying habitat of the SAC from the proposed development.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident due to distance of the qualifying habitat of the SAC from the proposed development.

e. **Changes in air quality:** No discernible impact pathway is evident due to distance of the qualifying habitat of the SAC from the proposed development.

f. **Radiological effects**: Background levels around the Sizewell C Main Development Site are negligible and consistent with the results of long-term operator monitoring which is subject to Environment Agency surveillance. Therefore, any disturbance associated with construction or decommissioning is not predicted to give rise to a radiological effect on non-human biota. No Likely Significant Effect is predicted (**Table 5.2, item 6a**) (**Doc Ref 5.10**).

g. **Radiological effects**: Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.2, item 6b**) (**Doc Ref 5.10**).

h. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

i. **Disturbance effects on species populations:** No discernible impact pathway is evident due to distance of the qualifying habitat of the SAC from the proposed development.

j. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident due to distance of the qualifying habitat of the SAC from the proposed development.

k. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident due to the distance of the qualifying habitat of the SAC from the proposed development.

l. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified no plan or project that could act in-combination with the construction and decommissioning of the Sizewell C Project to potentially result in Likely Significant In-combination Effects . No Likely Significant In-combination Effects is predicted (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.8: Southern North Sea SAC

Name of European site and designation: Southern North Sea SAC																																		
EU Code: UK0030395																																		
Distance to NSIP: Main Development Site – within and adjacent																																		
European site features	**Likely effects of NSIP**																																	
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruct-ure			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1351 Harbour porpoise *Phocoena phocoena*	**a**	**a**	**a**	✓ **b**	✓ **c**	✓ **b**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	x **g**	x **h**	x **g**	✓ **i**	✓ **j**	✓ **i**	✓ **k**	✓ **l**	✓ **k**	**m**	**m**	**m**	✓ **n**	✓ **o**	✓ **n**	✓ **p**	✓ **p**	✓ **p**

Evidence supporting conclusions:

a. **Alteration of coastal processes / sediment transport:** No discernible impact pathway is evident due to the distance between the SAC and the Sizewell C Project.

b. **Water quality effects – marine environment:** Any uncontrolled discharges to the marine environment in the vicinity of Sizewell (including sediment plumes from dredging) could affect water quality and therefore habitats and/or effects on

prey species in the Southern North Sea SAC. Likely Significant Effect cannot be excluded (**Table 5.4, item 2a**) (**Doc Ref 5.10**).

c. **Water quality effects – marine environment:** The cooling water discharge would raise ambient water temperature and introduce potential pollutants into the water column. Likely Significant Effect cannot be excluded (**Table 5.4, item 2c**) (**Doc Ref 5.10**).

d. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident on the qualifying feature of the Southern North Sea SAC.

e. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident on the qualifying feature of the Southern North Sea SAC.

f. **Changes in air quality:** No discernible impact pathway is evident on the qualifying feature of the Southern North Sea SAC.

g. **Radiological effects:** Background levels around the Sizewell C Main Development Site are negligible and consistent with the results of long-term operator monitoring which is subject to Environment Agency surveillance. Therefore, any disturbance associated with construction or decommissioning is not predicted to give rise to a radiological effect on non-human biota. No Likely Significant Effect is predicted (**Table 5.4, item 6a**) (**Doc Ref 5.10**).

h. **Radiological effects:** Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.4, item 6b**) (**Doc Ref 5.10**).

i. **Direct habitat loss and fragmentation:** Construction activities can cause habitat loss and fragmentation. Likely Significant Effect cannot be excluded (**Table 5.4, item 7a**) (**Doc Ref 5.10**).

j. **Direct habitat loss and fragmentation:** During operation, the discharge of the thermal and chemical plumes and presence of infrastructure will cause the direct and indirect loss and fragmentation of habitats. Likely Significant Effect cannot be excluded (**Table 5.4, item 7b**) (**Doc Ref 5.10**).

k. **Disturbance effects on species populations:** Construction and decommissioning activities may cause disturbance to marine mammals and prey species. Likely Significant Effect cannot be excluded (**Table 5.4, item 8a**) (**Doc Ref 5.10**).

l. **Disturbance effects on species populations:** Operation of the cooling water system could lead to effects on prey for marine mammals. Likely Significant Effect cannot be excluded (**Table 5.4, item 8b**) (**Doc Ref 5.10**).

m. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

n. **Physical interaction between species and project infrastructure:** There is the potential for direct physical interaction between harbour porpoises and vessels and indirect effects on prey items. Likely Significant Effect cannot be excluded (**Table 5.4, item 10a**) (**Doc Ref 5.10**).

o. **Physical interaction between species and project infrastructure:** Impingement and entrainment could affect populations of prey species. Likely Significant Effect cannot be excluded (**Table 5.4, item 10b**) (**Doc Ref 5.10**).

p. **In-combination effects:** The Likely Significant In-combination Effects screening exercise has identified at least one other plan or project that could act in-combination with the operation of the Sizewell C Project to potentially result in Likely Significant In-combination Effects. Likely Significant In-combination Effects cannot be excluded (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.9: The Wash and North Norfolk Coast SAC

Name of European site and designation: The Wash and North Norfolk Coast SAC

EU Code: UK0017075

Distance to NSIP: 88.2 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruct-ure			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1110 Sandbanks which are slightly covered by sea water all the time	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**
1160 Large shallow inlets	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**
1170 Reefs	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**
1310 Salicornia	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**

and other annuals colonizing mud and sand																															
1330 Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)*	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**
1420 Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*)	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**
1150 Coastal lagoons *Priority feature	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**
1365 Harbour seal *Phoca vitulina*	**a**	**a**	**a**	✓ **c**	✓ **d**	✓ **c**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	x **i**	x **j**	x **i**	**k**	**k**	**k**	✓ **m**	✓ **n**	✓ **m**	**o**	**o**	**o**	✓ **q**	✓ **r**	✓ **q**	✓ **t**	✓ **t**	✓ **t**
1355 Otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**k**	**k**	**k**	**l**	**l**	**l**	**o**	**o**	**o**	**p**	**p**	**p**	**s**	**s**	**s**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident due to the distance between the SAC and the Sizewell C Project.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

c. **Water quality effects – marine environment:** Any uncontrolled discharges to the marine environment in the vicinity of Sizewell (including sediment plumes from dredging) could affect water quality, leading to indirect effects foraging harbour seal prey species in the vicinity of the Sizewell C Project. Likely Significant Effect cannot be excluded (**Table 5.4, item 2a**) (**Doc Ref 5.10**).

d. **Water quality effects – marine environment:** The cooling water discharge would raise ambient water temperature and introduce potential pollutants into the water column. Likely Significant Effect cannot be excluded (**Table 5.4, item 2c**) (**Doc Ref 5.10**)

e. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident on the qualifying features of The Wash and North Norfolk Coast SAC.

f. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident on the qualifying feature of The Wash and North Norfolk Coast SAC.

g. **Changes in air quality:** No discernible impact pathway is evident due to the distance between the SAC and the Sizewell C Project.

h. **Radiological effects**: No discernible impact pathway is evident due to the distance between the qualifying habitats of the SAC and the Sizewell C Project.

i. **Radiological effects**: Background levels around the Sizewell C Main Development Site are negligible and consistent with the results of long-term operator monitoring which is subject to Environment Agency surveillance. Therefore, any disturbance associated with construction or decommissioning is not predicted to give rise to a radiological effect on non-human biota. No Likely Significant Effect is predicted (**Table 5.4, item 6a**) (**Doc Ref 5.10**).

j. **Radiological effects:** Dose rates are predicted to be lower than the screening value of 10 µGy per hour that is considered protective of populations of non-human biota across all ecosystems. No Likely Significant Effect is predicted (**Table 5.4, item 6b**) (**Doc Ref 5.10**).

k. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident due to distance of the SAC from the proposed development.

l. **Disturbance effects on species populations:** No discernible impact pathway is evident on the qualifying habitat features or otter of The Wash and North Norfolk Coast SAC.

m. **Disturbance effects on species populations:** Construction and decommissioning activities may cause disturbance to marine mammals and prey species. Likely Significant Effect cannot be excluded (**Table 5.4, item 8a**) (**Doc Ref 5.10**).

n. **Disturbance effects on species populations:** Operation of the cooling water system could lead to effects on prey for marine mammals. Likely Significant Effect cannot be excluded (**Table 5.4, item 8b**) (**Doc Ref 5.10**).

o. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

p. Physical interaction between species and project infrastructure: No discernible impact pathway is evident.

q. Physical interaction between species and project infrastructure: There is the potential for direct physical interaction between foraging harbour seal and vessels and indirect effects on prey items. Likely Significant Effect cannot be excluded (**Table 5.4, item 10a**) (**Doc Ref 5.10**).

r. Physical interaction between species and project infrastructure: Impingement and entrainment could prey species. Likely Significant Effect cannot be excluded (**Table 5.4, item 10b**) (**Doc Ref 5.10**).

s. In-combination effects: No discernible impact pathway is evident.

t. In-combination effects: The Likely Significant In-combination Effects screening exercise has identified at least one other plan or project that could act in-combination with the operation of the Sizewell C Project to potentially result in Likely Significant In-combination Effects . Likely Significant In-combination Effects cannot be excluded (**Section 5.6**) (**Doc Ref 5.10**).

