

Coryton Power Station Environmental Permit Variation Application

Air Quality Impact Assessment

PREPARED FOR



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SIGNATURE PAGE

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Air Quality Impact Assessment

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CONTENTS

CHE	CKLIST	1
EXE	CUTIVE SUMMARY	2
1.	INTRODUCTION	4
1.1	BACKGROUND	4
1.2	POLLUTANTS ASSESSED	4
2.	LEGAL FRAMEWORK	7
2.1	AIR QUALITY STANDARDS	7
2.2	SENSITIVE ECOLOGICAL RECEPTORS	7
2.3	SIGNIFICANCE OF IMPACT	8
3.	AIR QUALITY BACKGROUND CONCENTRATIONS	10
3.1	DEFRA MAPPING AND MONITORING DATA	10
3.2	OZONE (AOT40) AND SO ₂	10
4.	ASSESSMENT METHODOLOGY	12
4.1	MODEL PARAMETERS AND INPUTS	12
4.2	EMISSION PARAMETERS	15
4.3	HUMAN RECEPTORS	17
4.4	ECOLOGICAL RECEPTORS	17
4.5	SENSITIVITY ANALYSIS	23
5.	MODELLED IMPACTS	24
5.1	HUMAN HEALTH IMPACTS	24
5.2	ECOLOGICAL IMPACTS	28
	 5.2.1 Ambient NO_x emissions 5.2.2 Nutrient Nitrogen Deposition 5.2.3 Acid Deposition 	28 31 31
6.	CONCLUSION	32

APPENDIX A CONTOUR PLOTS

APPENDIX B ECOLOGICAL TABLES



LIST OF TABLES	
TABLE 2.1 APPLICABLE AIR QUALITY STANDARDS FOR HUMAN HEALTH	7
TABLE 2.2 APPLICABLE CRITICAL LEVELS	8
TABLE 2.3 SIGNIFICANCE CRITERIA FOR POTENTIAL IMPACTS	8
TABLE 3.1 BASELINE AIR QUALITY FROM DEFRA/LOCAL MONITORING SITES	10
TABLE 3.2 BACKGROUND OZONE AND SO2	11
TABLE 4.1 AIR DISPERSION MODEL METHODOLOGY AND PARAMETERS	12
TABLE 4.2 MODELLED EMISSION PARAMETERS	16
TABLE 4.3 APPLICABLE CRITICAL LOADS FOR NUTRIENT AND ACID DEPOSITIONS	19
TABLE 5.1 MODELLED MAXIMUM OFFSITE CONCENTRATIONS OF 1-HOUR MEAN NO ₂ , 99.79 TH PERCENTILE (μ G/M ³)	25
TABLE 5.2 MODELLED MAXIMUM OFFSITE CONCENTRATIONS OF ANNUAL MEAN NO ₂ (μ G/M ³)	26
TABLE 5.3 MODELLED MAXIMUM AMBIENT NO $_{\rm X}$ CONCENTRATIONS (μ G/M ³) – WORST CASE RECEPTORS	30

LIST OF FIGURES

FIGURE 1.1 SITE BOUNDARY AND EMISSION POINTS	6
FIGURE 4.1 MODELLED DOMAIN	13
FIGURE 4.2 WIND ROSE DATA FROM SOUTHEND AIRPORT (2019 - 2023)	14
FIGURE 4.3 DESIGNATED ECOLOGICAL SITES WITHIN 15KM OF THE SITE	18

ACRONYMS AND ABBREVIATIONS

Acronyms	Description
AQS	Air Quality Standard
AQMA	Air Quality Management Area
AW	Ancient Woodland
BAT	Best Available Techniques
BREF	Best Available Technique Reference Document
CCGT	Combined Cycle Gas Turbine
CL	Critical Load
CO	Carbon Monoxide
°C	Degrees Celsius
DEFRA	Department for Environment, Food & Rural Affairs
EA	Environment Agency
EAL	Environmental Assessment Level
ELV	Emission Limit Value



Acronyms	Description
EU	European Union
g/s	Grams per second
IED	Industrial Emission Directive
К	Degrees Kelvin
LCP	Large Combustion Plant
LNR	Local Nature Reserve
LWS	Local Wildlife Site
m/s	Metres per second
m³/s	Cubic metres per second
µg/m³	Micrograms per cubic metre
mg/m ³	Milligrams per cubic metre
MWth	MegaWatt Thermal
NLC	North Lincolnshire Council
NNR	National Nature Reserve
NO ₂	Nitrogen Dioxide
NO _x	Oxides of Nitrogen
PC	Process Contribution
PEC	Predicted Environmental Concentration
PM	Particulate Matter
µg/m³	Micrograms per cubic metre
SAC	Special Area of Conservation
SO ₂	Sulphur Dioxide
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest



Requirement ¹	Report Section Reference
Purpose of the study	Section 0
Describe the site	Section 0
Modelled emission scenarios, duration and frequency	Section 3
Location map (proposed site, site boundary, land use)	Section 1.1 and Figure 1.1 for site location
Relevant environmental standards	Section 2.1
Background levels	Section 5
Explain the model	Section 4.1 and Table 4.1
Explain emission parameters	Section 4.1 and Table 4.2
Explain the modelled domain and receptors	Section 4.3 and Figure 4.1 for modelled domain
Explain meteorological data and surface characteristics	Section 4.1 and Table 4.1
Explain terrain and building treatments	Section 4.1
Special treatment	Section 4.1
Sensitivity analysis	Section 4.5
Impact assessment	Section 5
Contour plots	Appendix A

¹ EA, last updated May 2024, Air emissions risk assessment for your environmental permit, https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit



EXECUTIVE SUMMARY

Coryton Energy Company Limited (InterGen) operates the Coryton Power Station (the 'Site'), under an existing permit (EPR/EP3833LY/V003), most recently dated the 10th March 2020. The Site is located within a heavy industrial area at Standford-le-Hope, Coryton, Essex, SS17 9GN, adjacent to the former Coryton Refinery.

The Site is currently permitted as a combined cycle gas turbine (CCGT) power plant, comprising two gas turbines with a gross thermal input of 702 MW each. Other combustion plants operated on the installation include two gas fired auxiliary boilers (4 MWth input each), a gas oil (diesel) fired emergency generator (2 MWth input) and a gas oil fired firewater pump (0.56 MWth input).

InterGen is proposing to upgrade the two CCGTs which will involve the CCGTs being taken offline for refurbishment works. Once work is complete, they will be reinstated and recommissioned. After the upgrades, there will be an uplift of 84 MWth to the power input of the Site; each CCGT will be 744 MWth. The proposed upgrade works to the CCGTs will require a variation to the Site's current EP as a result of the increased thermal input capacity.

The two CCGTs are considered Large Combustion Plant (LCP), each having a thermal input greater than 50 MWth and are subject to Schedule 1 of the Environmental Permitting Regulations (EPR), under a Section 1.1 Part A(1) activity. Each CCGT is expected to operate between 890 to 980 hours per year and will therefore require compliance with the relevant BAT-AELs set out in the Large Combustion Plant (LCP) Best Available Techniques Conclusions (BATC) Document.

The upgraded CCGTs will continue to run on natural gas.

An air quality modelling has been developed to assess the significance of the potential impact of NO₂ and NO_x emissions on sensitive human health and ecological receptors from a proposed upgrade of two combined cycle gas turbine (CCGT) sources on the InterGen Site. The Base Scenario (current operations) and the Future Scenario (with upgraded CCGTs) were assessed.

For human health impacts the upgrade to the CCGTs (Source A1+A2) resulted in no significant effects based on the maximum offsite receptor. When the wider site combustion emitters are considered in addition to the CCGTs, the model results indicate the potential for an exceedance of the NO2 short term AQS. This modelled outcome only arises when the emergency generator and fire pump are being used, for example during testing. These sources are unlikely to all operate concurrently and the diesel generator and fire pump engine will only be operated for a small number of hours per year, and therefore in practice, the NO2 1 hour standard is not likely to be exceeded.

Impacts on nearby sensitive ecological receptors for ambient NOx were insignificant when considering Source A1+A2 annual mean at all designated sites. Holehaven Creek SSSI shows a potentially significant impact against the 24-hour standard for these emitters for both base and future scenarios, however with lower predicted contributions for the future scenario.

When considering all sources together there is one modelled potentially significant impact at Holehaven Creek SSSI against the annual mean standard and modelled potentially significant impacts at four designated sites (with Holehaven Creek being the most impacted) against the 24-hour standard. In all cases the future scenario predicted contributions are less than those



from the base scenario and as such the future scenario is predicted to represent an improvement. Moreover, all sources are unlikely to all operate concurrently as the emergency diesel generator and fire pump engine will only operate during emergencies, and for testing a few hours a year.

This air quality impact assessment has been prepared by Environmental Resources Management Limited (ERM) on behalf of InterGen. The supporting information document is based on information provided by InterGen, publicly available environmental data and results of air quality dispersion modelling undertaken by ERM.



1. INTRODUCTION

1.1 BACKGROUND

Coryton Energy Company Limited (InterGen) operates the Coryton Power Station (the 'Site'), under an existing permit (EPR/EP3833LY/V003) dated the 10th March 2020. The Site is located within a heavy industrial area at Standford-le-Hope, Coryton, Essex, SS17 9GN, adjacent to the former Coryton Refinery.

The Site is currently permitted as a combined cycle gas turbine (CCGT) power plant, comprising two gas turbines with a gross thermal input of 702 MW each. Other combustion plant operated on the installation are two gas fired auxiliary boilers (4 MWth each), a gas oil fired emergency generator (2 MWth) and a gas oil fired firewater pump (0.56 MWth).

InterGen is proposing to upgrade the two CCGTs which will involve the CCGTs being taken offline for refurbishment works, once work is complete, they will be reinstated and recommissioned. After the upgrades, there will be an uplift of 84 MWth to the power input of the Site; each CCGT will be 744 MWth. The proposed upgrade works to the CCGTs will require a variation to the Site's current EP.

The air quality impact assessment (AQIA) considers the changes in emissions from the current to future designs including the change in emissions arising from the use of upgraded CCGTs, the higher operational capacity and changes to flue gas composition and exit characteristics resulting from the upgrades. The AQIA also considers emissions from all combustion plants on site, comprising two boilers and a fire pump, as well as the two CCGTs. It aims to evaluate the significance of the potential combustion gases from the burning of natural gas on the ambient air quality. The pollutant of interest is oxides of nitrogen (NO_x) in relation to impacts on human health and ecological habitats.

Two scenarios were modelled using the ADMS to assess the potential emissions of NO_x on the ambient air quality from the Site's operation. The two scenarios are described below:

- Base Scenario: assessment of the currently permitted Site; and
- Future Scenario: assessment of the future proposed permitted Site design including uprated units.

The significance of the potential impacts of NO_x for both of these Scenarios was assessed by comparison against the EA criteria outlined in **Section 2**.

Figure 1.1 shows the site boundary and emission points.

1.2 POLLUTANTS ASSESSED

This AQIA provides a detailed assessment of the potential impacts to local human health and ecological receptors resulting from NOx emissions from the Site.

Sulphur Dioxide (SO₂) is not assessed as natural gas in the UK contains less than 50 mg/m³ of sulphur (Gas Safety (Management) Regulations 1996)². Therefore, upon combustion, sulphur dioxide emissions are negligible. This is reflected in the Large Combustion Plants (LCP) Best

² UK Government 1996, Gas Safety (Management) Regulations 1996. https://www.legislation.gov.uk/uksi/1996/551/contents



Available Technique Reference Document $(BREF)^3$ which does not set emission limits for SO_2 when combusting natural gas as a fuel.

Particulate matter (PM) emissions from the combustion of natural gas are also negligible. As stated in the LCP BREF page 547 "Dust or particulate matter emissions from combustion plants burning natural gas are not an environmental concern under normal operation and controlled combustion conditions", and the BREF does not set emissions limits for gas turbines burning natural gas because of emissions being insignificant.

Finally, carbon monoxide (CO) emissions from a correctly tuned gas turbine may be considered negligible. Gas turbines are operated in lean conditions⁴ where there is more air introduced into the turbine than is required for the quantity of fuel burned. This is reflected in the LCP BREF that states on page 783: "In order to prevent or reduce CO emissions to air from the combustion of natural gas, Best Available Technique (BAT) is to ensure optimised combustion". Furthermore, the LCP BREF does not provide BAT-AELs for CO, rather, it provides an indication of the yearly average CO emission levels for each type of existing combustion plant operated \geq 1,500 hours per year. The existing CCGTs at the Site operate for < 1,500 hours per year, for which the LCP BREF provides no indicative CO emission levels to assess against.

InterGen currently operates and will continue to operate the Site's CCGTs in line with the BAT requirements. As such, combustion is maintained "near complete" meaning that CO emissions are negligible and are not assessed in detail by this AQIA.

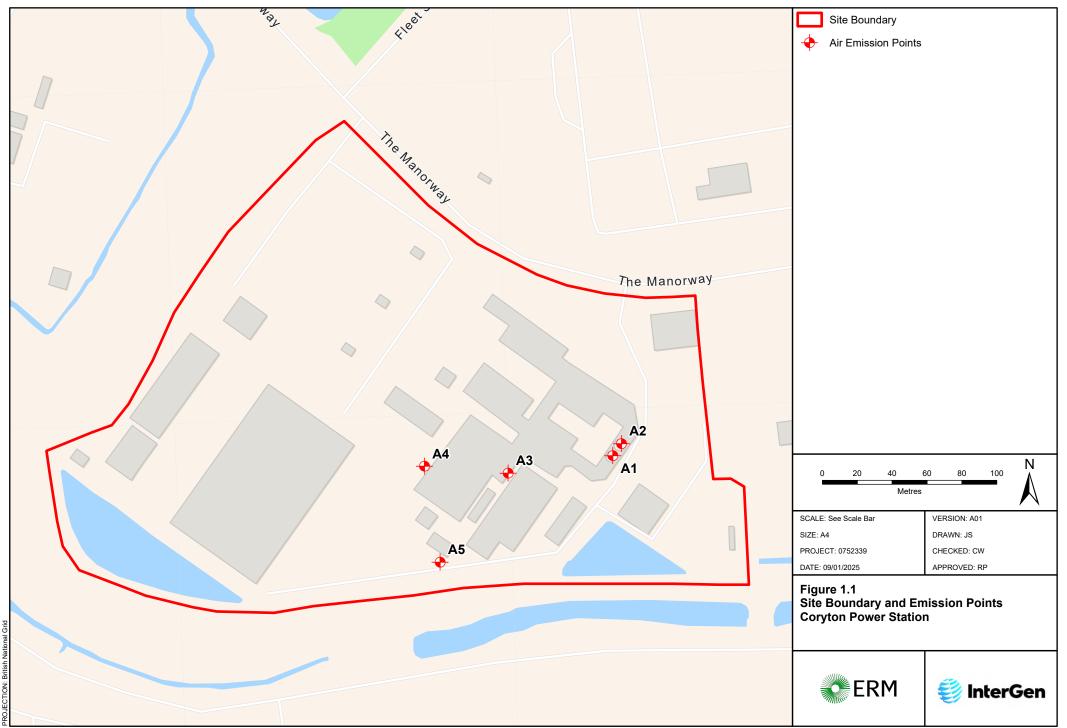
https://eippcb.jrc.ec.europa.eu/reference/large-combustion-plants-0

⁴ GE Power Systems. Gas Turbine Emissions and Control.

https://www.gevernova.com/content/dam/gepower-new/global/en_US/downloads/gas-newsite/resources/reference/ger-4211-gas-turbine-emissions-and-control.pdf



³ European Commission 2017. Large Combustion Plants BREF.



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2. LEGAL FRAMEWORK

2.1 AIR QUALITY STANDARDS

The protection of sensitive human receptors is regulated through the following:

- Air Quality Standards imposed by The Air Quality Standards Regulations 2010 (as amended)⁵ transposed from EU standards⁶; and
- Environmental Assessment Levels (EALs) set out by the EA⁷.