HRA Screening Matrix B1.10: Schelde- en Durmeëstuarium van de Nederlandse grens tot Gent SCI

Name of European site and designation: Schelde- en Durmeëstuarium van de Nederlandse grens tot Gent SCI																																		
EU Code: BE2300006																																			
Distance to NSIP: 197 km																																			
European site features	**Likely effects of NSIP**																																		
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1320 Spartina swards (*Spartinion*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

maritimae)																																
1330 Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2310 Dry sand heaths with *Calluna* and *Genista*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2330 Inland dunes with open *Corynephorus* and *Agrostis* grasslands	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3270 Rivers with muddy	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

banks with *Chenopodion* rubri p.p. and *Bidention* p.p. vegetation																																	
4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6230 Species-rich *Nardus* grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

alpine levels																																
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7140 Transition mires and quaking bogs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9120 Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betu*li	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)																																	
1042 Large white-faced darter *Leucorrhinia pectoralis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1134 European bitterling *Rhodeus sericeus amarus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1149 Spined loach *Cobitis taenia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1166 Northern crested newt *Triturus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

cristatus																																
1318 Pond bat *Myotis dasycneme*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1337 Eurasian beaver *Castor fiber*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.11: Unterweser SCI

Name of European site and designation: Unterweser SCI

EU Code: DE2316331

Distance to NSIP: 479 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1106 Atlantic salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1351 Harbour propoise *Phocoena phocoena*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1365 Harbour seal *Phoca vitulina*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.
i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.
j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.
k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).
l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.12: Weser bei Bremerhaven SCI

Name of European site and designation: Weser bei Bremerhaven SCI

EU Code: DE2417370

Distance to NSIP: 483 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**

Lampetra fluviatilis																																
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.13: Nebenarme der Weser mit Strohauser Plate und Juliusplate SCI

Name of European site and designation: Nebenarme der Weser mit Strohauser Plate und Juliusplate SCI																																		
EU Code: DE2516331																																		
Distance to NSIP: 475 km																																		
European site features	**Likely effects of NSIP**																																	
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3150 Natural eutrophic lakes with Magnopotam	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

ion or Hydrochariti on - type vegetation																																
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9190 Old acidophilous oak woods with *Quercus robur* on sandy plains	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

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91F0 Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1106 Atlantic salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1318 Pond bat *Myotis dasycneme*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1351	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Harbour porpoise *Phocoena phocoena*																																
1365 Harbour seal *Phoca vitulina*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.14: Schleswig-Holsteinisches Elbästuar und angrenzende Flächen SCI

Name of European site and designation: Schleswig-Holsteinisches Elbästuar und angrenzende Flächen SCI																																		
EU Code: DE2323392																																		
Distance to NSIP: 509 km																																		
European site features	**Likely effects of NSIP**																																	
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1160 Large shallow inlets and bays	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6510 Lowland hay meadows (*Alopecurus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

pratensis, Sanguisorba officinalis)																															
7140 Transition mires and quaking bogs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9190 Old acidophilous oak woods with *Quercus robur* on sandy plains	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91D0 Bog woodland	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91F0 Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

minor, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*)																																	
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1106 Atlantic salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1113 Houting *Coregonus oxyrinchus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Asp *Aspius aspius*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1145 Loach *Misgurnus fossilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1149 Spined loach	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Cobitis taenia																																	
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1365 Harbour seal *Phoca vitulina*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1601 Elbe water dropwort *Oenanthe conioides*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.15: Unterelbe SCI

Name of European site and designation: Unterelbe SCI

EU Code: DE2018331

Distance to NSIP: 508 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91F0	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*)																																	
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1106 Atlantic salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1113 Houting *Coregonus oxyrinchus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Asp *Aspius*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

aspius																																
1351 Harbour porpoise *Phocoena phocoena*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1365 Harbour seal *Phoca vitulina*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1601 Elbe water dropwort *Oenanthe conioides*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. Alteration of coastal processes/sediment transport: No discernible impact pathway is evident.

b. Water quality effects – marine environment: No discernible impact pathway is evident.

c. Water quality effects – terrestrial environment: No discernible impact pathway is evident.

d. Alteration of local hydrology and hydrogeology: No discernible impact pathway is evident.

e. Changes in air quality: No discernible impact pathway is evident.

f. Radiological effects: No discernible impact pathway is evident.

g. Direct habitat loss and fragmentation: No discernible impact pathway is evident.

h. Disturbance effects on species populations: No discernible impact pathway is evident.

i. Disturbance due to increase in recreational pressure: No discernible impact pathway is evident.

j. Physical interaction between species and project infrastructure: No discernible impact pathway is evident.

k. Physical interaction between species and project infrastructure: The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.16: Mühlenberger Loch/Neßsand SCI

Name of European site and designation: Mühlenberger Loch/Neßsand SCI

EU Code: DE2424302

Distance to NSIP: 563 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2330 Inland dunes with open *Corynephorus* and *Agrostis* grasslands	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6120 Xeric sand calcareous grasslands	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0 Alluvial	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)																																	
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1106 Atlantic salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1113 Houting *Coregonus oxyrinchus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Asp *Aspius aspius*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1351 Harbour porpoise *Phocoena*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

phocoena																															
1365 Harbour seal *Phoca vitulina*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1601 Elbe water dropwort *Oenanthe conioides*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.17: Rapfenschutzgebiet Hamburger Stromelbe SCI

Name of European site and designation: Rapfenschutzgebiet Hamburger Stromelbe SCI

EU Code: DE2424303

Distance to NSIP: 565 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1106 Atlantic salmon	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Salmo salar																																
1113 Houting *Coregonus oxyrinchus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Asp *Aspius aspius*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1351 Harbour porpoise *Phocoena phocoena*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.18: Hamburger Unterelbe SCI

Name of European site and designation: Hamburger Unterelbe SCI

EU Code: DE2526305

Distance to NSIP: 582 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
3270 Rivers with muddy banks with *Chenopodion rubri* p.p. and *Bidention* p.p. vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

of plains and of the montane to alpine levels																																	
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1106 Atlantic salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1113 Houting *Coregonus oxyrinchus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Asp	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Aspius aspius																																
1134 European bitterling *Rhodeus sericeus amarus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1145 Loach *Misgurnus fossilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1149 Spined loach *Cobitis taenia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1601 Elbe water dropwort *Oenanthe conioides*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.19: Elbe zwischen Geesthacht und Hamburg SCI

Name of European site and designation: Elbe zwischen Geesthacht und Hamburg SCI

EU Code: DE2526332

Distance to NSIP: 584 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
3270 Rivers with muddy banks with *Chenopodion rubri* p.p. and *Bidention* p.p. vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

of plains and of the montane to alpine levels																																	
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91F0 Riparian mixed forests of *Quercus robur, Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

(*Ulmenion minoris*)																																	
1095 Sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **k**	**j**	**l**	**l**	**l**
1106 Atlantic salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1113 Houting *Coregonus oxyrinchus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Asp *Aspius aspius*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1601 Elbe water dropwort *Oenanthe conioides*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.20: Rivière Laïta, Pointe du Talud, étangs du Loc'h et de Lannenec SAC

Name of European site and designation: Rivière Laïta, Pointe du Talud, étangs du Loc'h et de Lannenec SAC																																		
EU Code: FR5300059																																			
Distance to NSIP: 850 km																																			
European site features	**Likely effects of NSIP**																																		
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1150 Coastal lagoons	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1170 Reefs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

1210 Annual vegetation of drift lines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1220 Perennial vegetation of stony banks	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1320 Spartina swards (Spartinion maritimae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1410 Mediterranean salt meadows (Juncetalia maritimi)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2110 Embryonic shifting dunes	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2120 Shifting dunes along	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

the shoreline with Ammophila arenaria ('white dunes')																																
2130 Fixed coastal dunes with herbaceous vegetation ('grey dunes')	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2180 Wooded dunes of the Atlantic, Continental and Boreal region	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2190 Humid dune slacks	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition -type vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6410 Molinia meadows on calcareous,	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

peaty or clayey-silt-laden soils (Molinion caeruleae)																																	
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7210 Calcareous fens with Cladium mariscus and species of the Caricion davallianae	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1421 Trichomanes speciosum	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	x **k**	**j**	**l**	**l**	**l**
1103 Shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1096 Brook lamprey *Lampetra planeri*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Great sea	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

lamprey *Petromyzon marinus*																															
1106 Black salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1903 *Liparis loeselii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1441 Shore dock *Rumex rupestris*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1044 Southern Coenagrion *Coenagrion mercuriale*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1007 *Elona quimperiana*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1083 Stag beetle *Lucanus cervus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1308 Barbastelle *Barbastella barbastellus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1324 Greater mouse-eared bat *Myotis myotis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

1304 Greater horseshoe bat *Rhinolophus ferrumequinum*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1303 Lesser horseshoe bat *Rhinolophus hipposideros*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. However, on the basis of the very low predicted impingement (based on a single individual being recorded in the monitoring data from Sizewell B in 2009), Likely Significant Effect can be excluded (**section 5.3**) (Doc Ref. 5.10Ad).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.21: Estuaire de la Rance SAC

Name of European site and designation: Estuaire de la Rance SAC																																	
EU Code: FR5300061																																	
Distance to NSIP: 564 km																																	
European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1110 Sandbanks which are slightly covered by sea water all the time	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

1150 Coastal lagoons	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1160 Large shallow inlets and bays																																	
1170 Reefs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1210 Annual vegetation of drift lines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1410 Mediterranean salt meadows (Juncetalia	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

maritimi)																																
4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
8220 Siliceous rocky slopes with chasmophytic vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
8230 Siliceous rock with pioneer vegetation of the Sedo-Scleranthion or of the Sedo albi-Veronicion dillenii	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

shrublayer (Quercion robori-petraeae or Ilici-Fagenion)																																	
9130 Asperulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
9180 Tilio-Acerion forests of slopes, screes and ravines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	x **k**	**j**	**l**	**l**	**l**
1103 Shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1308 Barbastelle *Barbastella*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

barbastellus																															
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1310 Scheiber's bat *Miniopterus schreibersii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1323 Bechstein's bat *Myotis bechsteinii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1321 Geoffroy's bat *Myotis emarginatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1324 Greater mouse-eared bat *Myotis myotis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1365 Common seal *Phoca vitulina*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1351 Common porpoise *Phocoena phocoena*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1304 Greater horseshoe	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

bat *Rhinolophus ferrumequinum*																																
1303 Lesser horseshoe bat *Rhinolophus hipposideros*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. However, on the basis of the very low predicted impingement (based on a single individual being recorded in the monitoring data from Sizewell B in 2009), Likely Significant Effect can be excluded (**section 5.3**) (Doc Ref. 5.10Ad).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.22: Rivière Elle SAC

Name of European site and designation: Rivière Elle																																
EU Code: FR5300006																																
Distance to NSIP: 864 km																																
European site features	**Likely effects of NSIP**																															
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3260 Water courses of plain to montane levels with the	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Ranunculion fluitantis and Callitricho-Batrachion vegetation																															
4020 Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7110 Active raised bog	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7140 Transition mires and	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

quaking bogs																																	
9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
91D0 Bog woodland	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1421 Trichomanes speciosum	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	x **k**	**j**	**l**	**l**	**l**
1103 Shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1163 Freshwater sculpin *Cottus gobio*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1096 Brook lamprey *Lampetra planeri*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Great sea lamprey *Petromyzon marinus*																															
1106 Black salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1831 Water-Plantain *Luronium natans*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1044 Southern Coenagrion *Coenagrion mercuriale*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1007 *Elona quimperiana*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1065 Marsh Fritillary *Euphydryas aurinia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1029 Freshwater Pearl Mussel *Margaritifera margaritifera*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1308 Barbastelle *Barbastella barbastellus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1323	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Bechstein's bat *Myotis bechsteinii*																															
1324 Greater mouse-eared bat *Myotis myotis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1304 Greater horseshoe bat *Rhinolophus ferrumequinum*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1398 *Sphagnum pylaesii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.
i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. Physical interaction between species and project infrastructure: No discernible impact pathway is evident.

k. Physical interaction between species and project infrastructure: The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. However, on the basis of the very low predicted impingement (based on a single individual being recorded in the monitoring data from Sizewell B in 2009), Likely Significant Effect can be excluded (**section 5.3**) (Doc Ref. 5.10Ad).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.23: Rivière Elorn SAC

Name of European site and designation: Rivière Elorn SAC

EU Code: FR5300024

Distance to NSIP: 745 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1210 Annual vegetation of drift lines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1310 Salicornia and other	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

annuals colonizing mud and sand																																	
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
4020 Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7110 Active raised bog	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7120 Degraded raised bogs still capable of natural regeneration	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
8220 Siliceous rocky slopes with chasmophytic vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
8230 Siliceous rock with	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

pioneer vegetation of the Sedo-Scleranthion or of the Sedo albi-Veronicion dillenii																																
9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
9130 Asperulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
9180 Tilio-Acerion forests of slopes, screes and ravines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
91D0 Bog woodland	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
91E0 Alluvial	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)																																	
1421 Trichomanes speciosum	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	x **k**	**j**	**l**	**l**	**l**
1103 Shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1163 Freshwater sculpin *Cottus gobio*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1096 Brook lamprey *Lampetra planeri*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1106 Black salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1831 Water-	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Plantain *Luronium natans*																															
1007 *Elona quimperiana*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1065 Marsh Fritillary *Euphydryas aurinia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1083 Stag beetle *Lucanus cervus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1029 Freshwater Pearl Mussel *Margaritifera margaritifera*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1304 Greater horseshoe bat *Rhinolophus ferrumequinum*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1398 *Sphagnum pylaesii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. However, on the basis of the very low predicted impingement (based on a single individual being recorded in the monitoring data from Sizewell B in 2009), Likely Significant Effect can be excluded (**section 5.3**) (Doc Ref. 5.10Ad).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.24: Marais du Cotentin et du Bessin - Baie des Veys SAC

Name of European site and designation: Marais du Cotentin et du Bessin - Baie des Veys SAC

EU Code: FR2500088

Distance to NSIP: 396 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1150 Coastal lagoons	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1210 Annual vegetation of drift lines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1410 Mediterranean salt meadows (Juncetalia maritimi)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
2110 Embryonic shifting dunes	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
2120 Shifting dunes along the shoreline with Ammophila arenaria ('white dunes')	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
2130 Fixed coastal dunes with herbaceous vegetation ('grey	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

dunes')																																
2170 Dunes with Salix repens ssp argentea (Salicion arenariae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
2190 Humid dune slacks	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoeto-Nanojuncetea	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
3140 Hard oligo-mesotrophic waters with benthic vegetation of	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

Chara spp																																
3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition -type vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
3160 Natural dystrophic lakes and ponds	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
7140 Transition mires and quaking bogs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
7210	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

Calcareous fens with Cladium mariscus and species of the Caricion davallianae																																	
7230 Alkaline fens	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1166 Crested newt *Triturus cristatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	x **k**	**j**	**m**	**m**	**m**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **l**	**j**	**m**	**m**	**m**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1106 Black salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1903 *Liparis loeselii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1831 Water-Plantain	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

Luronium natans																																
4056 *Anisus vorticulus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1044 Southern Coenagrion *Coenagrion mercuriale*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1065 Marsh Fritillary *Euphydryas aurinia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
6199 Euplagia quadripunctaria	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1083 Stag beetle *Lucanus cervus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1016 *Vertigo moulinsiana*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1308 Barbastelle *Barbastella barbastellus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1364 Grey seal *Halichoerus grypus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1324	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

Greater mouse eared bat *Myotis myotis*																																
1365 Common seal *Phoca vitulina*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1304 Greater horseshoe bat *Rhinolophus ferrumequinum*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1303 Lesser horseshoe bat *Rhinolophus hipposideros*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. However, on the basis of the very low predicted impingement (based on a single individual being recorded in the monitoring data from Sizewell B in 2009), Likely Significant Effect can be excluded (**section 5.3**) (Doc Ref. 5.10Ad).

l. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

m. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.25: Rivière Leguer, forêts de Beffou, Coat an Noz et Coat an Hay SAC

Name of European site and designation: Rivière Leguer, forêts de Beffou, Coat an Noz et Coat an Hay SAC

EU Code: FR5300008

Distance to NSIP: 601 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1150 Coastal lagoons	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1170 Reefs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

1210 Annual vegetation of drift lines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1220 Perennial vegetation of stony banks	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2110 Embryonic shifting dunes	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2120 Shifting dunes along the shoreline with Ammophila arenaria	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

('white dunes')																																	
3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
4020 Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

of the montane to alpine levels																															
7110 Active raised bog	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7140 Transition mires and quaking bogs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
8220 Siliceous rocky slopes with chasmophytic vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9130 Asperulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91D0 Bog	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

woodland																																	
91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1421 *Trichomanes speciosum*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	x **k**	**j**	**l**	**l**	**l**
1103 Shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1163 Freshwater sculpin *Cottus gobio*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1096 Brook lamprey *Lampetra planeri*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1106 Black salmon	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Salmo salar																																
1831 Water-Plantain *Luronium natans*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1007 *Elona quimperiana*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1065 Marsh Fritillary *Euphydryas aurinia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1083 Stag beetle *Lucanus cervus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1308 Barbastelle *Barbastella barbastellus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1323 Bechstein's bat *Myotis bechsteinii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1324 Greater mouse eared bat *Myotis myotis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1304 Greater	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

horseshoe bat *Rhinolophus ferrumequinum*																																
1303 Lesser horseshoe bat *Rhinolophus hipposideros*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. However, on the basis of the very low predicted impingement (based on a single individual being recorded in the monitoring data from Sizewell B in 2009), Likely Significant Effect can be excluded (**section 5.3**) (Doc Ref. 5.10Ad).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.26: Tregor Goëlo SAC

Name of European site and designation: Tregor Goëlo SAC

EU Code: FR5300010

Distance to NSIP: 532 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1110 Sandbanks which are slightly covered by sea water all the time	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

1150 Coastal lagoons	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1160 Large shallow inlets and bays	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1170 Reefs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1210 Annual vegetation of drift lines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1220 Perennial vegetation of stony banks	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1320 Spartina swards (Spartinion maritimae**)**	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1330 Atlantic salt meadows	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

(Glauco-Puccinellietalia maritimae)																															
1420 Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
2110 Embryonic shifting dunes	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
2120 Shifting dunes along the shoreline with Ammophila arenaria ('white dunes')	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
2130 Fixed coastal dunes with herbaceous vegetation ('grey dunes')	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
2190 Humid dune slacks	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
3110 Oligotrophic waters	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

containing very few minerals of sandy plains (Littorelletalia uniflorae)																																	
3120 Oligotrophic waters containing very few minerals generally on sandy soils of the West Mediterranean, with Isoetes spp	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
4020 Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
6230 Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

Europe)																																
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
8220 Siliceous rocky slopes with chasmophytic vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
8230 Siliceous rock with pioneer vegetation of the Sedo-Scleranthion or of the Sedo albi-Veronicion dillenii	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
8330 Submerged or partially	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

submerged sea caves																																	
9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
9130 Asperulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
9180 Tilio-Acerion forests of slopes, screes and ravines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae,	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

Salicion albae)																																
1421 *Trichomanes speciosum*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	x **k**	**j**	**m**	**m**	**m**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **l**	**j**	**m**	**m**	**m**
1163 Freshwater sculpin *Cottus gobio*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1096 Brook lamprey *Lampetra planeri*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1106 Black salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1441 Shore dock Rumex rupestris	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1044 Southern Coenagrion *Coenagrion mercuriale*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1007 *Elona*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

quimperiana																															
1083 Stag beetle *Lucanus cervus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1308 Barbastelle *Barbastella barbastellus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1364 Grey seal *Halichoerus grypus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1323 Bechstein's bat *Myotis bechsteinii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1321 Geoffroy's bat *Myotis emarginatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1351 Common porpoise *Phocoena phocoena*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1304 Greater horseshoe bat *Rhinolophus ferrumequinum*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

1303 Lesser horseshoe bat *Rhinolophus hipposideros*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**
1349 Bottle nosed dolphin *Tursiops truncatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**m**	**m**	**m**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. However, on the basis of the very low predicted impingement (based on a single individual being recorded in the monitoring data from Sizewell B in 2009), Likely Significant Effect can be excluded (**section 5.3**) (Doc Ref. 5.10Ad).

l. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

m. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.27: Plymouth Sound and Estuaries SAC

Name of European site and designation: Plymouth Sound and Estuaries SAC

EU Code: UK0013111

Distance to NSIP: 615 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1110 Sandbanks which are slightly covered by sea water all the time	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

1160 Large shallow inlets and bays	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1170 Reefs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1320 Spartina swards (Spartinion maritimae**)**	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	x **k**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Great sea	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

lamprey *Petromyzon marinus*																															
1441 Shore dock Rumex rupestris	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1364 Grey seal *Halichoerus grypus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1351 Common porpoise *Phocoena phocoena*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1349 Bottle nosed dolphin *Tursiops truncatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. However, on the basis of the very low predicted impingement (based on a single individual being recorded in the monitoring data from Sizewell B in 2009), Likely Significant Effect can be excluded (**section 5.3**) (Doc Ref. 5.10Ad).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.28: Havre de Saint-Germain-sur-Ay et Landes de Lessay SAC

Name of European site and designation: Havre de Saint-Germain-sur-Ay et Landes de Lessay SAC

EU Code: FR2500081

Distance to NSIP: 632 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1110 Sandbanks which are slightly covered by sea water all the time	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

1210 Annual vegetation of drift lines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1330 Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2110 Embryonic shifting dunes	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes") *Priority	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

feature																																
2170 Dunes with Salix repens ssp argentea (*Salicion arenariae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2180 Wooded dunes of the Atlantic, Continental and Boreal region	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2190 Humid dune slacks	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
3150 Natural eutrophic lakes with Magnopotamion or	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

Hydrocharition -type vegetation																															
3160 Natural dystrophic lakes and ponds	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
4010 Northern Atlantic wet heaths with Erica tetralix	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
4020 Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6230 Species-rich Nardus grasslands, on silicious substrates in mountain	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

areas (and submountain areas in Continental Europe)																																	
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis***)**	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7110 Active raised bog	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
7120 Degraded raised bogs still capable of natural regeneration	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

7140 Transition mires and quaking bogs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7150 Depressions on peat substrates of the Rhynchosporion	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7210 Calcareous fens with Cladium mariscus and species of the *Caricion davallianae*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7230 Alkaline fens	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9190 Old acidophilous oak woods with Quercus robur on sandy plains	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
91D0 Bog woodland	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

excelsior (Alno-Padion, Alnion incanae, Salicion albae)																																	
1166 Crested newt *Triturus cristatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**J**	**j**	**l**	**l**	**L**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**L**
1096 Brook lamprey *Lampetra planeri*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1106 Black salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1831 Water plantain *Luronium natans*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1044 Southern Coenagrion *Coenagrion mercuriale*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

6199 *Euplagia quadripunctaria*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1083 Stag beetle *Lucanus cervus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**
1041 Orange spotted Emerald *Oxygastra curtisii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1308 Barbastelle *Barbastella barbastellus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.
i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.
j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. Physical interaction between species and project infrastructure: The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.29: Marais Vernier, Risle Maritime SAC

Name of European site and designation: Marais Vernier, Risle Maritime SAC																																	
EU Code: FR2300122																																	
Distance to NSIP: 389 km																																	
European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes") *Priority feature	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