Collectively these are referred to as Air Quality Standards (AQS). This assessment addresses the potential emissions of NO_x and by association NO_2 from the current and proposed future operations. The statutory criteria of relevance for this assessment are set out in **Table 2.1**.

TABLE 2.1 APPLICABLE AIR QUALITY STANDARDS FOR HUMAN HEALTH

Applicability ^a	Pollutant	Averaging Period	Assessment Criterion (µg/m³)	Percentile
Sensitive Human Receptor	NO ₂	1-hour mean, not to be exceeded more than 18 times per year	200	99.79 th
		Annual mean	40	N/A

2.2 SENSITIVE ECOLOGICAL RECEPTORS

Following EA guidance, impacts at habitats within up to 10 km from the emissions source have been modelled. Impacts have been modelled at the following sites within 10 km of the emissions source:

- Special Areas of Conservation (SACs) and candidate SACs designated under the EC Habitats Directive;
- Special Protection Areas (SPAs) and potential SPAs designated under the EC Birds Directive;
- Sites of Special Scientific Interest (SSSI) established by the 1981 Wildlife and Countryside Act;
- Ramsar Sites (Ramsar); and
- Local Wildlife Sites (LWS)

The protection of sensitive ecological receptors is regulated through the following:

- AQS imposed by The Air Quality Standards Regulations 2010 (as amended) transposed from EU standards;
- Targets for protected conservation areas set out by the Environment Agency; and
- Site-specific Critical Loads set out on the Air Pollution Information Service (APIS) website⁸.

⁶ European Union Air Quality Standards. Available online at: <u>http://ec.europa.eu/environment/air/quality/standards.htm</u>

⁸ UK Air Pollution Information System. Available online at: <u>www.apis.ac.uk</u>



⁵ The Air Quality Standards Regulations 2010 Statutory Instrument 2008/301. Available online at: <u>http://www.legislation.gov.uk/uksi/2010/1001/contents/made</u>

⁷ <u>https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit</u>

Those relating to ambient air are referred to as Critical Levels and those relating to deposition are referred to as Critical Loads. The Critical Levels (CLs) of relevance for this assessment are set out in **Table 2.2**. As the Critical Loads are site specific, these are set out in the detailed results presented in **Table 4.3**.

TABLE 2.2 APPLICABLE CRITICAL LEVELS

Applicability ^a	Pollutant	Averaging Period	Assessment Criterion (µg/m³)	Percentile
Sensitive Ecological Receptor	NOx	24-hour mean	200 a	N/A
		Annual mean	30	N/A

^a The EA H1 guidance for air emissions risk assessments for environmental permits advises that for detailed assessments where ozone is below the AOT40 critical level and sulphur dioxide is below the lower critical level of 10 μ g/m³, a higher AQS of 200 μ g/m³ should be used compared to the recommended 75 μ g/m³.

2.3 SIGNIFICANCE OF IMPACT

The significance of the potential emissions of NO_x from the Site's operation are assessed by comparison against applicable standards on the basis of the:

- Process Contribution (PC); and
- Predicted Environmental Concentration (PEC), the PEC being the Process Contribution (PC) added to the ambient baseline.

The EA⁹ criteria for significance of the potential impact at sensitive human and ecological receptors are presented in **Table 2.3**.

TABLE 2.3 SIGNIFICANCE CRITERIA FOR POTENTIAL IMPACTS

Applicability	PC, as % of AQS or CL	PEC, as % of AQS or CL	Significance			
Sensitive Human Receptor						
Short-term Impact						
Any sensitive human receptor	<10%	-	Insignificant			
	>10%	-	Potentially Significant			
Long-term Impact	'					
Any sensitive human	<1%	-	Insignificant			
receptor	>1% AND	<70%	Potentially Significant			
	>1% AND	>70%	Potentially Significant			
Sensitive Ecological Receptor						
Short-term Impact						
	<10%	-	Insignificant			

⁹ Environment Agency, last updated December 2023, Air emissions risk assessment for your environmental permit, <u>https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit</u>



Applicability	PC, as % of A	QS or CL	PEC, as % of AQS or C	- Significance
Ramsar, Special Area of Conservation (SAC), Special Protection Area (SPA) or Site of Special Scientific Interest (SSSI)	>10%		-	Potentially Significant
Ancient Woodland	<100%		-	Insignificant
(AW), Local Wildlife Site (LWS), Local Nature Reserve (LNR) or National Nature Reserve (NNR)	>100%		-	Potentially Significant
Long-term Impact				
Ramsar, SAC, SPA or	<1%		-	Insignificant
SSSI	>1%	AND	<70%	Insignificant
	>1%	AND	>70%	Potentially Significant
AW, LWS, LNR or	<100%		-	Insignificant
NNR	>100%		-	Potentially Significant



3. AIR QUALITY BACKGROUND CONCENTRATIONS

Thurrock Council has declared sixteen Air Quality Management Areas (AQMA) related to breaches of the NO₂ annual mean AQS¹⁰. The nearest AQMA to the Project Site is the Rochford AQMA located in Rochford District Council 9.3 km northeast.

3.1 DEFRA MAPPING AND MONITORING DATA

The baseline air quality information was reviewed from background maps¹¹ and local monitoring reports for NO_x and NO₂ (**Table 3.1**). The DEFRA mapping was determined to be a more representative background due to the location of the local monitoring site however both sets of values are comparable.

Source	Pollutants Monitored	Baseline Value (µg/m³)	Period
DEFRA Mapping (2021)	NO ₂	15.5	Annual Mean (2021)
	NO _x	21.5	Annual Mean (2021)
Local	NO ₂	16.8	Annual Mean (2024)
Monitoring Site (Stanford- le-hope Roadside) (2024)	NOx	23.2	Annual Mean (2024)

TABLE 3.1 BASELINE AIR QUALITY FROM DEFRA/LOCAL MONITORING SITES

3.2 OZONE (AOT40) AND SO₂

The 24-hourly 200 μ g/m³ standard for NO_x on designated environmental sites is justified by the levels of ozone and SO₂ in the local area as outlined in **Section 2.1**. Ozone is not measured in the immediate vicinity of the Site. The Thurrock monitoring station located in Grays approximately 13.6 km southwest of the Site was used to obtain background ozone and SO₂ as this monitoring location is considered the most representative of the Site and the closest.

¹⁰ Thurrock Council, 2024 Air Quality Management Areas. <u>https://www.thurrock.gov.uk/air-quality/air-quality-management-areas</u>. Accessed 24/01/2025
 ¹¹ DEFRA 2024, Background Mapping data for local authorities – 2021. <u>https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2021</u>. Accessed 24/01/2025



TABLE 3.2 BACKGROUND OZONE AND SO2

Source	Pollutants Monitored	Threshold	Monitored Baseline	Notes
Thurrock (UKA00272) ¹²	Ozone	6,000 μg/m ³	4,517 μg/m ³ , as the AOT40	AOT40 accumulated hourly value (01 May – 31 July 2024, 08:00:20:00)
	SO ₂	10 µg/m³	2.1 µg/m³	Annual Mean (2024)

¹² Defra 2024, Site Information for Thurrock (UKA002720, <u>https://uk-air.defra.gov.uk/networks/site-info?site_id=THUR</u> Accessed: 25/01/25



4. ASSESSMENT METHODOLOGY

4.1 MODEL PARAMETERS AND INPUTS

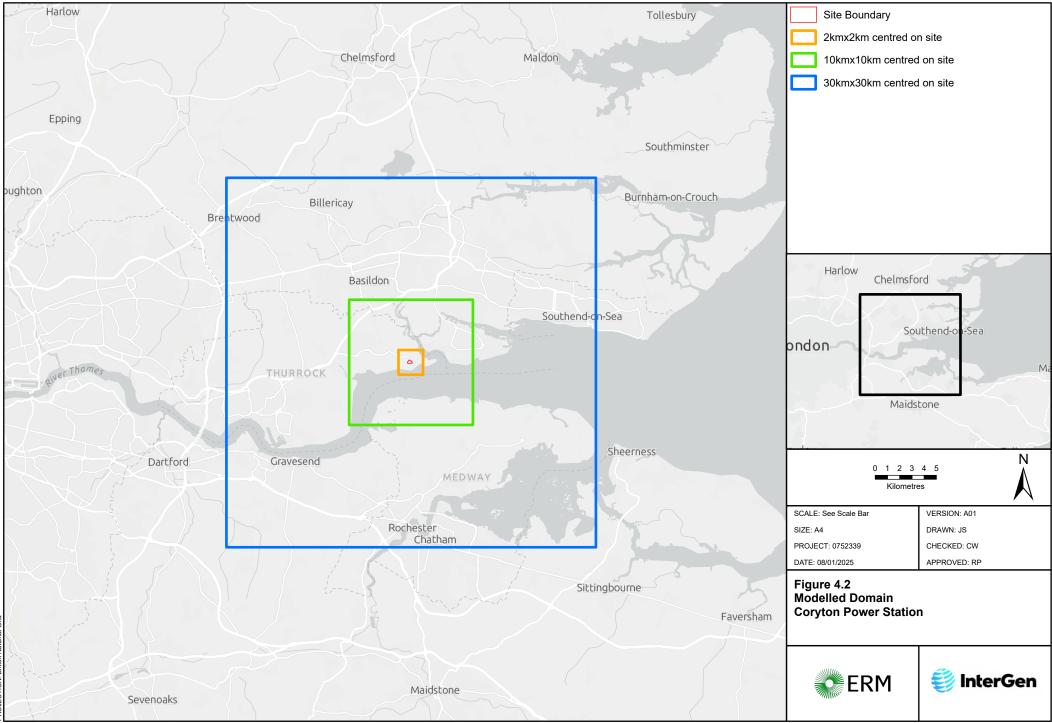
The key elements of the methodology used for carrying out the air dispersion modelling study are set out in **Table 4.1**.

TABLE 4.1 AIR DISPERSION MODEL METHODOLOGY AND PARAMETERS

Parameter	Approach	Notes
Dispersion model	ADMS	
Number of sources	5	See Figure 1.1 for locations of the modelled sources.
Model domain	30 km x 30 km	Radius of 15 km from the centre of the Site. See Figure 4.1 for the modelled domain.
Human receptor grid	Multi-tier grid 20 m up to 1 km from the centre of the Site; 50 m between 2 km and 5 km from the centre of the Site; 100 m between 10 km to 15 km from the centre of the Site	The maximum modelled stack height is 59.4 m above ground level. See Section 4.3 for details.
Buildings	9 buildings with heights range from 8 m to 35 m.	Buildings that are greater than one third of the stack height, within five stack heights of the stack, are included.
Terrain	Flat	There are no sustained gradients of >1:10 in the vicinity of the Site, and therefore terrain was not required.
Surface characteristics	Surface Roughness Site: 0.3 m representative of agricultural areas with some taller vegetation Met Station: 0.1 m representative of root crop areas	Based on mapping and aerial imagery.
Meteorological data	Southend Airport, 5 years (2019-2023)	Hour-sequential data. Wind roses are presented in Figure 4.2 .
		2023 was identified as the year with the highest annual mean NO_x impact, and this was used for the subsequent analysis.
NO _x to NO ₂ conversion ratio	Short-term concentrations: <500 m from source 15% >500 m from source 35% Long-term concentrations: 70%	The Environment Agency ¹³ states that a short- term conversion ratio of 15% is reasonable within 500 m of a source. For distances of >500 m ratios are taken from other Environment Agency guidance ¹⁴ .

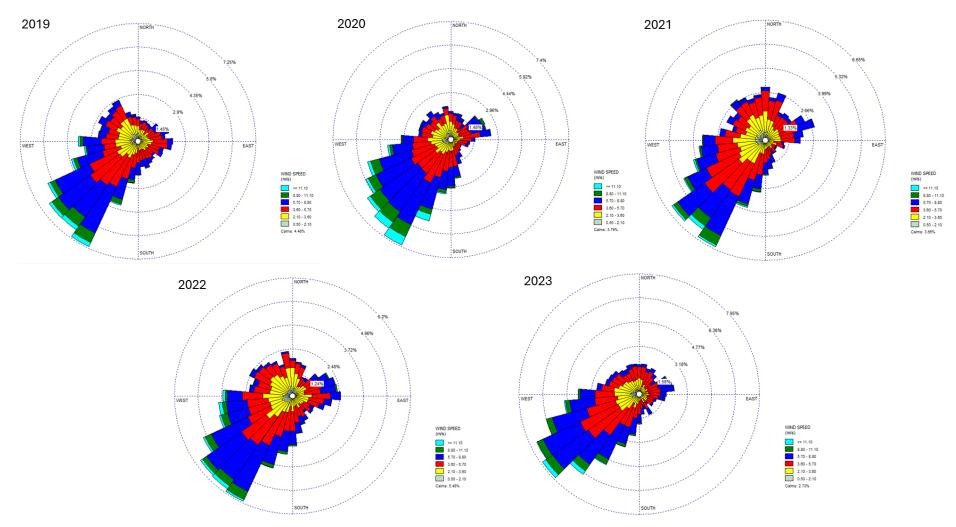
 ¹³ Environment Agency AQMAU, 2016, Diesel generator short term NO₂ impact assessment, <u>https://consult.defra.gov.uk/airquality/medium-combustion-plant-and-controls-on-generators/supporting_documents/Generator%20EA%20air%20dispersion%20modelling%20report.pdf</u>
 ¹⁴ Environment Agency, 2007, Review of methods for NO to NO₂ conversion in plumes at short ranges, <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/2909</u> 85/scho0907bnhi-e-e.pdf

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FIGURE 4.2 WIND ROSE DATA FROM SOUTHEND AIRPORT (2019 - 2023)





4.2 EMISSION PARAMETERS

Two scenarios were modelled using the ADMS to assess the potential emissions of NO_x on the ambient air quality from the Site's operation. The Two scenarios are described below, and the emission parameters used in this assessment are presented in **Table 4.2**.

- Base Scenario: assessment of the currently permitted Site; and
- Future Scenario: assessment of the future proposed permitted Site design including uprated units.



TABLE 4.2 MODELLED EMISSION PARAMETERS

Parameter	Source A1	Source A2	Source A3	Source A4	Source A5
Combustion Source	ССБТ	CCGT	Gas Fired Boilers	Emergency Diesel Generator	Fire Pump Generator
Number of flues	1 1		2 ^b	1	1
Operating hours per a year	894	979	8,064	118	31
Stack Orientation	Vertical	· ·	·	·	· · ·
Stack Height above ground level (m)	59.35	59.35	24	3.11	6.88
Flue Diameter (m)	6.06	6.06	0.51	0.25	0.15
Emission Velocity (m/s, Base Scenario)	18.89	18.89	13.17	225.9	119.7
Emission Velocity (m/s, Future Scenario)	21.84	21.84	13.17	225.9	119.7
Normalised Flow Rate (m ³ /s, Base Scenario)	545	545	2.69	11.09	2.12
Normalised Flow Rate (m ³ /s, Future Scenario)	629.8	629.8	2.69	11.09	2.12
Emission Temperature (°C, Base Scenario)	99.9	96.9	232	419	419
Emission Temperature (°C, Future Scenario)	91.6	91.6	232	419	419
Stack Easting and Northing	574197, 182205	574202, 182212	574137, 182195	574089, 182199	574098, 182144
NO_x Concentration (mg/m ³ , Base Scenario)	45.0	45.0	100	100	100
NO _x Concentration (mg/m ³ , Future Scenario) ^a	40.0	40.0	100	100	100
NO_x Emission (g/s, Base Scenario) ^a	24.53	24.53	0.269	3.555	0.0995
NO _x Emission (g/s, Future Scenario) ^a	25.2	25.2	0.269	3.555	0.0995

^a Concentrations were assumed the following conditions: 283.15 K, 101.3 kPa, 11% O₂, 9.6% moisture.

^b Two flues from two separate boilers emitting through a common stack.



4.3 HUMAN RECEPTORS

The potential impact of NO_x emissions from the Site's operation was assessed with reference to model grid receptors. These hypothetical receptors were identified within a 15 km radius of the centre of the Site. A map of the modelled domain is presented in **Figure 4.1**. This assessment focuses on the maximum offsite results beyond the Site boundary. The modelled maximum offsite emissions, representing the highest modelled impacts expected to occur outside the power plant' facilities, are presented in **Section 5** below.

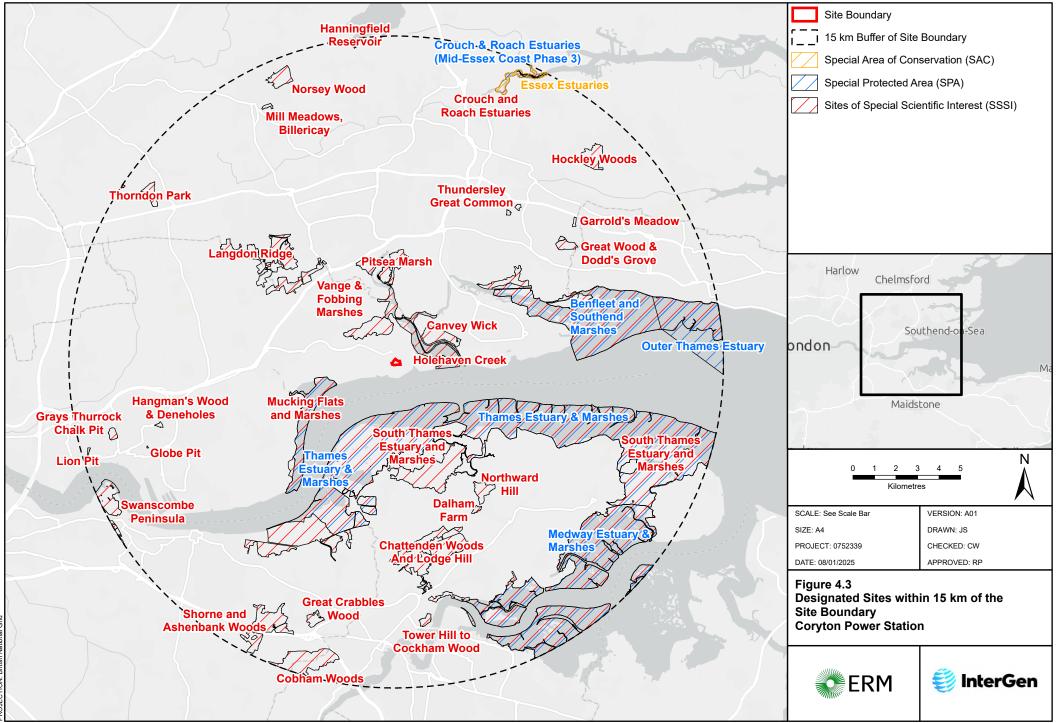
4.4 ECOLOGICAL RECEPTORS

As per EA permitting guidance¹⁵, protected conservation areas within a 15 km radius of the Site, including Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites, as well as a 2 km radius of the Site for Sites of Special Scientific Interest (SSSI), Ramsar Sites (Ramsar), Local Nature Reserves (LNR), Local Wildlife Sites (LWS) and National Nature Reserves (NNR) have been included in the ecological impact assessment. Based on the MAGIC¹⁶ map website, the following designated ecological sites have been included. The location of these ecological sites within the 15 km from the centre of the Site are shown in **Figure 4.3**.

The baseline conditions of the site-specific critical loads (CL) of the designed ecological sites are used to assess nutrient nitrogen deposition and acid deposition rates. These have been reviewed and obtained from the Air Pollution Information System (APIS¹⁷) website, consulted 20th November 2024, based on the site relevant critical loads tool. APIS is an online database detailing critical loads and background concentrations for sensitive ecological sites, developed in partnership by the UK conservation agencies and regulatory agencies and the Centre for Ecology and Hydrology. **Table 4.3** presents the applicable site-specific critical loads which were used to assess nutrient nitrogen and acid depositions in this assessment.

 ¹⁵ EA, last updated May 2024, Air emissions risk assessment for your environmental permit, https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit
 ¹⁶ Natural England, 2018, MAGIC Interactive map, https://magic.defra.gov.uk/magicmap.aspx
 ¹⁷ UK APIS, 2024, https://www.apis.ac.uk/





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Path: \\UKSPRDGISFS01\Data\London\Projects\0752339 - Project InterGen\MAP\0752339 - Project InterGen\0752339 - Project InterGen.aprx\0752339 - InterGen - Designated Sites Within 15 km - A01

TABLE 4.3 APPLICABLE CRITICAL LOADS FOR NUTRIENT AND ACID DEPOSITIONS

Ecological Site and Type	Nitrogen Deposition	Acid Deposition								
		Low Range	e (min), keq/ha/yr	High Range (max), keq/ha/yr						
	CL (kgN/ha/yr)	CL maxS	CL minN	CL maxN	CL maxS	CL minN	CL maxN			
Benfleet And Southend Marshes SPA	10 - 20	N/A ^a , not a	ssessed.							
Benfleet and Southend Marshes SSSI	10 - 20	N/A ^a , not a	ssessed.							
Canvey Wick SSSI	N/A ^a , not assessed.	N/Aª, not a	ssessed.							
Chattenden Woods and Lodge Hill SSSI	10 - 20	1.165	0.142	1.307	2.727	0.357	3.084			
Cobham Woods SSSI	15 - 20	8.559	0.142	8.701	1.296	0.142	1.438			
Crouch & Roach Estuaries (Mid-Essex Coast Phase 3) SPA	10 - 20	N/Aª, not a	ssessed.		1	1				
Crouch and Roach Estuaries SSSI	10 - 20	4	0.856	4.856	4	1.071	5.071			
Dalham Farm SSSI	N/A ^a , not assessed.	N/Aª, not a	ssessed.		1	1				
Essex Estuaries SAC	5 - 15	N/A ^a , not a	ssessed.							
Garrold's Meadow SSSI	10 - 20	4	0.856	4.856	4	0.856	4.856			



Ecological Site and Type	Nitrogen Deposition	Acid Deposition							
		Low Range	e (min), keq/ha/yr	High Rang	Range (max), keq/ha/yr				
	CL (kgN/ha/yr)	CL maxS	CL minN	CL maxN	CL maxS	CL minN	CL maxN		
Globe Pit SSSI	N/A ^a , not assessed.	N/Aª, not a	ssessed.		1	1			
Grays Thurrock Chalk Pit SSSI	N/A ^a , not assessed.	N/Aª, not a	ssessed.						
Great Crabbles Wood SSSI	15 - 20	1.203	0.142	1.345	8.48	0.142	8.622		
Great Wood & Dodd's Grove SSSI	15 - 20	1.667	0.142	2.2024	2.485	0.357	2.627		
Hangman's Wood & Deneholes SSSI	N/A ^a , not assessed.	N/Aª, not a	ssessed.		1	1			
Hanningfield Reservoir SSSI	10 - 20	4	1.071	5.071	4	1.071	5.071		
Hockley Woods SSSI	15 - 20	2.534	0.357	2.891	2.479	0.142	2.621		
Holehaven Creek SSSI	10 - 20	N/A ^a , not a	ssessed.			<u> </u>			
Langdon Ridge SSSI	10 - 15	2.532	0.357	2.889	2.539	0.357	2.896		
Lion Pit SSSI	N/A ^a , not assessed.	N/Aª, not a	ssessed.		1	1	_1		
Medway Estuary & Marshes SPA	5 - 15	0.89	0.499	1.389	4.18	0.892	4.894		



Ecological Site and Type	Nitrogen Deposition	Acid Depo	sition				
		Low Range	e (min), keq/ha/yr	High Rang	e (max), ke	q/ha/yr	
	CL (kgN/ha/yr)	CL maxS	CL minN	CL maxN	CL maxS	CL minN	CL maxN
Medway Estuary and Marshes SSSI	5 - 15	4	0.856	4.856	4	1.071	5.071
Mill Meadows Billericay SSSI	10 - 20	4	1.071	5.071	4	1.071	5.071
Mucking Flats and Marshes SSSI	10 - 20	N/Aª, not as	ssessed.		·		
Norsey Wood SSSI	15 - 20	1.707	0.142	2.064	2.577	0.357	2.934
Northward Hill SSSI	N/A ^a , not assessed.	N/Aª, not as	ssessed.		1	-	<u>.</u>
Pitsea Marsh SSSI	15 - 25	N/A ^a , not as	ssessed.				
Shorne and Ashenbank Woods SSSI	15 - 20	1.203	0.142	1.345	8.547	0.142	8.689
South Thames Estuary and Marshes SSSI	5 - 15	0.51	0.499	1.389	4.17	0.892	5.032
Swanscombe Peninsula SSSI	N/A ^a , not assessed.	N/Aª, not as	ssessed.		1	1	1
Thames Estuary & Marshes SPA	5 - 15	0.52	0.499	1.389	4.17	0.892	5.032
Thorndon Park SSSI	15 - 20	1.708	0.142	2.065	2.576	0.357	2.933
Thundersley Great Common SSSI	5 - 15	0.86	0.499	1.359	0.86	0.499	1.359



Ecological Site and Type	Nitrogen Deposition	Acid Deposition								
		Low Range	e (min), keq/ha/yr	High Rang	je (max), ke	eq/ha/yr				
	CL (kgN/ha/yr)	CL maxS	CL minN	CL maxN	CL maxS	CL minN	CL maxN			
Tower Hill to Cockham Wood SSSI	15 - 20	1.173	0.142	1.315	2.637	0.142	2.779			
Vange & Fobbing Marshes SSSI	N/A ^a , not assessed.	N/Aª, not a	ssessed.		1		1			
Benfleet and Southend Marshes Ramsar ^b	10 - 20	N/A ^a , not a	ssessed.							
Thames Estuary & Marshes Ramsar ^b	5 - 15	0.52	0.499	1.389	4.17	0.892	5.032			
West Canvey Marshes LWS ^b	N/A ^a , not assessed.	N/Aª, not a	ssessed.		1					
Northwick Farm & Seawall LWS ^b	N/A ^a , not assessed.	N/Aª, not a	ssessed.							
Corringham & Fobbing Marshes LWS ^b	N/A ^a , not assessed.	N/Aª, not a	ssessed.							

Data accessed from APIS website dated 20/11/2024.

^a N/A Site-specific critical loads for nitrogen and acidity information were not available from the APIS website for these sites on this date. Ecological impacts of nutrient nitrogen and acid depositions at these sites were therefore not assessed.

^b Critical load information for Ramsar and LWS sites is not available from APIS therefore assumptions were made where possible (i.e. if there was a related SAC, SPA or SSSI for a specific site). Benfleet and Southend Marshes and Thames Estuary & Marshes Ramsar sites were assessed using their related designated site loads.



4.5 SENSITIVITY ANALYSIS

The sensitivity analysis of the dispersion model study is based on:

- Meteorological variation: Meteorological data recorded at Southend Airport from 2019-2023 was used for this assessment, it is the closest relevant station and provides local meteorology characteristics to inform the air quality dispersion model. The data for the year 2023 resulted in the highest modelled concentrations, so the impact assessment was carried out on model results for that year to be conservative.
- Effect of building downwash: Nine buildings immediate within the Site have been included in the dispersion model as per the site layout. The proposed air quality dispersion model is considered robust and not prone to under-estimating the impacts.



5. MODELLED IMPACTS

The assessment considered the potential impact of NO_x emissions from the Site's operation in relation to human health and ecological habitats. Two scenarios were modelled using the ADMS. The modelled results were compared against the statutory AQS presented in **Table 2.1** and **Table 2.2**. The EA criteria outlined in **Table 2.3** were used to determine the significance of the modelled results. The significance of the potential impacts are shown for the Base Scenario (current operations) and Future Scenario (future operations). The delta between the two scenarios is also shown.

5.1 HUMAN HEALTH IMPACTS

The detailed modelling aims to identify whether there could be potential exceedances of the statutory AQS for the 1-hour mean NO₂, i.e. PEC > 200 μ g/m³. The modelled maximum offsite PCs and PECs for the hourly and the annual mean NO₂ at the grid receptors for each of the sources for both the Base and Future Scenarios are presented in **Table 5.1**Table 5.1 and **Table 5.2**Table 5.2. The results in these tables represent the highest modelled emissions, therefore the predicted contributions at the other potential receptors are lower. For this assessment, the baseline concentration for long-term NO₂ at sensitive human receptors is 15.5 μ g/m³, based on the 2021 DEFRA background mapping data¹⁸ as shown in Section 3. For short-term averages, it is multiplied by two to 31.1 μ g/m³.

¹⁸ DEFRA, 2021, Background Mapping data for local authorities -2021, https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2021



TABLE 5.1 MODELLED MAXIMUM OFFSITE CONCENTRATIONS OF 1-HOUR MEAN NO₂, 99.79TH PERCENTILE (µg/m³)

	AQS (µg/m³)	Background (µg/m³)	Scenario	Max PC (µg/m ³)	PC as % of AQS	PEC (µg/m³)	PEC as % of AQS	Significance	Delta (µg/m³)
Source A1 (CCGT)	200	31.1	Base	14.4	7.2%	45.4	23%	Insignificant	-2.50
			Future	11.9	5.9%	42.9	21%	Insignificant	
Source A2 (CCGT)	200	31.1	Base	14.1	7.1%	45.2	23%	Insignificant	-2.29
			Future	11.8	5.9%	42.9	21%	Insignificant	
Source A1+A2 (CCGTs)	200	31.1	Base	28.6	14.3%	59.6	30%	Potentially Significant	-4.88
(CCGIS)		Future	23.7	11.9%	54.8	27%	Potentially Significant	-	
All Sources Sources A1 (CCGT), A2	200	31.1	Base	494	246.8%	524.6	262%	Potentially Significant	0.00
(CCGT), A2 (CCGT), A3 (Gas Fired Boilers), A4 (Emergency Diesel Generator) and A5 (Fire Pump)			Future	494	246.8%	524.6	262%	Potentially Significant	



The modelled results indicate that the hourly NO₂ AQS of 200 μ g/m³ is not predicted to be exceeded as a consequence of the Source A1, Source A2 and Source A1+A2 together Site operations. The modelled potential impacts of NO_x emissions from these sources do not exceed 10% of the PC and are therefore considered insignificant.

When the wider site combustion emitters are considered in addition to the CCGTs, the model results indicate the potential for an exceedance of the AQS. This modelled outcome only arises when the emergency generator and fire pump are being used, for example during testing. These sources are unlikely to all operate concurrently and the diesel generator and fire pump engine will only be operated for a small number of hours per year, and therefore in practice, the NO₂ 1 hour standard is not likely to be exceeded.

A contour plot for the 1-hour mean NO₂ 99.79th percentile PCs of the Future Scenario relating to Source A1+A2 together is presented in **Table 5.2**.

	AQS (µg/m³)	Background (µg/m³)	Scenario	Max PC (µg/m³)	PC as % of AQS	PEC (µg/m³)	PEC as % of AQS	Significance	Delta (µg/m³)
Source A1 (CCGT)	40	15.5	Base	0.0902	0.2%	15.6	39%	Insignificant	-0.00775
			Future	0.0825	0.2%	15.6	39%	Insignificant	
Source A2 (CCGT)	40	15.5	Base	0.101	0.3%	15.6	39%	Insignificant	-0.0105
			Future	0.0905	0.2%	15.6	39%	Insignificant	
Source A1+A2	40	15.5	Base	0.191	0.5%	15.7	39%	Insignificant	-0.0182
(CCGTs)			Future	0.173	0.4%	15.7	39%	Insignificant	
All Sources	40	15.5	Base	6.19	15.5%	21.7	54%	Potentially Significant	-0.0113

TABLE 5.2 MODELLED MAXIMUM OFFSITE CONCENTRATIONS OF ANNUAL MEAN NO2 (μ g/m³)



	AQS (µg/m³)	Background (µg/m ³)	Scenario	Max PC (µg/m³)	PC as % of AQS	PEC (µg/m³)	PEC as % of AQS	Significance	Delta (µg/m³)
Sources A1 (CCGT), A2 (CCGT), A3 (Gas Fired Boilers), A4 (Emergency Diesel Generator) and A5 (Fire Pump)			Future	6.18	15.5%	21.7	54%	Potentially Significant	

The modelled results indicate that the annual mean NO_2 AQS of 40 μ g/m³ are not predicted to be exceeded as a consequence of the Source A1, Source A2 and Source A1+A2 together Site operations. The modelled potential impacts of NO_x emissions from these sources do need exceed 1% of the PC and are therefore considered insignificant.