2170 Dunes with Salix repens ssp argentea (*Salicion arenariae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2190 Humid dune slacks	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3130 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3150 Natural eutrophic lakes with Magnopotam	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

ion or Hydrochariti on -type vegetation																																	
5130 Juniperus communis formations on heaths or calcareous grasslands	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

of the montane to alpine levels																																
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7110 Active raised bog	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7120 Degraded raised bogs still capable of natural regeneration	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7150 Depressions on peat substrates of the Rhynchosporion	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7210 Calcareous fens with Cladium mariscus and species of the *Caricion davallianae*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7230 Alkaline fens	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
8310 Caves not	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

open to the public																																		
9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9130 Asperulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9180 Tilio-Acerion forests of slopes, screes and ravines	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9190 Old acidophilous oak woods with Quercus robur on sandy plains	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91D0 Bog woodland	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)																																	
1166 Crested newt *Triturus cristatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1102 Allis shad *Alosa alosa*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1163 Freshwater slulpin *Cottus gobio*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**l**
1096 Brook lamprey *Lampetra planeri*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Great sea lamprey	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Petromyzon marinus																																
5339 *Rhodeus amarus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1106 Black salmon *Salmo salar*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1044 Southern Coenagrion *Coenagrion mercuriale*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1065 Marsh fritillary *Euphydryas aurinia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6199 *Euplagia quadripunctaria*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1083 Stag beetle *Lucanus cervus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1014 *Vertigo angustior*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1016 *Vertigo moulinsiana*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1323 Bechstein's bat *Myotis bechsteinii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1321 Geoffroy's	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

bat *Myotis emarginatus*																															
1324 Greater mouse-eared bat *Myotis myotis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1304 Greater horseshoe bat *Rhinolophus ferrumequinum*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.
i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.
j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. Physical interaction between species and project infrastructure: The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.30: Treene Winderatter See bis Friedrichstadt und Bollingstedter Au SAC

Name of European site and designation: Treene Winderatter See bis Friedrichstadt und Bollingstedter Au SAC																																		
EU Code: DE1322391																																		
Distance to NSIP: 615 km																																		
European site features	**Likely effects of NSIP**																																	
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
2310 Dry sand heaths with Calluna and Genista	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2320 Dry sand heaths with Calluna and Empetrum nigrum	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2330 Inland dunes	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

with open Corynephorus and Agrostis grasslands																																
3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition -type vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3160 Natural dystrophic lakes and ponds	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
4010 Northern Atlantic wet heaths with Erica tetralix	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

6230 Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7120 Degraded	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

raised bogs still capable of natural regeneration																																
7140 Transition mires and quaking bogs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
7230 Alkaline fens	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9110 Luzulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9130 Asperulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9190 Old acidophilous oak woods with Quercus robur on sandy plains	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91D0	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Bog woodland																																	
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1166 Crested newt *Triturus cristatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Aral asp *Aspius aspius*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1149 Spined loach *Cobitis taenia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1113 Houting *Coregonus oxyrhynchus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**l**
1096 Brook lamprey	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Lampetra planeri																																	
1145 Mud loach *Misgurnus fossilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1032 *Unio crassus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.
i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.
j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. Physical interaction between species and project infrastructure: The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.31: Untereider SAC

Name of European site and designation: Untereider SAC

EU Code: DE1719391

Distance to NSIP: 593 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1310 Salicornia and other annuals colonizing mud and sand	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

1320 Spartina swards (*Spartinion maritimae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis***)**	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A688 *Botaurus stellaris stellaris*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A045 Barnacle goose *Branta leucopsis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A197 Black tern *Chlidonias niger*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A081 Marsh harrier *Circus aeruginosus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A082 Hen harrier	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Circus cyaneus																															
A084 Montagu's harrier *Circus pygargus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A122 Corncrake *Crex crex*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A037 *Cygnus bewickii*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A151 Ruff *Philomachus pugnax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A140 Golden plover *Pluvialis apricaria*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A119 Spotted crake *Porzana porzana*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A132 Avocet *Recurvirostra avosetta*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A193 Common tern *Sterna hirundo*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
A194 Arctic tern *Sterna*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

paradisaea																																	
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Aral asp *Aspius aspius*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1113 Houting *Coregonus oxyrhynchus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**l**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.32: Lesum SAC

Name of European site and designation: Lesum SAC																																	
EU Code: DE2818304																																	
Distance to NSIP: 566 km																																	
European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**l**
1095	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Great sea lamprey *Petromyzon marinus*																															

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.33: Bremische Ochtum SAC

Name of European site and designation: Bremische Ochtum SAC

EU Code: DE2918371

Distance to NSIP: 572 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**l**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.
i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.
j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.
k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).
l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.34: Weser zwischen Ochtummündung und Rekum SAC

Name of European site and designation: Weser zwischen Ochtummündung und Rekum SAC

EU Code: DE2817370

Distance to NSIP: 552 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**l**
1095 Great sea lamprey *Petromyzon marinus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.
b. **Water quality effects – marine environment:** No discernible impact pathway is evident.
c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.
d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.
e. **Changes in air quality:** No discernible impact pathway is evident.
f. **Radiological effects:** No discernible impact pathway is evident.
g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.
h. **Disturbance effects on species populations:** No discernible impact pathway is evident.
i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.
j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.
k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).
l. **In-combination effects:** No discernible impact pathway is evident.

HRA Screening Matrix B1.35: Unterems und Außenems SCI

Name of European site and designation: Unterems und Außenems SCI

EU Code: DE2507331

Distance to NSIP: 400 km

European site features	**Likely effects of NSIP**																																
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
1130 Estuaries	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1140 Mudflats and sandflats not covered by seawater at low tide	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1320 Spartina swards (*Spartinion maritimae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1330 Atlantic salt	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

meadows (*Glauco-Puccinellietalia maritimae*)																																	
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1103 Twaite shad *Alosa fallax*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**l**
1095 Great sea lamprey *Petromyzon*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**L**

marinus																															
1318 Pond bat *Myotis dasycneme*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1365 Common seal *Phoca vitulina*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1351 Common porpoise *Phocoena phocoena*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. In-combination effects: No discernible impact pathway is evident.

HRA Screening Matrix B1.36: Ems SCI

Name of European site and designation: Ems SCI																																
EU Code: DE2809331																																
Distance to NSIP: 463 km																																
European site features	**Likely effects of NSIP**																															
Effect	Alteration of coastal processes / sediment transport			Water quality effects – marine environ-ment			Water quality effects – terrestrial environ-ment			Alteration of local hydrology and hydro-geology			Changes in air quality			Radiologi-cal effects			Direct habitat loss and direct/ indirect habitat fragment-ation			Disturb-ance effects on species populations			Disturb-ance due to increase in recreation-al pressure			Physical interaction between species and project infrastruc-ture			*In combina-tion effects*		
Stage of Development	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*	*C*	*O*	*D*
2310 Dry sand heaths with Calluna and Genista	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
2330 Inland dunes with open Corynephorus and Agrostis grasslands	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3130 Oligotrophic to	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the Isoeto-Nanojuncetea																																	
3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition -type vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
3270 Rivers with muddy banks with *Chenopodion rubri* pp and Bidention pp	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

vegetation																																
4030 European dry heaths	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
5130 Juniperus communis formations on heaths or calcareous grasslands	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6230 Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

7140 Transition mires and quaking bogs	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9110 Luzulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9130 Asperulo-Fagetum beech forests	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

betuli																																	
9190 Old acidophilous oak woods with Quercus robur on sandy plains	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91D0 Bog woodland	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
91F0 Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

(*Ulmenion minoris*)																																	
1166 Crested newt *Triturus cristatus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1130 Aral asp *Aspius aspius*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1149 Spined loach *Cobitis taenia*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1163 Freshwater sculpin *Cottus gobio*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1099 River lamprey *Lampetra fluviatilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	✓ **K**	**j**	**l**	**l**	**l**
1145 Mud loach *Misgurnus fossilis*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1134 Rhodeus sericeus amarus	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1831 Water plantain *Luronium natans*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1083 Stag beetle *Lucanus*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

cervus																															
1337 European beaver *Castor fiber*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**
1355 Eurasian otter *Lutra lutra*	**a**	**a**	**a**	**b**	**b**	**b**	**c**	**c**	**c**	**d**	**d**	**d**	**e**	**e**	**e**	**f**	**f**	**f**	**g**	**g**	**g**	**h**	**h**	**h**	**i**	**i**	**i**	**j**	**j**	**j**	**l**	**l**	**l**

Evidence supporting conclusions:

a. **Alteration of coastal processes/sediment transport:** No discernible impact pathway is evident.

b. **Water quality effects – marine environment:** No discernible impact pathway is evident.

c. **Water quality effects – terrestrial environment:** No discernible impact pathway is evident.

d. **Alteration of local hydrology and hydrogeology:** No discernible impact pathway is evident.

e. **Changes in air quality:** No discernible impact pathway is evident.

f. **Radiological effects:** No discernible impact pathway is evident.

g. **Direct habitat loss and fragmentation:** No discernible impact pathway is evident.

h. **Disturbance effects on species populations:** No discernible impact pathway is evident.