When the wider site combustion emitters are considered in addition to the CCGTs, the model results indicate the potential for a potentially significant impact as the PC is greater than 1% and the PEC is less than 70% when all of the sources operate concurrently. However, in practice the diesel generator and fire pump engine are operated for a small number of hours per year and the impacts of these sources will be minimal in the context of the annual mean NO₂. As such, the impacts will be insignificant in practice.

A contour plot for the annual mean NO₂ PCs of the Future Scenario relating to Source A1+A2 together is presented in **Appendix A**.



5.2 ECOLOGICAL IMPACTS

The potential impact of ambient NO_x , and nutrient nitrogen and acid deposition resulting from the Site's operation on the surrounding designated ecological sites has been assessed for both Source A1+A2 together and all sources together for the Base scenario and Future Scenario. For each combination of sources and scenario the modelled results were compared against the Critical Levels (outlined in **Table 2.1**) to evaluate the ambient NO_x levels, and were compared against the site-specific Critical Loads (presented in **Table 4.3**) to evaluate the nutrient nitrogen and acid deposition.

5.2.1 AMBIENT NO_X EMISSIONS

The modelled PCs and PECs for NO_x at the designated ecological site with the highest predicted potential impact, Holehaven Creek SSSI, are presented in **Table 5.3.** Full results for all designated ecological sites are shown in **Appendix B**) and show the following:

- For Sources A1+A2 together:
 - The 24-hour mean PC is only modelled to be >10% of the 24-hour mean Critical Levels at one of the designated sites (Holehaven SSSI) for both the Base and the Future Scenarios. The predicted contributions from the Future Scenario are less than those for the Base Scenario for all sites and therefore the Future Scenario has a predicted an improvement at all designated sites;
 - The annual mean PC is not modelled to be >1% of the annual mean Critical Levels at any identified sites for all scenarios; and
 - The modelled potential impacts on the ambient NO_x levels from Source A1+A2 together are therefore considered insignificant at all receptors.
- For all sources together (A1, A2, A3, A4 and A5):
 - The 24-hour mean PC is modelled to be >10% of the 24-hour mean Critical Levels at five of the assessed designated sites (Canvey Wick SSSI, Holehaven Creek SSSI, Pitsea Marsh SSSI, South Thames Estuary and Marshes SSSI and Thames Estuary & Marshes Ramsar) for both the Base and the Future Scenarios. However, in practice the diesel generator and fire pump engine will only operate for a small number of hours and therefore the potential for impacts from these two sources is expected to be minimal. The predicted contributions from the Future Scenario are less than those for the Base Scenario for all sites and therefore the Future Scenario has predicted an improvement at all designated sites;
 - The annual mean PC is modelled to be >1% of the annual mean Critical Levels at only one designated site (Holehaven Creek SSSI) for both Base and the Future Scenarios. This site shows a potential significant impact. Again, in practice the diesel generator and fire pump engine will operate for a small number of hours and in practice, the potential for impacts from these two sources will be minimal. All other sites show an insignificant impact for all scenarios; and
 - The modelled potential impacts on the ambient NO_x levels from all sources together are therefore considered insignificant at most receptors other than at Holehaven Creek for annual mean PC (which as mentioned above is modelled to be >1% of the annual mean Critical Level) and at five designated sites for the 24-hour standard.



• The difference in significance for the ambient results on designated ecological sites between all sources together and Source A1+A2 indicates that it is not the CCGT sources that are contributing the main impacts to the designated sites. The greater contribution is from the emergency generator and fire pump and as discussed above it is anticipated that these sources are unlikely to operate concurrently with the CCGTs in practice and will only be operated for a small number of hours per year.



TABLE 5.3 MODELLED MAXIMUM AMBIENT NO_X CONCENTRATIONS (µg/m³) – WORST CASE RECEPTORS

Ecological Site	CL	Baseline	Base PC	Base PC as % of Critical Level	Base PEC	Base PEC as % of Critical Level	Significance	Future PC	Future PC as % of Critical Level	Future PEC	Future PEC as % of Critical Level	Significance	Delta
Source A1+A2	2												
Holehaven Creek SSSI	30 (Annual)	28.0	0.205	0.68%	28.2	94.1%	Insignificant	0.191	0.64%	28.2	94.1%	Insignificant	-0.0138
Holehaven Creek SSSI	200 (24- hour)	56.1	26.5	13.2%	82.5	41.3%	Potentially Significant	24.6	12.3%	80.7	40.3%	Potentially Significant	-1.88
All Sources	·			·		· · ·		·	·		·	·	
Holehaven Creek SSSI	30 (Annual)	28.0	0.381	1.27%	28.4	94.7%	Potentially Significant	0.371	1.24%	28.4	94.7%	Potentially Significant	-0.0105
Holehaven Creek SSSI	200 (24- hour)	56.1	32.6	16.3%	88.6	44.3%	Potentially Significant	31.0	15.5%	87.0	43.5%	Potentially Significant	-1.64



5.2.2 NUTRIENT NITROGEN DEPOSITION

The modelled maximum nutrient nitrogen deposition rates at the identified designated ecological sites from emissions of NO_x at the Site are presented in **Appendix B**. The PC is compared with the relevant Critical Loads outlined inTable 4.3, and combined, with the relevant background concentrations.

The modelled nutrient nitrogen deposition rates arising from the Site's operation is below 1% of the critical loads at any of the identified sites both Sources A1+A2 together and all sources together. Impacts are therefore considered insignificant.

5.2.3 ACID DEPOSITION

The modelled maximum acid deposition rates at the identified designated ecological sites from emissions of NO_x at the Site are presented in **Appendix B**. The PC is compared with the relevant Critical Loads outlined in **Table 4.3**.

The modelled acidification rates arising from the Site's operation is below 1% of the critical loads at any of the identified sites for both the Base and Future scenarios for Source A1+A2 together and all sources together. Impacts are therefore considered insignificant.



6. CONCLUSION

An air quality modelling has been carried out to assess the significance of the potential impact of NO_x emissions on ambient air quality from a proposed upgrade of two CCGT sources on the InterGen Site. The Base Scenario and the Future upgraded scenario was assessed for a number of human and ecological receptors and the impacts compared against relevant UK standards.

For human health impacts the upgrade to the CCGTs (Source A1+A2) resulted in no significant effects based on the maximum offsite receptor. When the wider site combustion emitters are considered in addition to the CCGTs, the model results indicate the potential for an exceedance of the NO₂ short term AQS. This modelled outcome only arises when the emergency generator and fire pump are being used, for example during testing. These sources are unlikely to all operate concurrently and the diesel generator and fire pump engine will only be operated for a small number of hours per year, and therefore in practice, the NO₂ 1 hour standard is not likely to be exceeded.

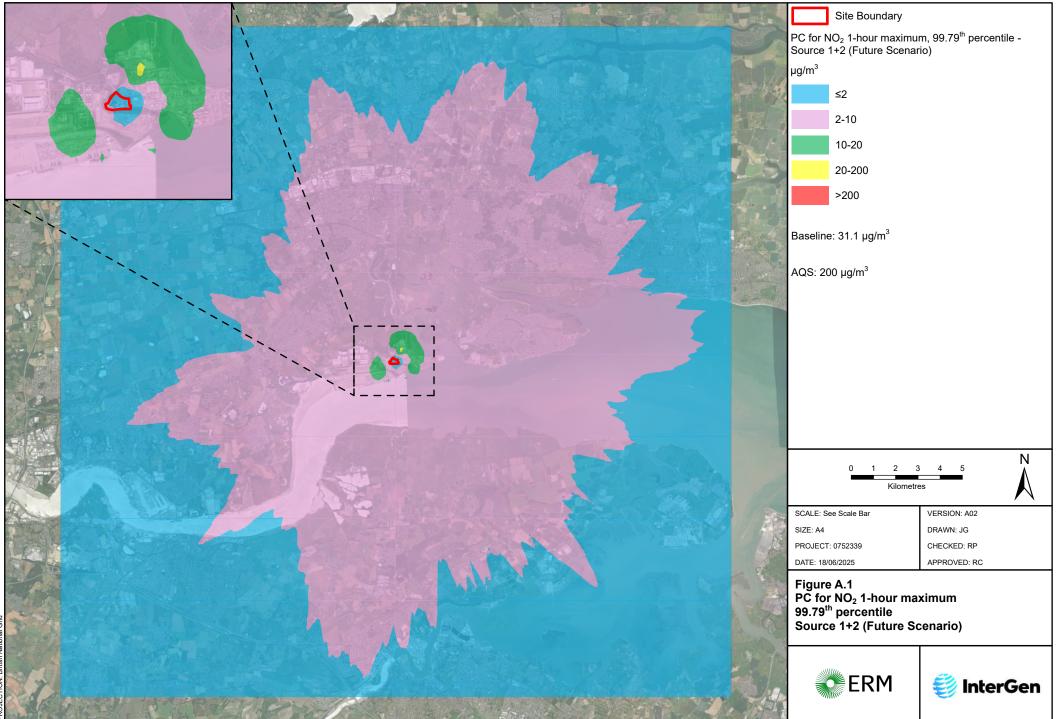
Impacts on nearby sensitive ecological receptors for ambient NO_x were insignificant when considering Source A1+A2 annual mean at all designated sites. Holehaven Creek SSSI shows a potentially significant impact against the 24-hour standard for these emitters for both base and future scenarios, however with lower predicted contributions for the future scenario.

When considering all sources together there is one modelled potentially significant impact at Holehaven Creek SSSI against the annual mean standard and modelled potentially significant impacts at five designated sites (with Holehaven Creek being the most impacted) against the 24-hour standard. In all cases the future scenario predicted contributions are less than those from the base scenario and as such the future scenario is predicted to represent an improvement. Moreover, all sources are unlikely to all operate concurrently as the emergency diesel generator and fire pump engine will only operate during emergencies, and for testing a few hours a year.



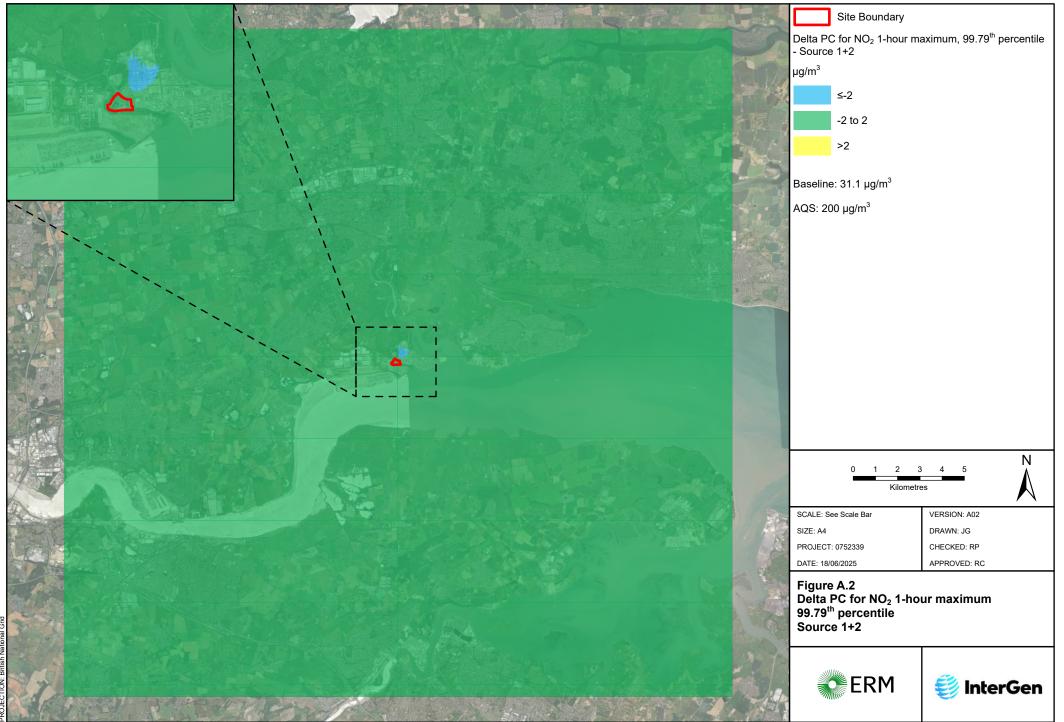


APPENDIX A CONTOUR PLOTS



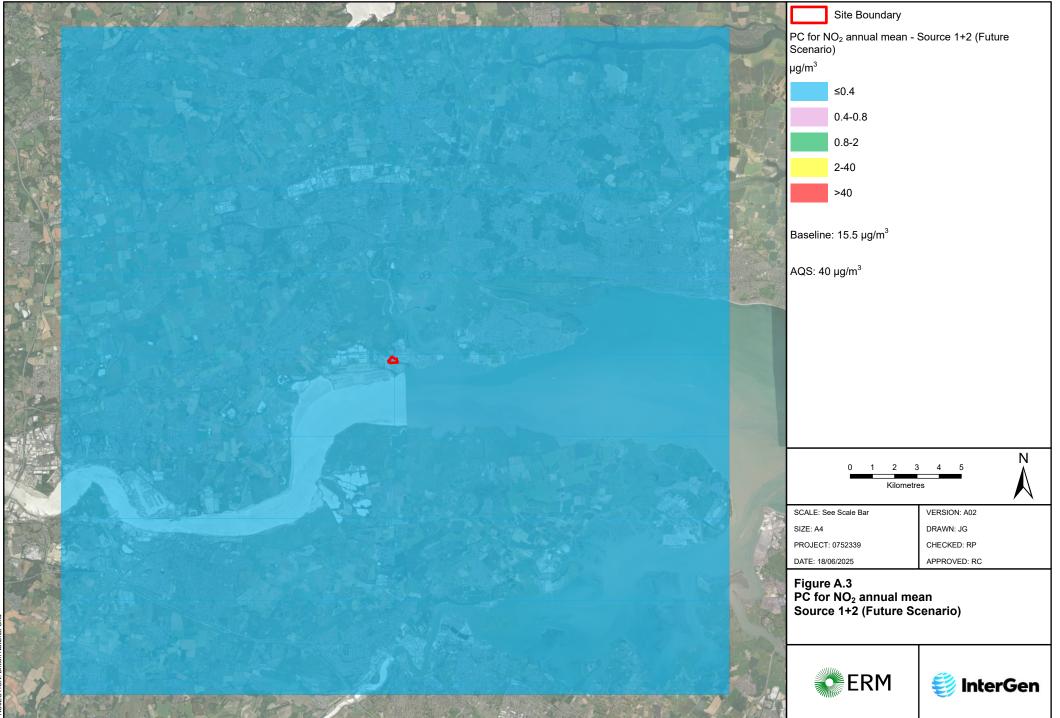
Maxar, Microsoft, Earthstar Geographics

Path: \\UKSPRDGISFS01\Data\London\Projects\0752339 - Project InterGen\MAP\0752339 - Project InterGen\0752339 - Project InterGen.aprx\0752339 - InterGen - NO2 1hr Contours - A02



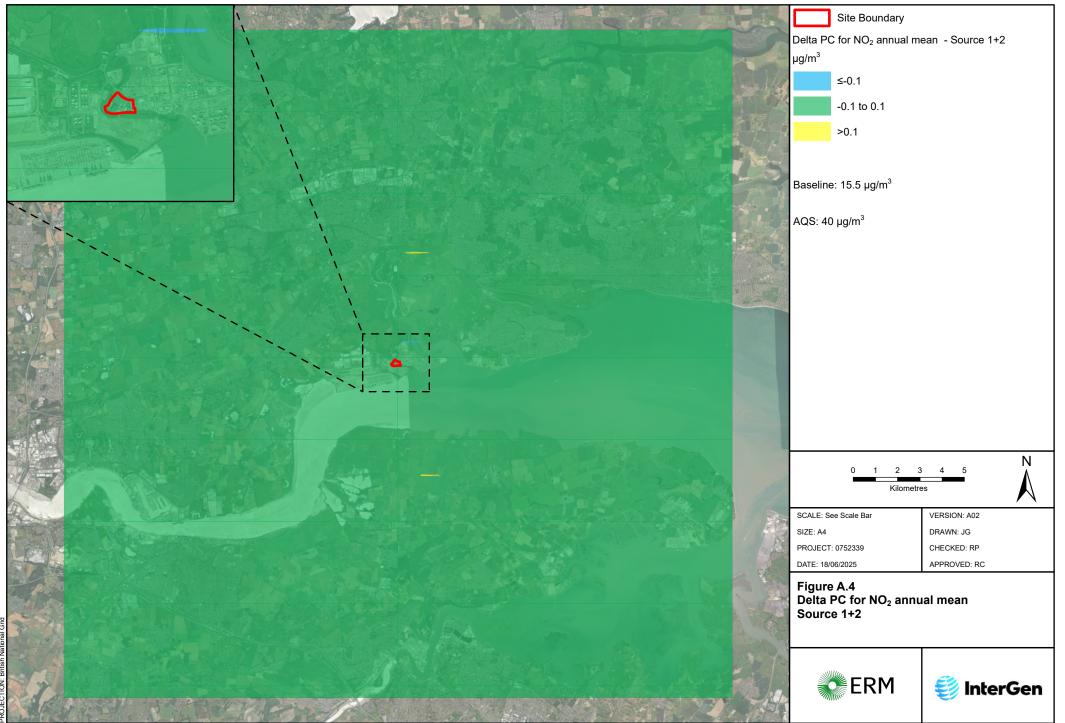
Maxar, Microsoft, Earthstar Geographics

Path: \\UKSPRDGISFS01\Data\London\Projects\0752339 - Project InterGen\MAP\0752339 - Project InterGen\0752339 - Project InterGen.aprx\0752339 - InterGen - Delta NO2 1hr Contours - A02



Earthstar Geographics

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Maxar, Microsoft, Earthstar Geographics

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APPENDIX B ECOLOGICAL TABLES

Modelled Acid Deposition (keg/ha/yr) - Source A1+A2

		CL (keq ha ⁻¹ yr ⁻¹)		Baseline (ke	q ha ^{.1} yr ^{.1})			Base PC as		Base PEC as %				Future PC as		PEC as % of		
Habitat name	Habitat type	LOW Range (Mi	n)		S baseline	N baseline	Base PC	Base N NO2	% of CL	Base PEC	of CL	Base Significance	Future PC	Future N NO2	% of CL	Future PEC	CL	Significance	Delta
Chattenden Woods and Lodge Hill SSSI	Woodland	1.165	0.142	1.307	0.17	0.88	0.008277937	0.000170	0.013%	1.050	80.3%	Insignificant	0.008145916	0.000167	0.0128%	1.050	80.3%	Insignificant	-0.0000027091
Cobham Woods SSSI	Woodland	8.559	0.142	8.701	0.19	0.77	0.009188694	0.000189	0.002%	0.960	11.0%	Insignificant	0.005984039	0.000123	0.0014%	0.960	11.0%	Insignificant	-0.0000657595
Crouch and Roach Estuaries SSSI	Woodland	4	0.856	4.856	0.14	0.87	0.033417695	0.000686	0.014%	1.011	20.8%	Insignificant	0.03301475	0.000677	0.0140%	1.011	20.8%	Insignificant	-0.0000082684
Garrold's Meadow SSSI	Grassland	4	0.856	4.856	0.17	0.88	0.026028536	0.000267	0.005%	1.050	21.6%	Insignificant	0.026142375	0.000268	0.0055%	1.050	21.6%	Insignificant	0.0000011680
Great Crabbles Wood SSSI	Woodland	1.203	0.142	1.345	0.23	1.7	0.006695591	0.000137	0.010%	1.930	143.5%	Insignificant	0.006714152	0.000138	0.0102%	1.930	143.5%	Insignificant	0.000003809
Great Wood & Dodd's Grove SSSI	Woodland	1.667	0.142	2.2024	0.21	1.68	0.029275067	0.000601	0.027%	1.891	85.8%	Insignificant	0.029305866	0.000601	0.0273%	1.891	85.8%	Insignificant	0.000006320
Hanningfield Reservoir SSSI	Woodland	4	1.071	5.071	0.15	0.93	0.008622316	0.000177	0.000%	1.080	3.8%	Insignificant	0.008461105	0.000174	0.0000%	1.080	3.8%	Insignificant	-0.0000033080
Hockley Woods SSSI	Woodland	2.534	0.357	2.891	0.22	1.72	0.019617766	0.000403	0.014%	1.940	67.1%	Insignificant	0.019768621	0.000406	0.0140%	1.940	67.1%	Insignificant	0.0000030955
Langdon Ridge SSSI	Woodland	2.532	0.357	2.889	0.229	1.76	0.016174959	0.000332	0.011%	1.989	68.9%	Insignificant	0.016082265	0.000330	0.0114%	1.989	68.9%	Insignificant	-0.0000019021
MEDWAY ESTUARY & MARSHES SPA	Grassland	0.89	0.499	1.389	0.16	0.84	0.026294784	0.000270	0.019%	1.000	72.0%	Insignificant	0.00707874	0.000073	0.0052%	1.000	72.0%	Insignificant	-0.0001971566
Medway Estuary and Marshes SSSI	Grassland	4	0.856	4.856	0.183	0.92	0.026294784	0.000270	0.006%	1.103	22.7%	Insignificant	0.00707874	0.000073	0.0015%	1.103	22.7%	Insignificant	-0.0001971566
Mill Meadows Billericay SSSI	Grassland	4	1.071	5.071	0.18	0.94	0.003689335	0.000038	0.000%	1.120	4.5%	Insignificant	0.003713457	0.000038	0.0000%	1.120	4.5%	Insignificant	0.000002475
Norsey Wood SSSI	Woodland	1.707	0.142	2.064	0.229	1.807	0.00352248	0.000072	0.004%	2.036	98.6%	Insignificant	0.003577519	0.000073	0.0036%	2.036	98.6%	Insignificant	0.0000011294
Shorne and Ashenbank Woods SSSI	Woodland	1.203	0.142	1.345	0.217	1.71	0.006436029	0.000132	0.010%	1.927	143.3%	Insignificant	0.00644243	0.000132	0.0098%	1.927	143.3%	Insignificant	0.000001314
South Thames Estuary and Marshes SSSI	Grassland	0.51	0.499	1.389	0.179	0.895	0.119912201	0.001230	0.089%	1.075	77.4%	Insignificant	0.113241167	0.001162	0.0836%	1.075	77.4%	Insignificant	-0.0000684448
THAMES ESTUARY & MARSHES SPA	Grassland	0.52	0.499	1.389	0.14	0.81	0.040350312	0.000414	0.030%	0.950	68.4%	Insignificant	0.038254323	0.000392	0.0283%	0.950	68.4%	Insignificant	-0.0000215048
Thorndon Park SSSI	Grassland	1.708	0.142	2.065	0.196	1.76	0.003359709	0.000034	0.002%	1.956	94.7%	Insignificant	0.003340828	0.000034	0.0017%	1.956	94.7%	Insignificant	-0.0000001937
Thundersley Great Common SSSI	Grassland	0.86	0.499	1.359	0.162	0.874	0.025161606	0.000258	0.019%	1.036	76.3%	Insignificant	0.025243504	0.000259	0.0191%	1.036	76.3%	Insignificant	0.000008403
Fower Hill to Cockham Wood SSSI	Woodland	1.173	0.142	1.315	0.237	1.716	0.006605243	0.000136	0.010%	1.953	148.5%	Insignificant	0.006544598	0.000134	0.0102%	1.953	148.5%	Insignificant	-0.0000012444
THAMES ESTUARY & MARSHES RAMSAR	Grassland	0.52	0.499	1.389	0.14	0.81	0.119912201	0.001230	0.089%	0.951	68.5%	Insignificant	0.113241167	0.001162	0.0836%	0.951	68.5%	Insignificant	-0.0000684448

Modelled Acid Deposition (keq/ha/yr) - All Sources

Houened Acia Deposition (keq/		CL (keg ha ⁻¹ vr	1,		Baseline (ke	(m ho ⁻¹ ,m ⁻¹)	I	Base N	Base PC as	1	Base PEC as %			Future N	Future PC as	1	PEC as % of		
			,															o	
Habitat name		LOW Range (Mi				N baseline		NO2	% of CL		of CL	Base Significance		NO2	% of CL	Future PEC		Ū	Delta
Chattenden Woods and Lodge Hill SSSI		1.165	0.142		0.17	0.88	0.012445799	0.000255	0.0%	1.050	80.4%	Insignificant	0.01236554	0.000254	0.0194%	1.050	80.4%	Insignificant	-0.0000016470
Cobham Woods SSSI	Woodland	8.559	0.142	8.701	0.19	0.77	0.012363681	0.000254	0.0%	0.960	11.0%	Insignificant	0.00795287	0.000163	0.0019%	0.960	11.0%	Insignificant	-0.0000905099
Crouch and Roach Estuaries SSSI	Woodland	4	0.856	4.856	0.14	0.87	0.042302102	0.000868	0.0%	1.011	20.8%	Insignificant	0.04189916	0.000860	0.0177%	1.011	20.8%	Insignificant	-0.0000082684
Garrold's Meadow SSSI	Grassland	4	0.856	4.856	0.17	0.88	0.032343525	0.000332	0.0%	1.050	21.6%	Insignificant	0.03252416	0.000334	0.0069%	1.050	21.6%	Insignificant	0.0000018533
Great Crabbles Wood SSSI	Woodland	1.203	0.142	1.345	0.23	1.7	0.008732563	0.000179	0.0%	1.930	143.5%	Insignificant	0.00876358	0.000180	0.0134%	1.930	143.5%	Insignificant	0.000006364
Great Wood & Dodd's Grove SSSI	Woodland	1.667	0.142	2.2024	0.21	1.68	0.036642926	0.000752	0.0%	1.891	85.8%	Insignificant	0.0367407	0.000754	0.0342%	1.891	85.8%	Insignificant	0.0000020063
Hanningfield Reservoir SSSI	Woodland	4	1.071	5.071	0.15	0.93	0.011455569	0.000235	0.0%	1.080	3.8%	Insignificant	0.01136001	0.000233	0.0000%	1.080	3.8%	Insignificant	-0.0000019609
Hockley Woods SSSI	Woodland	2.534	0.357	2.891	0.22	1.72	0.024016682	0.000493	0.0%	1.940	67.1%	Insignificant	0.02422813	0.000497	0.0172%	1.940	67.1%	Insignificant	0.0000043389
Langdon Ridge SSSI	Woodland	2.532	0.357	2.889	0.229	1.76	0.020518569	0.000421	0.0%	1.989	68.9%	Insignificant	0.02036866	0.000418	0.0145%	1.989	68.9%	Insignificant	-0.0000030761
MEDWAY ESTUARY & MARSHES SPA	Grassland	0.89	0.499	1.389	0.16	0.84	0.032757131	0.000336	0.0%	1.000	72.0%	Insignificant	0.0099851	0.000102	0.0074%	1.000	72.0%	Insignificant	-0.0002336410
Medway Estuary and Marshes SSSI	Grassland	4	0.856	4.856	0.183	0.92	0.032757131	0.000336	0.0%	1.103	22.7%	Insignificant	0.01007599	0.000103	0.0021%	1.103	22.7%	Insignificant	-0.0002327085
Mill Meadows Billericay SSSI	Grassland	4	1.071	5.071	0.18	0.94	0.004774692	0.000049	0.0%	1.120	4.5%	Insignificant	0.00480805	0.000049	0.0000%	1.120	4.5%	Insignificant	0.000003423
Norsey Wood SSSI	Woodland	1.707	0.142	2.064	0.229	1.807	0.004520958	0.000093	0.0%	2.036	98.6%	Insignificant	0.00458528	0.000094	0.0046%	2.036	98.6%	Insignificant	0.0000013198
Shorne and Ashenbank Woods SSSI	Woodland	1.203	0.142	1.345	0.217	1.71	0.008240255	0.000169	0.0%	1.927	143.3%	Insignificant	0.00825735	0.000169	0.0126%	1.927	143.3%	Insignificant	0.000003508
South Thames Estuary and Marshes SSSI	Grassland	0.51	0.499	1.389	0.179	0.895	0.197299517	0.002024	0.1%	1.076	77.5%	Insignificant	0.1876128	0.001925	0.1386%	1.076	77.5%	Insignificant	-0.0000993857
THAMES ESTUARY & MARSHES SPA	Grassland	0.52	0.499	1.389	0.14	0.81	0.061484232	0.000631	0.0%	0.951	68.4%	Insignificant	0.05938824	0.000609	0.0439%	0.951	68.4%	Insignificant	-0.0000215048
Thorndon Park SSSI	Grassland	1.708	0.142	2.065	0.196	1.76	0.00430257	0.000044	0.0%	1.956	94.7%	Insignificant	0.00429303	0.000044	0.0021%	1.956	94.7%	Insignificant	-0.000000978
Thundersley Great Common SSSI	Grassland	0.86	0.499	1.359	0.162	0.874	0.030356835	0.000311	0.0%	1.036	76.3%	Insignificant	0.03058169	0.000314	0.0231%	1.036	76.3%	Insignificant	0.0000023070
Tower Hill to Cockham Wood SSSI	Woodland	1.173	0.142	1.315	0.237	1.716	0.00964263	0.000198	0.0%	1.953	148.5%	Insignificant	0.00961077	0.000197	0.0150%	1.953	148.5%	Insignificant	-0.0000006538
THAMES ESTUARY & MARSHES RAMSAR	Grassland	0.52	0.499	1.389	0.14	0.81	0.197299517	0.002024	0.1%	0.952	68.5%	Insignificant	0.1876128	0.001925	0.1386%	0.952	68.5%	Insignificant	-0.0000993857