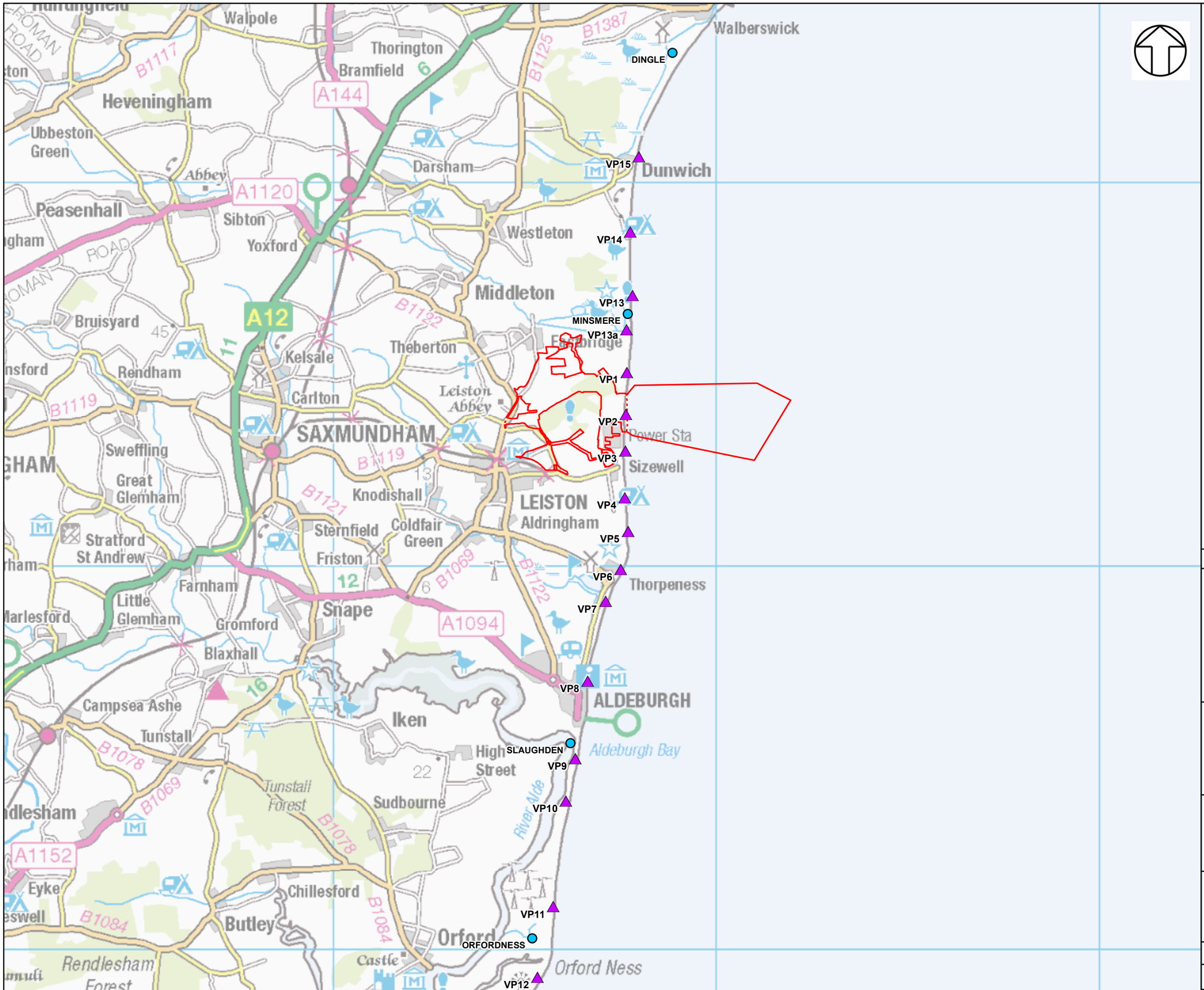
i. **Disturbance due to increase in recreational pressure:** No discernible impact pathway is evident.

j. **Physical interaction between species and project infrastructure:** No discernible impact pathway is evident.

k. **Physical interaction between species and project infrastructure:** The operation of the cooling water system has the potential to impinge migratory fish species that are qualifying features of the European site. Likely Significant Effect cannot be excluded (**Table 5.5, item 10b**) (**Doc Ref 5.10**).

l. **In-combination effects:** No discernible impact pathway is evident

APPENDIX 6A: FIGURES



NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- TERN SURVEY VANTAGE POINTS
- SEABIRD COLONY

NOT PROTECTIVELY MARKED

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DOCUMENT:
SIZEWELL C PROJECT
SHADOW HRA REPORT ADDENDUM
APPENDIX 6A
FIGURES (BASELINE)

DRAWING TITLE:
LOCATION OF COASTAL VANTAGE POINTS FROM WHICH THE 2020 TERN SURVEYS WERE UNDERTAKEN

DRAWING NO:
FIGURE 6A.1

DATE:	DRAWN:	SCALE :	REVISION:
JAN 2021	J.T.	1:95,000 @A3	2.0

SCALE BAR
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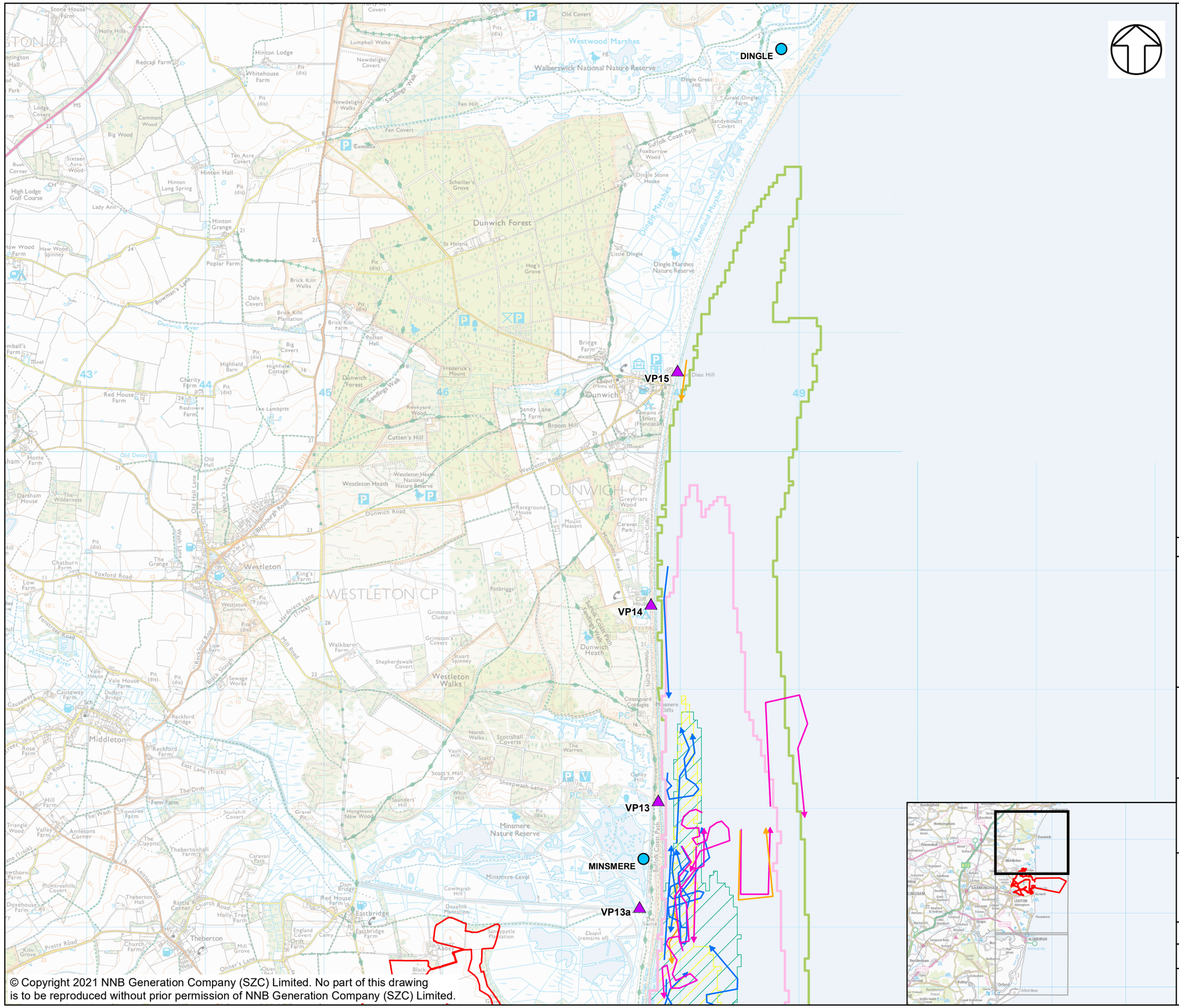

NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- TERN SURVEY VANTAGE POINTS
- SEABIRD COLONY

SPECIES OF TERN

- COMMON TERN
- LITTLE TERN
- SANDWICH TERN

PREDICTED CHEMICAL AND THERMAL PLUMES FROM SZB

- BOUNDARY OF THERMAL UPLIFT AT ≥ 2°C AT SEA SURFACE AS 98TH PERCENTILE FOR SZB ALONE
- BOUNDARY OF THERMAL UPLIFT AT ≥ 3°C AT SEA SURFACE AS 98TH PERCENTILE FOR SZB ALONE
- BROMOFORM AT ≥ 5µg/l AT SEA SURFACE AS 95TH PERCENTILE FOR SZB
- TOTAL RESIDUAL OXIDANTS AT ≥ 10µg/l AT SEA SURFACE AS 95TH PERCENTILE FOR SZB

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DOCUMENT:
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APPENDIX 6A
FIGURES (BASELINE)

DRAWING TITLE:
LOCATIONS OF FORAGING TERNS RECORDED DURING THE FIRST MAY SURVEY IN 2020, WITH PREDICTED CHEMICAL AND THERMAL PLUMES FROM SZB ALSO SHOWN.

DRAWING NO: FIGURE 6A.2
MAP 1 OF 3

DATE:	DRAWN:	SCALE :	REVISION:
JAN 2021	J.T.	1:30,000 @A3	2.0

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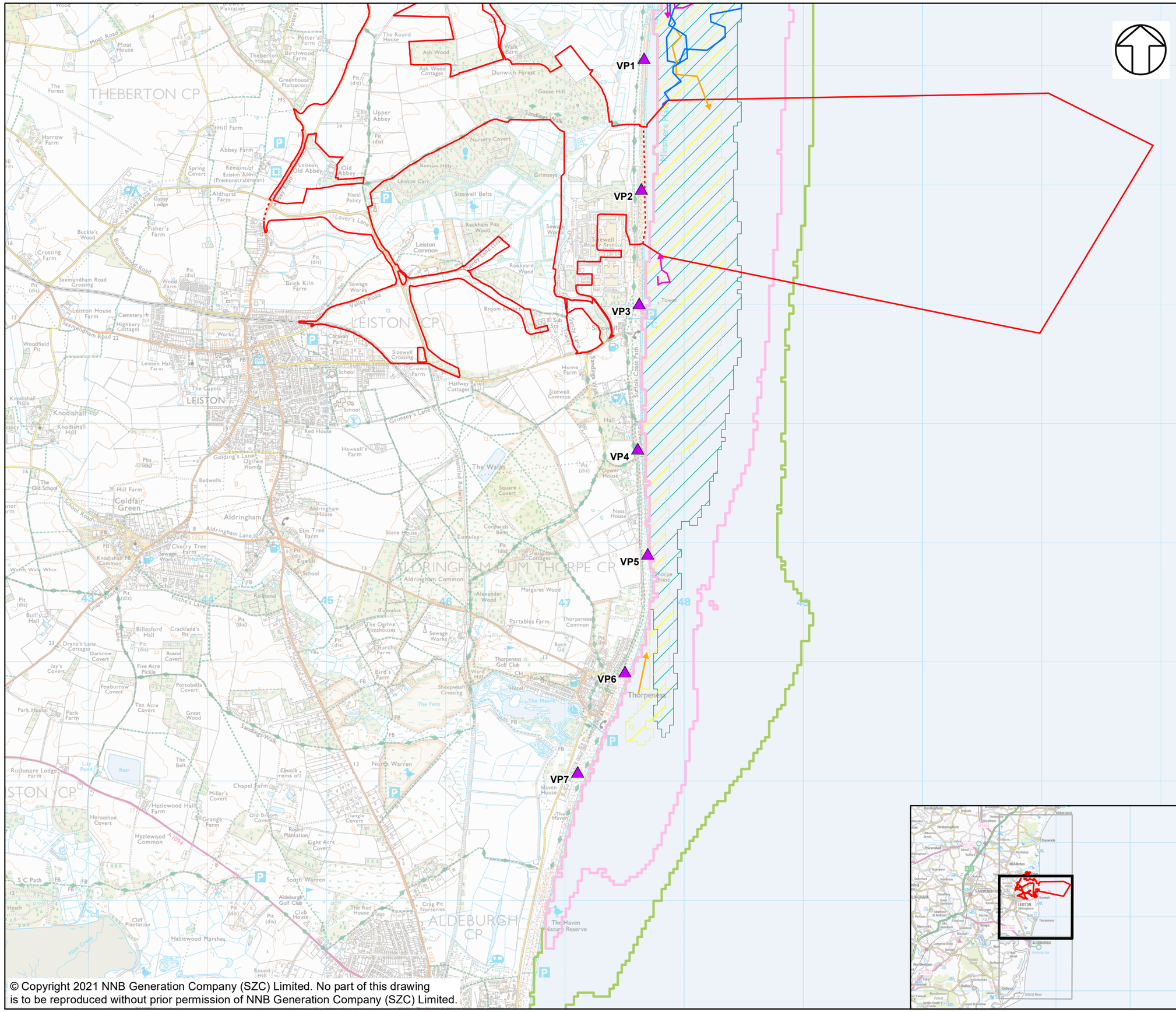

NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- TERN SURVEY VANTAGE POINTS

SPECIES OF TERN

- COMMON TERN
- LITTLE TERN
- SANDWICH TERN

PREDICTED CHEMICAL AND THERMAL PLUMES FROM SZB

- BOUNDARY OF THERMAL UPLIFT AT ≥ 2^{O}C AT SEA SURFACE AS 98TH PERCENTILE FOR SZB ALONE
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- BROMOFORM AT ≥ 5µg/l AT SEA SURFACE AS 95TH PERCENTILE FOR SZB
- TOTAL RESIDUAL OXIDANTS AT ≥ 10µg/l AT SEA SURFACE AS 95TH PERCENTILE FOR SZB

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DRAWING TITLE:
LOCATIONS OF FORAGING TERNS RECORDED DURING THE FIRST MAY SURVEY IN 2020, WITH PREDICTED CHEMICAL AND THERMAL PLUMES FROM SZB ALSO SHOWN.

DRAWING NO: FIGURE 6A.2 — MAP 2 OF 3

DATE:	DRAWN:	SCALE :	REVISION:
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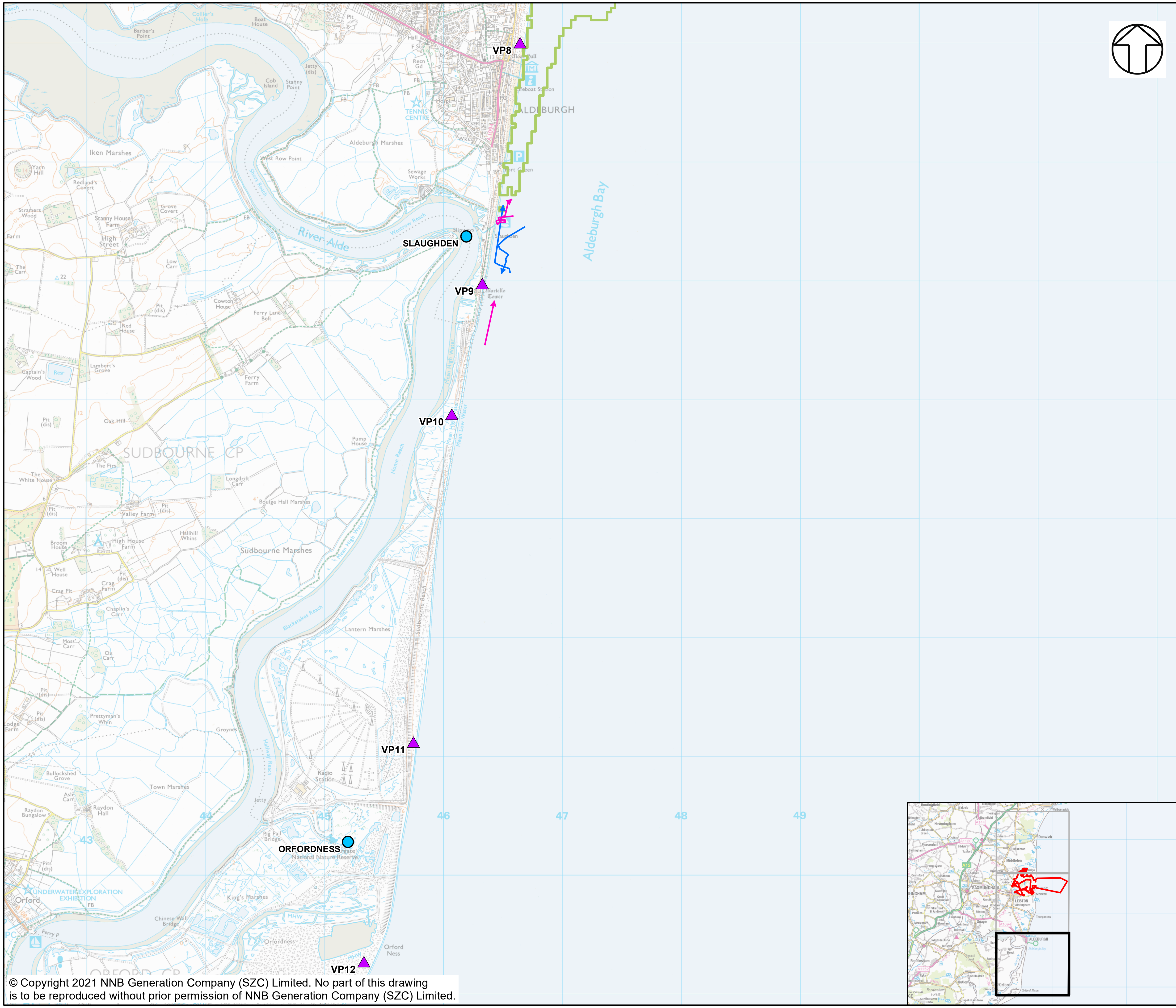