	Critical Level (Annual												
Ecological Site	mean)	Baseline	Base PC	Base PC as % of Critic		Base PEC as % of Critical Level	Significance			Future PEC		Significance	Delta
BENFLEET AND SOUTHEND MARSHES SPA	30	19.3	0.06530853	0.22%	19.35		Insignificant	0.0626705	0.21%				-0.0026
Benfleet and Southend Marshes SSSI	30	19.3	0.06530853		19.35		Insignificant	0.0626705	0.21%				-0.0026
Canvey Wick SSSI	30	22.1	0.163810991	0.55%	22.23		Insignificant	0.154664264	0.52%				-0.0091
Chattenden Woods and Lodge Hill SSSI	30	19.0	0.011825624	0.04%	18.98		Insignificant	0.011637023	0.04%				-0.0002
Cobham Woods SSSI	30	21.8	0.013126706	0.04%	21.80		Insignificant	0.008548627	0.03%	21.79			-0.0046
CROUCH & ROACH ESTUARIES (MID-ESSEX COAST PHASE 3) SPA	30	15.7	0.047739565	0.16%	15.79		Insignificant	0.047163928	0.16%				-0.0006
Crouch and Roach Estuaries SSSI	30	15.7	0.047739565	0.16%	15.79		Insignificant	0.047163928	0.16%				-0.0006
Dalham Farm SSSI	30	15.5	0.011827432		15.51		Insignificant	0.011678458	0.04%				-0.0001
ESSEX ESTUARIES SAC	30	15.7	0.049592726	0.17%	15.79		Insignificant	0.04801085	0.16%	15.79			-0.0016
Garrold's Meadow SSSI	30	17.2	0.037183622		17.22		Insignificant	0.03734625	0.12%				0.0002
Grays Thurrock Chalk Pit SSSI	30	27.3	0.008267107	0.03%	27.35		Insignificant	0.008384801	0.03%				0.0001
Great Crabbles Wood SSSI	30	22.1	0.009565131	0.03%	22.13		Insignificant	0.009591646	0.03%	22.13			0.0000
Great Wood & Dodd's Grove SSSI	30	17.3	0.041821525	0.14%			Insignificant	0.041865522	0.14%				0.0000
Hangman's Wood & Deneholes SSSI	30	24.6	0.010068878	0.03%	24.60		Insignificant	0.010199517	0.03%				0.0001
Hanningfield Reservoir SSSI	30	12.7	0.012317594		12.73		Insignificant	0.012087294	0.04%				-0.0002
Hockley Woods SSSI	30	15.4	0.02802538	0.09%	15.46	51.52%	Insignificant	0.028240887	0.09%	15.46			0.0002
Holehaven Creek SSSI	30	28.0	0.205039239	0.68%	28.23	94.10%	Insignificant	0.191258611	0.64%	28.22	94.0541953691020%	Insignificant	-0.0138
Langdon Ridge SSSI	30	21.6	0.023107084	0.08%	21.58	71.94%	Insignificant	0.022974665	0.08%	21.58	71.9399155498478%	Insignificant	-0.0001
Lion Pit SSSI	30	32.6	0.0074477	0.02%	32.56	108.54%	Insignificant	0.007550583	0.03%	32.56	108.5418352761040%	Insignificant	0.0001
MEDWAY ESTUARY & MARSHES SPA	30	27.7	0.037563977	0.13%	27.71	92.37%	Insignificant	0.010112486	0.03%	27.68	92.2737082855403%	Insignificant	-0.0275
Medway Estuary and Marshes SSSI	30	27.7	0.037563977	0.13%	27.71	92.37%	Insignificant	0.010112486	0.03%	27.68	92.2737082855403%	Insignificant	-0.0275
Mill Meadows Billericay SSSI	30	15.9	0.005270479	0.02%	15.94	53.15%	Insignificant	0.005304939	0.02%	15.94	53.1476831295662%	Insignificant	0.0000
Mucking Flats and Marshes SSSI	30	31.3	0.040152539	0.13%	31.30	104.34%	Insignificant	0.03933089	0.13%	31.30	104.3377696324200%	Insignificant	-0.0008
Norsey Wood SSSI	30	14.9	0.005032115	0.02%	14.95	49.84%	Insignificant	0.005110742	0.02%	14.95	49.8403691401826%	Insignificant	0.0001
Northward Hill SSSI	30	15.5	0.012387677	0.04%	15.51	51.71%	Insignificant	0.012205279	0.04%	15.51	51.7073509283486%	Insignificant	-0.0002
Pitsea Marsh SSSI	30	23.3	0.149375266	0.50%	23.45	78.15%	Insignificant	0.115855211	0.39%	23.41	78.0428507016743%	Insignificant	-0.0335
Shorne and Ashenbank Woods SSSI	30	20.7	0.009194327	0.03%	20.75	69.16%	Insignificant	0.009203472	0.03%	20.75	69.1640115732877%	Insignificant	0.0000
South Thames Estuary and Marshes SSSI	30	34.7	0.171303144	0.57%	34.89	116.31%	Insignificant	0.161773096	0.54%	34.88	116.2825769859210%	Insignificant	-0.0095
Swanscombe Peninsula SSSI	30	36.1	0.008042851	0.03%	36.13	120.44%	Insignificant	0.008146998	0.03%	36.13	120.4404899924660%	Insignificant	0.0001
THAMES ESTUARY & MARSHES SPA	30	33.2	0.057643302	0.19%	33.29	110.97%	Insignificant	0.054649033	0.18%	33.29	110.9554967762560%	Insignificant	-0.0030
horndon Park SSSI	30	19.5	0.004799585	0.02%	19.53		Insignificant	0.004772612	0.02%				0.0000
hunderslev Great Common SSSI	30	19.8	0.035945151	0.12%	19.81	66.03%	Insignificant	0.036062149	0.12%	19.81	66.0268738283866%	Insignificant	0.0001
Fower Hill to Cockham Wood SSSI	30	22.3	0.009436062	0.03%	22.29		Insignificant	0.009349425	0.03%				-0.0001
Vange & Fobbing Marshes SSSI	30	23.3	0.03394878	0.11%	23.33		Insignificant	0.032241124	0.11%				-0.001
Benfleet and Southend Marshes RAMSAR	30	19.3	0.063726443		19.35		Insignificant	0.0626705	0.21%				-0.0011
THAMES ESTI JARY & MARSHES RAMSAR	30	33.2	0.171303144		33.40		Insignificant	0.161773096	0.54%				-0.0095

	Critical Level (24-Hour												
Ecological Site	Mean)	Baseline	Base PC	Base PC as % of Critic	Base PEC	Base PEC as % of Critical Level	Significance	Future PC	Future PC as % of Critical Level	Future PEC	Future PEC as % of Critical Level	Significance	Delta
BENFLEET AND SOUTHEND MARSHES SPA	200	38.6	4.33068	2.17%	42.89	21.45%	Insignificant	4.28719	2.14%	42.85	21.4255950000000%	Insignificant	-0.0435
Benfleet and Southend Marshes SSSI	200	38.6	4.59915	2.30%	43.16	21.58%	Insignificant	4.592	2.30%	43.16	21.5780000000009	Insignificant	-0.0072
Canvey Wick SSSI	200	44.1	17.3101	8.66%	61.45	30.73%	Insignificant	17.1059	8.55%	61.25	30.6239500000000%	Insignificant	-0.2042
Chattenden Woods and Lodge Hill SSSI	200	37.9	2.78362	1.39%	40.7:	20.36%	Insignificant	2.74186	1.37%	40.67	20.3359300000009	Insignificant	-0.0418
Cobham Woods SSSI	200	43.6	3.8945	1.95%	47.46	23.73%	Insignificant	1.47169	0.74%	45.04	22.520845000000%	Insignificant	-2.4228
CROUCH & ROACH ESTUARIES (MID-ESSEX COAST PHASE 3) SPA	200	31.5	3.19752	1.60%	34.68	17.34%	Insignificant	3.21094	1.61%	34.69	17.3474700000009	Insignificant	0.0134
Crouch and Roach Estuaries SSSI	200	31.5	3.19752	1.60%	34.68	17.34%	Insignificant	3.21094	1.61%	34.69	17.3474700000009	Insignificant	0.0134
Dalham Farm SSSI	200	31.0	2.42073	1.21%	33.42	16.71%	Insignificant	2.3929	1.20%	33.39	16.6964500000000%	Insignificant	-0.0278
ESSEX ESTUARIES SAC	200	31.5	3.23214	1.62%	34.72	17.36%	Insignificant	3.21094	1.61%	34.69	17.3474700000009	Insignificant	-0.0212
Garrold's Meadow SSSI	200	34.4	2.18062	1.09%	36.54	18.27%	Insignificant	2.18747	1.09%	36.54	18.2717350000000%	Insignificant	0.0069
Grays Thurrock Chalk Pit SSSI	200	54.7	1.03012	0.52%	55.7:	27.86%	Insignificant	1.02955	0.51%	55.71	27.8567750000000%	i Insignificant	-0.0006
Great Crabbles Wood SSSI	200	44.2	1.66567	0.83%	45.93	22.95%	Insignificant	1.66643	0.83%	45.91	22.9532150000009	Insignificant	0.0008
Great Wood & Dodd's Grove SSSI	200	34.6	2.72733	1.36%	37.36	18.68%	Insignificant	2.80029	1.40%	37.43	18.7161450000000%	Insignificant	0.0730
Hangman's Wood & Deneholes SSSI	200	49.2	1.24351	0.62%	50.42	25.21%	Insignificant	1.23086	0.62%	50.41	25.203430000000%	Insignificant	-0.0126
Hanningfield Reservoir SSSI	200	25.4	2.34326	1.17%	27.78	13.89%	Insignificant	2.34937	1.17%	27.79	13.8946850000009	i Insignificant	0.0061
Hockley Woods SSSI	200	30.9	1.76544	0.88%	32.62	16.31%	Insignificant	1.78937	0.89%	32.65	16.3226850000009	Insignificant	0.0239
Holehaven Creek SSSI	200	56.1	26.4852	13.24%	82.54	41.27%	Potentially Significant	24.6102	12.31%	80.66	40.3301000000009	Potentially Significant	-1.8750
Langdon Ridge SSSI	200	43.1	3.03789	1.52%	46.16	23.08%	Insignificant	2.96867	1.48%	46.09	23.0433350000000%	Insignificant	-0.0692
Lion Pit SSSI	200	65.1	0.950445	0.48%	66.06	33.03%	Insignificant	0.968074	0.48%	66.08	33.0390370000009	i Insignificant	0.0176
MEDWAY ESTUARY & MARSHES SPA	200	55.3	2.71123	1.36%	58.06	29.03%	Insignificant	1.89378	0.95%	57.24	28.6188900000009	Insignificant	-0.8175
Medway Estuary and Marshes SSSI	200	55.3	2.71123	1.36%	58.06	29.03%	Insignificant	1.9092	0.95%	57.25	28.6266000000009	Insignificant	-0.8020
Mill Meadows Billericay SSSI	200	31.9	1.11543	0.56%	32.99	16.50%	Insignificant	1.14821	0.57%	33.03	16.5131050000009	i Insignificant	0.0328
Mucking Flats and Marshes SSSI	200	62.5	8.01371	4.01%	70.54	35.27%	Insignificant	7.02153	3.51%	69.55	34.7727650000009	Insignificant	-0.9922
Norsey Wood SSSI	200	29.9	0.941301	0.47%	30.84	15.42%	Insignificant	0.963539	0.48%	30.86	15.42876950000009	Insignificant	0.0222
Northward Hill SSSI	200	31.0	2.57854	1.29%	33.58	16.79%	Insignificant	2.48684	1.24%	33.49	16.7434200000009	Insignificant	-0.0917
Pitsea Marsh SSSI	200	46.6	19.7141	9.86%	66.3	33.15%	Insignificant	15.675	7.84%	62.27	31.1345000000009	insignificant	-4.0391
Shome and Ashenbank Woods SSSI	200	41.5	1.47442	0.74%	42.95	i 21.48%	Insignificant	1.51342	0.76%	42.99	21.4967100000009	lnsignificant	0.0390
South Thames Estuary and Marshes SSSI	200	69.4	19.337	9.67%	88.78	44.39%	Insignificant	18.6557	9.33%	88.10	44.0508500000009	Insignificant	-0.6813
Swanscombe Peninsula SSSI	200	72.2	1.46126	0.73%	73.7	36.85%	Insignificant	1.49045	0.75%	73.74	36.8692250000009	Insignificant	0.0292
THAMES ESTUARY & MARSHES SPA	200	66.5	9.26116	4.63%	75.73	37.86%	Insignificant	9.06657	4.53%	75.53	37.7652850000009	insignificant	-0.1946
Thorndon Park SSSI	200	39.1	1.11613	0.56%	40.17	20.09%	Insignificant	1.12867	0.56%	40.19	20.0933350000000%	Insignificant	0.0125
Thundersley Great Common SSSI	200	39.5	2.65603	1.33%	42.20	21.10%	Insignificant	2.70509	1.35%	42.25	21.1245450000009	Insignificant	0.0491
Tower Hill to Cockham Wood SSSI	200	44.6	2.26293	1.13%	46.83	23.41%	Insignificant	2.25269	1.13%	46.81	23.4053450000009	i Insignificant	-0.0102
Vange & Fobbing Marshes SSSI	200	46.6	7.83627	3.92%	54.43	27.22%	Insignificant	7.19269	3.60%	53.79	26.8933450000009	Insignificant	-0.6436
Benfleet and Southend Marshes RAMSAR	200	38.6	4.33068	2.17%	42.89	21.45%	Insignificant	4.27853	2.14%	42.84	21.4212650000009	Insignificant	-0.0522
THAMES ESTUARY & MARSHES RAMSAR	200	66.5	19.337	9.67%	85.80	42.90%	Insignificant	18.6557	9.33%	85.12	42.55985000000009	Insignificant	-0.6813

	ources	1						1			
	Critical Level (Annual mean)	Baseline	Base PC		D DE0		- · · · · · · · · ·	5	Future PEC		Delta
Ecological Site BENELEET AND SOLITHEND MARSHES SPA	mean) 30	Baseline 19.3	Base PC 0.085102392	Base PC as % of Critic 0.28%	Base PEC 19.37	Base PEC as % of Critical Level Significance 64.56% Insignificant	Future PC 0.082464363		Future PEC 19.36	Future PEC as % of Critical Level Significance 64.5482145416667% Insignificant	-0.0026
Benfleet and Southend Marshes SSSI	30	19.3	0.085261756	0.28%	19.37	64.56% Insignificant	0.082623726	0.27%	19.36	64.5487457538813% Insignificant	-0.0026
Canvey Wick SSSI	30	22.1	0.267902349	0.89%	22.34	74.46% Insignificant	0.258755622	0.86%	22.33	74.4325187409437% Insignificant	-0.0091
Chattenden Woods and Lodge Hill SSSI	30	19.0	0.017779713	0.06%	18.98	63.28% Insignificant	0.01766505	0.06%	18.98	63.2755501670244% Insignificant	-0.0001
Cobham Woods SSSI	30	21.8	0.017662401	0.06%	21.80	72.68% Insignificant	0.011361238	0.04%	21.80	72.6545374591324% Insignificant	-0.0063
CROUCH & ROACH ESTUARIES (MID-ESSEX COAST PHASE 3) SPA	30	15.7	0.060431574	0.20%	15.80	52.67% Insignificant	0.059855937	0.20%	15.80	52.6728531249619% Insignificant	-0.0006
Crouch and Roach Estuaries SSSI	30	15.7	0.060431574	0.20%	15.80	52.67% Insignificant	0.059855937	0.20%	15.80	52.6728531249619% Insignificant	-0.0006
Dalham Farm SSSI	30	15.5	0.017819707	0.06%	15.52	51.73% Insignificant	0.017741497	0.06%	15.52	51.7258049884399% Insignificant	-0.0001
ESSEX ESTUARIES SAC	30	15.7	0.063134853	0.21%	15.81	52.68% Insignificant	0.061218467	0.20%	15.80	52.6773948896119% Insignificant	-0.0019
Garrold's Meadow SSSI	30	17.2	0.046205036	0.15%	17.22	57.41% Insignificant	0.046463081	0.15%	17.22	57.4148769367960% Insignificant	0.0003
Grays Thurrock Chalk Pit SSSI	30	27.3	0.01013007	0.03%	27.35	91.17% Insignificant	0.010229758	0.03%	27.35	91.1740991939992% Insignificant	0.0001
Great Crabbles Wood SSSI	30	22.1	0.01247509	0.04%	22.13	73.77% Insignificant	0.012519396	0.04%	22.13	73.7750646537900% Insignificant	0.0000
Great Wood & Dodd's Grove SSSI	30	17.3	0.052347037	0.17%	17.37	57.89% Insignificant	0.052486716	0.17%	17.37	57.8949557183562% Insignificant	0.0001
Hangman's Wood & Deneholes SSSI	30	24.6	0.012328289	0.04%	24.60	82.00% Insignificant	0.012434835	0.04%	24.60	82.0014494500114% Insignificant	0.0001
Hanningfield Reservoir SSSI	30	12.7	0.016365098	0.05%	12.74	42.45% Insignificant	0.016228583		12.74	42.4540952767199% Insignificant	-0.0001
Hockley Woods SSSI	30	15.4	0.034309546	0.11%	15.46	51.54% Insignificant	0.034611616	0.12%	15.46	51.5420387203349% Insignificant	0.0003
Holehaven Creek SSSI	30	28.0	0.381339353	1.27%	28.41	94.69% Potentially Significant	0.370837918	1.24%	28.40	94.6527930585997% Potentially Significant	-0.0105
Langdon Ridge SSSI	30	21.6	0.029312241	0.10%	21.59	71.96% Insignificant	0.029098088		21.59	71.9603269600913% Insignificant	-0.0002
Lion Pit SSSI	30	32.6	0.009047693	0.03%	32.56	108.55% Insignificant	0.009140268	0.03%	32.56	108.5471342262710% Insignificant	0.0001
MEDWAY ESTUARY & MARSHES SPA	30	27.7	0.046795902	0.16%	27.72	92.40% Insignificant	0.014264434		27.69	92.2875481141400% Insignificant	-0.0325
Medway Estuary and Marshes SSSI	30	27.7	0.046795902	0.16%	27.72	92.40% Insignificant	0.014394268	0.05%	27.69	92.2879808944140% Insignificant	-0.0324
Mill Meadows Billericay SSSI	30	15.9	0.006820989	0.02%	15.95	53.15% Insignificant	0.006868649		15.95	53.1528954969406% Insignificant	0.0000
Mucking Flats and Marshes SSSI	30	31.3	0.069782766	0.23%	31.33	104.44% Insignificant	0.067385081		31.33	104.4312836018260% Insignificant	-0.0024
Norsey Wood SSSI	30	14.9	0.006458511	0.02%	14.95	49.84% Insignificant	0.006550396		14.95	49.8451679850342% Insignificant	0.0001
Northward Hill SSSI	30	15.5	0.01914554	0.06%	15.52	51.73% Insignificant	0.019026954		15.52	51.7300898452664% Insignificant	-0.0001
Pitsea Marsh SSSI	30	23.3	0.24196959	0.81%	23.54	78.46% Insignificant	0.204355557	0.68%	23.50	78.3378518566971% Insignificant	-0.0376
Shome and Ashenbank Woods SSSI	30	20.7	0.011771793	0.04%	20.75	69.17% Insignificant	0.011796216		20.75	69.1726540519711% Insignificant	0.0000
South Thames Estuary and Marshes SSSI	30	34.7	0.281856452	0.94%	35.00	116.68% Insignificant	0.268018292		34.99	116.6367276414000% Insignificant	-0.0138
Swanscombe Peninsula SSSI	30	36.1	0.009882463	0.03%	36.13	120.45% Insignificant	0.009985573	0.03%	36.13	120.4466185756700% Insignificant	0.0001
THAMES ESTUARY & MARSHES SPA	30	33.2	0.087834618	0.29%	33.32	111.07% Insignificant	0.084840348		33.32	111.0561344935310% Insignificant	-0.0030
Thorndon Park SSSI	30	19.5	0.006146529	0.02%	19.54	65.12% Insignificant	0.006132905	0.02%	19.54	65.1171096847336% Insignificant	0.0000
Thundersley Great Common SSSI	30	19.8	0.043366906	0.14%	19.82	66.05% Insignificant	0.043688123		19.82	66.0522937428387% Insignificant	0.0003
Tower Hill to Cockham Wood SSSI	30	22.3	0.013775186	0.05%	22.29	74.31% Insignificant	0.013729668		22.29	74.3090988945053% Insignificant	0.0000
Vange & Fobbing Marshes SSSI	30	23.3	0.056316964	0.19%	23.35	77.84% Insignificant	0.055448429		23.35	77.8414947626332% Insignificant	-0.0009
Benfleet and Southend Marshes BAMSAR	30	19.3	0.083394031	0.28%	19.37	64.55% Insignificant	0.082464363	0.27%	19.36	64.5482145416667% Insignificant	-0.0009
THAMES ESTUARY & MARSHES RAMSAR	30	33.2	0.281856452	0.94%	33.51	111.71% Insignificant	0.268018292	0.89%	33.50	111.6667276414000% Insignificant	-0.0138
Modelled Maximum 24-Hour Mean Nox Concentrations (µg/m3) - All											
For the standard	Critical Level (24-Hour				D DE0		5		F		D. IV.
Ecological Site	Mean)	Baseline	Base PC	Base PC as % of Critic		Base PEC as % of Critical Level Significance	Future PC	Future PC as % of Critical Level	Future PEC	Future PEC as % of Critical Level Significance	Delta
BENFLEET AND SOUTHEND MARSHES SPA	Mean) 200	38.6	5.03811	2.52%	43.60	21.80% Insignificant	4.9932	2.50%	43.56	21.778600000000% Insignificant	-0.0449
	Mean) 200 200	38.6 38.6				5		2.50%			-0.0449 0.0081
BENFLEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI	Mean) 200	38.6	5.03811 5.3758	2.52% 2.69%	43.60 43.94	21.80% Insignificant 21.97% Insignificant	4.9932 5.38387	2.50% 2.69%	43.56 43.95	21.778600000000% Insignificant 21.973935000000% Insignificant Batantially Significant	-0.0449
BENFLEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canvey Wick SSSI	Mean) 200 200 200	38.6 38.6 44.1	5.03811 5.3758 20.4608	2.52% 2.69% 10.23%	43.60 43.94 64.60	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant	4.9932 5.38387 20.3839	2.50% 2.69% 10.19%	43.56 43.95 64.53	21.778600000000% Insignificant 21.973935000000% Insignificant 32.262950000000% Potentially Significant	-0.0449 0.0081 -0.0769
BENFLEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canvey Wick SSSI Chattenden Woods and Lodge Hill SSSI	Mean) 200 200 200 200 200 200	38.6 38.6 44.1 37.9	5.03811 5.3758 20.4608 3.38511	2.52% 2.69% 10.23% 1.69%	43.60 43.94 64.60 41.32	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant	4.9932 5.38387 20.3839 3.35269	2.50% 2.69% 10.19% 1.68%	43.56 43.95 64.53 41.28	21.77860000000% insignificant 21.973935000000% insignificant 32.262950000000% 20.641345000000% insignificant	-0.0449 0.0081 -0.0769 -0.0324
BENFLEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canvey Wick SSSI Chattenden Woods and Lodge Hill SSSI Cohlam Woods SSSI	Mean) 200 200 200 200 200 200 200	38.6 38.6 44.1 37.9 43.6	5.03811 5.3758 20.4608 3.38511 4.58177	2.52% 2.69% 10.23% 1.69% 2.29%	43.60 43.94 64.60 41.32 48.15	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant 24.06% Insignificant	4.9932 5.38387 20.3839 3.35269 1.74181	2.50% 2.69% 10.19% 1.68% 0.87%	43.56 43.95 64.53 41.28 45.31	21.778800000000% Insignificant 21.973835000000% Insignificant 32.282850000000% Potentially Significant 20.641345000000% Insignificant 22.65590500000% Insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400
BENFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canvey Wick SSSI Contenden Woods and Lodge Hill SSSI Contamond Woods SSSI ConDuch & ROACH ESTURATES (MID-ESSEX COAST PHASE 3) SPA	Mean) 200 200 200 200 200 200 200 200 200 20	38.6 38.6 44.1 37.9 43.6 31.5	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268	2.52% 2.69% 10.23% 1.69% 2.29% 1.83%	43.60 43.94 64.60 41.32 48.15 35.14	21.80% insignificant 21.97% insignificant 32.30% Potentially Significant 20.66% insignificant 24.68% insignificant 17.57% insignificant	4.9932 5.38387 20.3839 3.35269 1.74181 3.6661	2.50% 2.69% 10.19% 1.68% 0.87% 1.63%	43.56 43.95 64.53 41.28 45.31 35.15	21.778500000000 in significant 21.9738350000000 insignificant 22.829500000000 insignificant 20.64134500000000 insignificant 22.6559050000000 insignificant 17.5755000000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134
BENFLEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Carvey Wick SSSI Chattenden Woods and Lodge Hill SSSI Cobham Woods SSSI CROUCH & ROACH ESTLARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries SSSI	Mean) 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268	2.52% 2.69% 10.23% 1.69% 2.29% 1.83% 1.83%	43.60 43.94 64.60 41.32 48.15 35.14 35.14	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant 24.08% Insignificant 17.57% Insignificant	4.9932 5.38387 20.3839 3.35269 1.74181 3.6661 3.6661	2.50% 2.69% 10.19% 1.68% 0.87% 1.83% 1.83%	43.56 43.95 64.53 41.28 45.31 35.15 35.15	21.778600000000 insignificant 21.97393500000000 Potential Significant 32.2829500000000 Potentially Significant 20.6434500000000 insignificant 22.6558050000000 insignificant 17.5755000000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 0.0134
BENFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Cantewy Wick SSSI Chattenden Woods SSSI Cobtam Woods SSSI Cobtam Woods SSSI CROUCH & ROACH ESTURAIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries SSI Daiham Fam SSSI	Mean) 200 200 200 200 200 200 200 200 200 20	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.0	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 2.88784	2.52% 2.69% 10.23% 2.29% 1.83% 1.83% 1.83%	43.60 43.94 64.60 41.32 48.15 35.14 35.14 33.89	21.80% insignificant 21.97% insignificant 22.30% Potentially Significant 20.66% insignificant 24.06% insignificant 17.57% insignificant 17.57% insignificant 16.94% insignificant	4.9932 5.38387 20.3839 3.35269 1.74181 3.6661 3.6661 2.86827	2.50% 2.69% 10.19% 0.87% 1.83% 1.83% 1.83%	43.56 43.95 64.53 41.28 45.31 35.15 35.15 35.15 33.87	21.778500000000% insignificant 21.97935000000% insignificant 22.28280000000% insignificant 20.641345000000% insignificant 12.56590500000% insignificant 12.57560000000% insignificant 16.3024150000000% insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 0.0134 -0.0196
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Carwey Wick SSSI Cohem Woods and Lodge Hill SSSI Cohem Woods SSSI Cobuch and Roach Estudaries (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estudaries SSSI Dalham Firm SSSI Dalham Firm SSSI ESSIX ESTUARIES SAC	Mean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.0 31.5	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 2.88784 3.76127	2.52% 2.69% 10.23% 1.69% 2.29% 1.83% 1.83% 1.83% 1.83%	43.60 43.94 64.60 41.32 48.15 35.14 35.14 35.14 35.25 35.25	21.80% Insignificant 21.97% Insignificant 32.30% Prientially Significant 20.66% Insignificant 24.68% Insignificant 17.57% Insignificant 17.57% Insignificant 16.94% Insignificant	4.9932 5.38387 20.3839 3.35266 1.74181 3.6661 3.6661 2.86827 3.6661	2.50% 2.69% 10.19% 1.68% 1.85% 1.85% 1.35% 1.35% 1.35%	43.56 43.95 64.53 41.28 45.31 35.15 35.15 33.57 33.57	21.778600000000 insignificant 21.9738350000000 insignificant 22.262950000000 Potentially Significant 20.643450000000 insignificant 17.5750500000000 insignificant 17.5750500000000 insignificant 16.93415500000000 insignificant 17.5755000000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 0.0134 -0.0196 -0.0952
BENFLET AND SOUTHEND WARSHES SPA Bentheet and Southend Manshes SSSI Cantery Wick SSSI Chattenden Woods and Lodge Hill SSSI Coham Wiods SSSI COUCH & ROUCH ESTUARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Rouch Estuaries SSI Datham Farm SSSI ESSEX ESTUARIES SAC Garold's Maadow SSSI	Mean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.0 31.5 31.0 31.5 34.4	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 2.88784 3.76127 2.55408	2.52% 2.69% 10.23% 2.29% 1.83% 1.83% 1.83% 1.83% 1.83% 1.84% 1.88%	43.60 43.94 64.60 41.32 48.15 35.14 35.14 35.14 35.25 36.91	21.80% [msgmfcant 21.97% [msgmfcant 22.05% [Potentially Significant 20.06% [msgmfcant 24.06% [msgmfcant 17.57% [msgmfcant 17.57% [msgmfcant 16.94% [msgmfcant 16.94% [msgmfcant 17.62% [msgmfcant	4.9932 5.38387 20.3839 1.74181 3.6661 2.88627 3.6661 2.52314	2 50% 2 69% 10.19% 1.68% 1.68% 1.33% 1.33% 1.33% 1.33% 1.28%	43.56 43.36 44.53 45.13 35.15 35.15 33.87 35.15 33.87 35.15 33.87 35.15	21.778500000000 insignificant 21.97935000000 insignificant 22.282800000000 insignificant 22.659650000000 insignificant 17.759600000000 insignificant 17.759600000000 insignificant 16.0341500000000 insignificant 18.7575600000000 insignificant 18.84597000000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 0.0134 -0.0196 -0.0952 -0.0309
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Carwey Wick SSSI Coham Woods SSSI Cobham Woods SSSI Cobham Woods SSSI Conuch a Roach Estuaries SSSI Dalham Farm SSSI SSEX ESTUARIES SAC Garold's Meadow SSSI Garold's Meadow SSSI	Mean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.0 31.5 34.4 54.7	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 2.88784 3.76127 2.55408 1.37034	2.52% 2.69% 10.23% 1.69% 2.29% 1.83% 1.83% 1.83% 1.44% 1.83% 1.28% 0.69%	43.60 43.94 64.60 41.32 48.15 35.14 35.14 33.89 35.25 36.91 56.05	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant 24.68% Insignificant 17.57% Insignificant 16.94% Insignificant 16.94% Insignificant 28.46% Insignificant	4.9932 5.38387 20.3839 3.35269 1.74181 3.6661 3.6661 2.86827 3.6661 2.52314 1.39941	2.50% 2.69% 10.19% 1.68% 1.83% 1.83% 1.43% 1.43% 1.63% 0.70%	43.56 43.85 64.53 45.23 35.15 35.15 33.87 35.15 35.68 85.688	21.778600000000 insignificant 21.9738350000006 insignificant 22.262980000006 Potentially Significant 22.65599500000006 insignificant 17.27505000000006 insignificant 17.57505000000006 insignificant 16.93413500000006 insignificant 17.5750500000006 insignificant 23.4395700000006 insignificant 28.4395700000006 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0134 -0.0196 -0.0952 -0.0309 0.0291