NOTES

KEY

TERN SURVEY VANTAGE POINTS

SEABIRD COLONY

SPECIES OF TERN

COMMON TERN

LITTLE TERN

PREDICTED CHEMICAL AND THERMAL PLUMES FROM SZB

BOUNDARY OF THERMAL UPLIFT AT ≥ 2^{O}C AT SEA SURFACE AS 98TH PERCENTILE FOR SZB ALONE

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DRAWING TITLE:
LOCATIONS OF FORAGING TERNS RECORDED DURING THE FIRST MAY SURVEY IN 2020, WITH PREDICTED CHEMICAL AND THERMAL PLUMES FROM SZB ALSO SHOWN.

DRAWING NO:			MAP 3 OF 3
FIGURE 6A.2			
DATE:	DRAWN:	SCALE :	REVISION:
JAN 2021	J.T.	1:30,000 @A3	2.0

SCALE BAR
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DINGLE

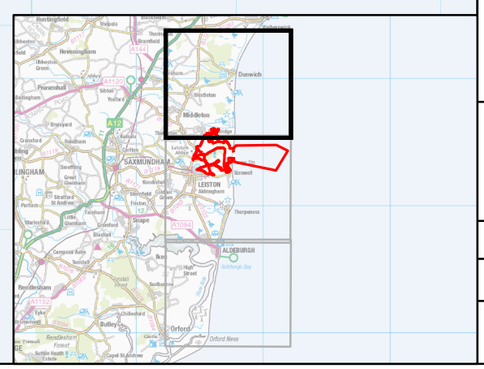
VP15

VP14

VP13

MINSMERE

VP13a



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NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- TERN SURVEY VANTAGE POINTS
- SEABIRD COLONY

SPECIES OF TERN

- COMMON TERN
- LITTLE TERN
- SANDWICH TERN

PREDICTED CHEMICAL AND THERMAL PLUMES FROM SZB

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- BOUNDARY OF THERMAL UPLIFT AT ≥ 3^{O}C AT SEA SURFACE AS 98TH PERCENTILE FOR SZB ALONE
- BROMOFORM AT ≥ 5µg/l AT SEA SURFACE AS 95TH PERCENTILE FOR SZB
- TOTAL RESIDUAL OXIDANTS AT ≥ 10µg/l AT SEA SURFACE AS 95TH PERCENTILE FOR SZB

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FIGURES (BASELINE)

DRAWING TITLE:
LOCATIONS OF FORAGING TERNS RECORDED DURING THE SECOND MAY SURVEY IN 2020, WITH PREDICTED CHEMICAL AND THERMAL PLUMES FROM SZB ALSO SHOWN.

DRAWING NO: FIGURE 6A.3 — MAP 1 OF 3

DATE:	DRAWN:	SCALE :	REVISION:
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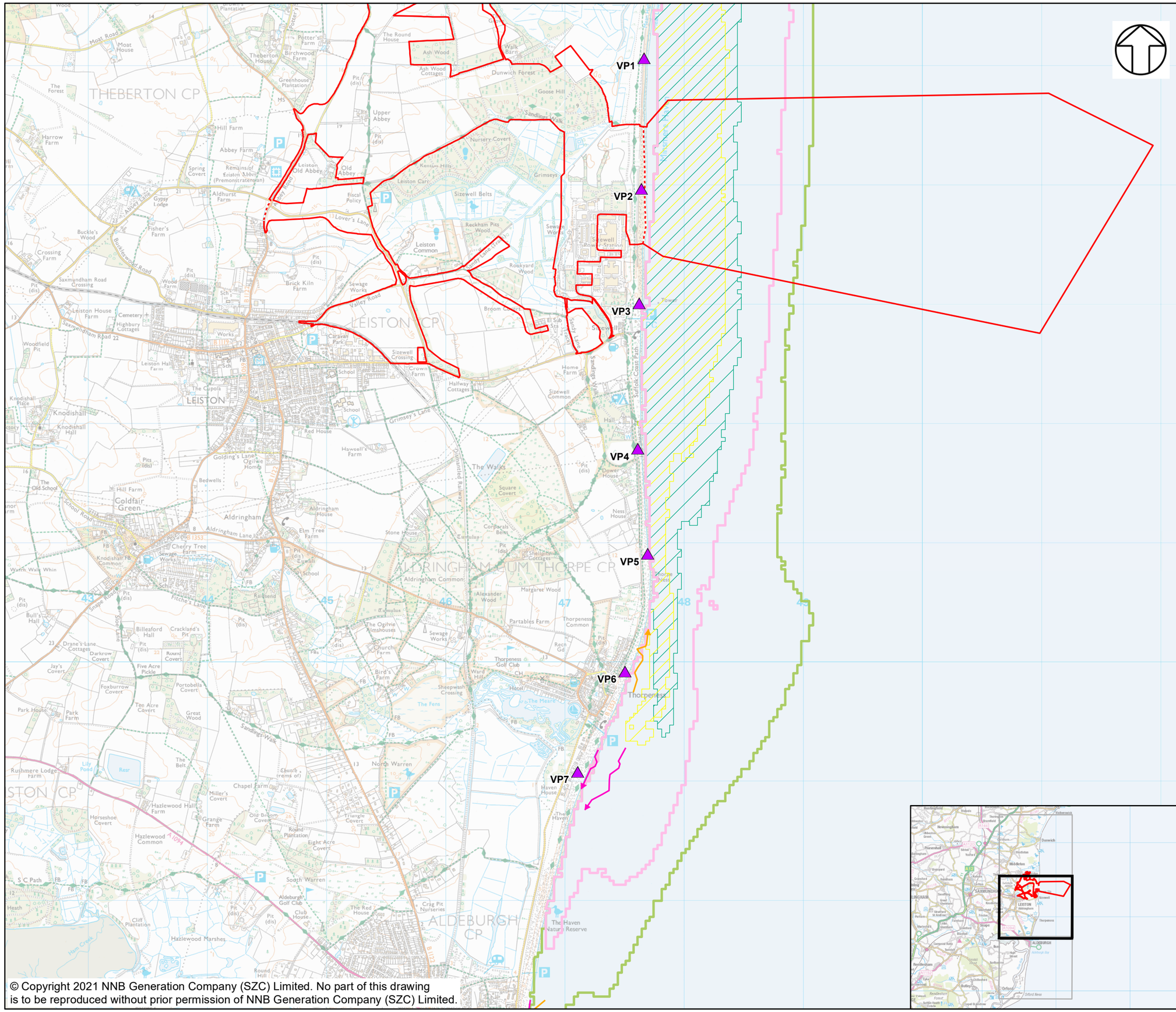

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DRAWING NO: FIGURE 6A.3 — MAP 2 OF 3

DATE:	DRAWN:	SCALE :	REVISION:
JAN 2021	J.T.	1:30,000 @A3	2.0

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