BENFLET AND SOUTHEND WARSHES SPA Benfleet and Southend Marshes SSSI Chattenden Woods and Lodge Hill SSSI Chattenden Woods and Lodge Hill SSSI Coham Wwoods SSSI Crouch a Nouch ESTLARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries SSI Datham Farm SSSI ESSEX ESTLARIES SAC Garold's Maadow SSSI Grays Thurrock Chalk Prit SSSI Grays Thurrock Chalk Prit SSSI	Mean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.0 31.5 34.4 54.7 44.2	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 2.88784 3.76127 2.55408 1.37034 1.38295	2.52% 2.69% 10.23% 1.69% 2.29% 1.83% 1.83% 1.83% 1.83% 1.83% 1.83% 0.88% 0.69%	43.60 43.94 64.60 41.32 48.15 35.14 35.14 35.14 35.25 36.91 56.05 46.22	21.80% [nsignificant 21.97% [nsignificant 22.30% [Potentially Significant 20.66% [nsignificant 24.06% [nsignificant 17.57% [nsignificant 17.57% [nsignificant 16.94% [nsignificant 17.62% [nsignificant 18.64% [nsignificant 28.03% [nsignificant 28.03% [nsignificant	4.9932 5.33387 20.3839 3.35266 1.74181 3.6661 2.86827 3.6661 2.52314 1.39840 1.9866	2 50% 2 69% 2 69% 10.19% 10.8% 10.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1	43.56 44.59 44.20 44.20 45.31 35.15 33.67 35.15 33.67 36.88 56.08 46.23	21.778500000009 insignificant 21.97935000000 insignificant 22.828500000000 insignificant 22.659650000000 insignificant 17.575000000000 insignificant 17.575000000000 insignificant 18.934500000000 insignificant 18.955000000000 insignificant 18.4355000000000 insignificant 28.44129500000000 insignificant 28.44129500000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0134 -0.0134 -0.0196 -0.0952 -0.0309 0.0291 0.0040
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SS3 Canvey Wick SSS1 Coham Woods SSS1 Coham Woods SSS1 Coham Koods and Lodge Hill SSS1 Coham Koods SSS1 Crouch a Anoch- Estuarles SSS1 Datham Farm SSS1 ESSEX ESTUARIES SAC Garrold's Maadow SSS1 Grays Thurrok Chaik PR SSS1 Great Crabbles Wood SSS1 Great Wood Bood's Grove SSI S	Hean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.6	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 2.88784 3.76127 2.55408 1.37034 1.98295 3.12383	2.52% 2.69% 10.23% 1.83% 1.83% 1.83% 1.44% 1.88% 0.69% 0.99% 1.56%	43.60 43.94 64.60 41.32 35.14 35.14 35.14 33.52 36.91 56.05 46.22 37.76	21.80% insignificant 21.97% insignificant 32.30% Potentially Significant 20.66% insignificant 24.68% insignificant 17.57% insignificant 16.94% insignificant 16.94% insignificant 28.03% insignificant 28.03% insignificant 28.31% insignificant 18.84% insignificant 28.31% insignificant	4.9932 5.3837 20.3833 3.35269 1.74181 3.6661 2.86827 3.6661 2.52314 1.39944 1.39969 3.20746	2.50% 2.69% 10.19% 1.68% 1.33% 1.33% 1.43% 1.43% 1.43% 0.70% 0.70% 1.60%	43.56 43.95 64.53 45.21 35.15 35.15 35.15 35.15 35.15 35.15 35.15 35.15 36.88 46.23 37.84 37.84	21.778600000000 insignificant 21.973835000000 insignificant 22.262950000000 insignificant 22.655905000000 insignificant 17.57550500000000 insignificant 17.57550500000000 insignificant 18.93451300000000 insignificant 28.64375700000000 insignificant 28.64375700000000 insignificant 18.1345700000000 insignificant 18.1345700000000 insignificant 18.1345700000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0134 -0.0136 -0.0952 -0.0309 0.0291 0.0040 0.8836
BENFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Carwey Wick SSSI Cohlam Woods and Lodge Hill SSSI Cohlam Woods SSSI CROUCH at RonCH ESTUARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries SSSI Dailham Farm SSSI SESX ESTUARIES SAC Garold's Meadow SSSI Great Tobalse Mood SSSI Great Chabbles Wood SSSI Great Chabbles Wood SSSI Great Chabbles Wood SSSI	Hean) 200	38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.6 49.2	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 2.88784 3.76127 2.55408 1.37034 1.37034 1.38285 3.12383 1.6462	2.52% 2.69% 10.23% 2.29% 1.83% 1.83% 1.83% 1.83% 1.83% 1.84% 0.69% 0.69% 0.69% 0.69% 0.69%	43.60 43.94 64.60 41.32 48.15 35.14 33.51 43.389 35.25 36.91 56.05 46.22 37.76 50.82	21.80% Insignificant 21.97% Insignificant 22.30% 22.30% 22.66% Insignificant 22.66% Insignificant 17.57% Insignificant 17.57% Insignificant 17.52% Insignificant 28.63% Insignificant 28.36% Insignificant 28.31% Insignificant 28.31% Insignificant 28.31% Insignificant 28.31% Insignificant 28.34% Insignificant	4.9932 5.3837 20.3839 3.35266 1.74181 3.6661 3.6661 2.88627 3.36661 2.53214 1.39641 1.9969 3.2074 1.68088	2.50% 2.99% 10.19% 1.68% 1.83% 1.83% 1.83% 1.33% 1.33% 0.70% 0.99% 0.99% 0.84%	43.56 43.35 64.53 41.28 35.15 35.15 35.15 35.15 35.15 35.15 35.15 36.88 56.00 46.23 37.74 50.86	21.778600000000 insignificant 21.9738350000000 Potential Significant 22.282950000000 Potential Significant 22.665965000000 insignificant 17.5756500000000 insignificant 17.5756500000000 insignificant 18.63415500000000 insignificant 18.4395700000000 insignificant 28.4395700000000 insignificant 23.1134500000000 insignificant 23.1134500000000 insignificant 23.1134500000000 insignificant 23.1134500000000 insignificant 25.4244000000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0136 -0.0952 -0.0309 0.0291 0.0040 0.0836 0.0347
BERNEET AND SOUTHEND WARSHES SPA Benfleet and Southend Marshes SS3 Canvey Wick SSS1 Cohtemder Woods and Lodge Hill SSS1 Cohtamoter Woods SSS1 Cohtamoter Woods SSS1 Concurs & Rouch Estuaries SS1 Dathan Farm SS3 ESSEX ESTUARIES SAC Grands Thadow SSS1 Grands Chables Wood SSS1 Grands Chables Wood SSS1 Grands Chables Wood SSS1 Hangman's Wood & Dereholes SSS1	Mean) 200	38.6 38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.0 31.5 34.4 54.7 44.2 34.6 49.2 25.4 25.4	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 2.88784 3.76127 2.55408 1.37034 1.89295 3.12833 1.6462 2.84231	2.52% 2.69% 10.23% 1.69% 2.29% 1.83% 1.43% 1.43% 1.28% 0.08% 1.56% 1.56% 1.56%	43.60 43.94 64.60 41.32 35.14 35.14 35.15 35.25 36.91 56.05 46.22 37.76 50.82 2.8.28	21.80% insignificant 21.97% insignificant 32.30% Potentially Significant 20.66% insignificant 24.06% insignificant 17.57% insignificant 16.94% insignificant 17.42% insignificant 28.03% insignificant 28.03% insignificant 18.86% insignificant 18.86% insignificant 18.86% insignificant 18.86% insignificant 18.86% insignificant 18.86% insignificant	4.9832 5.38387 20.38387 3.35289 1.74181 3.6661 2.285827 3.6661 2.55314 1.98949 3.20746 3.20746 1.6608 2.268932	2.50% 2.69% 10.19% 1.68% 1.38% 1.38% 1.38% 1.38% 0.70% 0.97% 1.60% 1.60% 1.60% 1.43%	43.56 43.95 64.53 45.31 35.15 33.87 35.15 33.87 35.15 33.87 35.15 33.87 35.15 33.87 35.15 33.87 35.15 35.85 36.88 46.23 37.84 50.96 28.31 37.84 28.31 37.84 28.31 37.84 37.84 37.85	21.778600000000 insignificant 21.9738350000000 insignificant 22.2629500000000 Fotentially Significant 20.64134500000000 insignificant 22.6559050000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57595000000000 insignificant 18.435000000000 insignificant 18.4357000000000 insignificant 23.11345000000000 insignificant 18.1397000000000 insignificant 18.1397000000000 insignificant 18.4397000000000 insignificant 23.11345000000000 insignificant 18.4397000000000 insignificant 18.43970000000000000 insignificant 18.4397000000000000000000000000000000000000	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0196 -0.0952 -0.0309 0.0291 0.0040 0.0836 0.0347 0.0270
BENFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Carwey Wick SSSI Cohlam Woods and Lodge Hill SSSI Cohlam Woods SSSI CROUCH at RonCH ESTUARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries SSSI Dailham Farm SSSI SESX ESTUARIES SAC Garold's Meadow SSSI Great Tobalse Mood SSSI Great Chabbles Wood SSSI Great Chabbles Wood SSSI Great Chabbles Wood SSSI	Mean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.0 31.5 31.0 31.5 34.4 54.7 44.2 34.4 44.2 34.6 49.2 25.4 30.9	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 2.88784 3.76127 2.55408 1.37034 1.37034 1.38285 3.12383 1.6462	2.52% 2.69% 10.23% 2.29% 1.83% 1.83% 1.83% 1.83% 1.83% 1.84% 0.69% 0.69% 0.69% 0.69% 0.69%	43.60 43.94 64.60 41.32 48.15 35.14 33.51 43.389 35.25 36.91 56.05 46.22 37.76 50.82	21.80% Insignificant 21.97% Insignificant 22.30% 22.30% 22.66% Insignificant 22.66% Insignificant 17.57% Insignificant 17.57% Insignificant 17.52% Insignificant 28.63% Insignificant 28.36% Insignificant 28.31% Insignificant 28.31% Insignificant 28.31% Insignificant 28.31% Insignificant 28.34% Insignificant	4.9932 5.3837 20.3839 3.35266 1.74181 3.6661 3.6661 2.88627 3.36661 2.53214 1.39641 1.9969 3.2074 1.68088	2.50% 2.69% 10.19% 1.68% 1.38% 1.38% 1.38% 1.38% 0.70% 0.97% 1.60% 1.60% 1.60% 1.43%	43.56 43.35 64.53 41.28 35.15 35.15 35.15 35.15 35.15 35.15 35.15 36.88 56.00 46.23 37.74 50.86	21.778600000000 insignificant 21.97383500000000 insignificant 22.26295000000000 insignificant 20.641345000000000 insignificant 22.65590500000000 insignificant 12.75505000000000 insignificant 17.75505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 18.43957000000000 insignificant 28.413000000000 insignificant 28.11345000000000 insignificant 18.13757000000000 insignificant 18.1375000000000 insignificant 18.1345000000000000 insignificant 18.1345000000000 insignificant 18.13450000000000 insignificant 18.13450000000000 insignificant 14.1345000000000000000000000000000000000000	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0196 -0.0352 -0.0309 0.0291 0.0040 0.0836 0.0347 0.0270 0.0269
BERNEET AND SOUTHEND WARSHES SPA Benfleet and Southend Marshes SSSI Canvey Wick SSSI Coham Woods SSSI Cobham Woods SSSI Cobham Woods SSSI ConUch & ROACH ESTUARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries SSI Datham Fam SSSI ESSEX ESTUARIES SAC Garold's Maadow SSSI Grand's Thurnock Chalk PH SSSI Great Crables Wood SSSI Great Wood & Doedr's Grove SSSI Hanningtied Revervoir SSSI Hanningtied Revervoir SSSI Hockley Woods SSI	Mean) 200	38.6 38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.0 31.5 34.4 54.7 44.2 34.6 49.2 25.4 25.4	5.03811 5.3758 20.4608 3.38511 4.58177 3.65268 3.65268 3.65268 3.65268 1.37034 1.37034 1.98295 3.12383 1.6462 2.84231 1.99971	2.52% 2.69% 10.23% 1.69% 2.29% 1.83% 1.43% 1.43% 0.69% 1.28% 1.66% 0.59% 1.56% 0.22% 1.56% 1.02% 1.00%	43.60 43.94 64.60 41.32 48.15 35.14 33.89 35.25 36.91 56.05 46.22 37.76 50.82 28.28 23.28	21.80% insignificant 21.97% insignificant 32.30% Potentially Significant 20.66% insignificant 24.06% insignificant 17.57% insignificant 17.57% insignificant 16.94% insignificant 17.42% insignificant 28.03% insignificant 28.03% insignificant 18.86% insignificant 18.86% insignificant 25.41% insignificant 14.14% insignificant	4 9932 5.3837 20.3833 3.35566 1.7418 3.6661 2.62521 1.3904 1.9909 3.2074 1.6606 2.2521 1.3904 1.9909 3.2074 2.6603 2.02657	2.50% 2.69% 10.19% 1.68% 1.68% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3	43.56 43.95 64.53 45.31 35.15 33.87 35.45 33.87 35.45	21.778500000000 insignificant 21.9738350000000 insignificant 22.829500000000 insignificant 20.64134500000000 insignificant 22.65590500000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 27.5759000000000 insignificant 28.041785000000000 insignificant 18.1957000000000 insignificant 18.1957000000000 insignificant 18.1957000000000 insignificant 18.1957000000000 insignificant 18.1957000000000 insignificant 18.1957000000000 insignificant 18.1957000000000 insignificant 18.1957000000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0196 -0.0952 -0.0309 0.0291 0.0040 0.0836 0.0347 0.0270
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canvey Wick SSSI Cohem Woods and Lodge Hill SSSI Cohem Woods SSSI Cohem Woods SSSI Cohem Woods SSSI Conuch & AnoLACH ESTLAHEE (MIDLESSEX COAST PHASE 3) SPA Crouch and Roach Estlauries SSSI Daiham Farm SSSI SSEX ESTLAHEE SAC Garold's Meadow SSSI Grang Turrack Chalk PH SSSI Great Crabbles Wood SSSI Great Wood & Abord Scrove SSSI Hanningfield Reservor SSSI Holehaven Creek SSSI	Mean) 200	38.6 38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 31.5 34.4 54.7 34.6 49.2 25.4 30.9 56.1	5.03811 5.3756 20.4608 3.38511 4.58177 3.55268 2.88784 3.365268 2.88784 1.37034 1.37034 1.37034 1.37034 1.38295 3.12383 1.6452 2.84231 1.99971 32.5911	2.52% 2.69% 10.23% 1.69% 2.29% 1.83% 1.83% 1.83% 1.68% 0.69% 0.59% 0.62% 1.62% 1.42% 1.42% 1.60%	43.60 43.94 43.94 43.94 43.51 35.14 35.14 35.14 35.14 35.14 35.25 36.91 56.05 24.62 23.7.76 50.82 23.2.86 88.64 88.64	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant 24.08% Insignificant 17.57% Insignificant 16.94% Insignificant 17.62% Insignificant 28.33% Insignificant 28.34% Insignificant 18.84% Insignificant 28.31% Insignificant 18.84% Insignificant 4.34% Insignificant 4.43% Potentially Significant	4 9932 5 38837 20.3839 3.35268 3.35268 3.6661 2.8827 3.6661 2.8827 3.6661 2.8827 3.6661 2.8839 2.8839 2.8839 2.8839 2.8839 2.28637 2.26267 3.0.653	2.50% 2.69% 10.19% 1.68% 1.83% 1.83% 1.43% 1.43% 0.70% 0.90% 0.96% 1.60% 1.43% 1.13% 1.26% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5% 1.43% 1.5%	43.56 43.85 64.53 45.31 35.15 33.87 35.15 36.88 46.23 37.84 55.06 85.000	21.778600000000 insignificant 21.97383500000000 insignificant 22.2629600000000 Potentially Significant 20.64134500000000 insignificant 22.65596500000000 insignificant 12.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 18.43957000000000 insignificant 28.04175000000000 insignificant 28.1345000000000 insignificant 18.43957000000000 insignificant 18.43957000000000 insignificant 18.43957000000000 insignificant 18.439570000000000 insignificant 14.548000000000 insignificant 14.5480000000000000 insignificant 14.540000000000 insignificant 43.5015000000000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0196 -0.0359 0.0291 0.0040 0.0347 0.0347 0.0270 0.0269 -1.6381
BERNEET AND SOUTHEND WARSHES SPA Benfleet and Southend Marshes SSSI Canvey Wick SSSI Coltamender Woods and Lodge Hill SSSI Coltamender Woods SSSI Coltamender Woods SSSI Crouch & Anoch. ESULARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries (SMID-ESSEX COAST PHASE 3) SPA Crouch and Roach SSI Great Crathebre Mood SSI Great Wood & Dodry's Grows SSI Haningminel Reservoir SSI Hocking Woods SSI Hocking Woods SSI Holehaven Creek SSI	Mean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 34.4 44.2 34.6 49.2 25.4 30.9 56.1 43.1	5.03811 5.3758 20.4608 3.36511 4.5817 3.65268 3.65268 1.37612 2.5540 1.37034 1.98295 3.12333 1.6462 2.84231 1.98275 3.12333	2.52% 2.69% 10.23% 1.69% 2.29% 1.33% 1.43% 1.28% 0.99% 1.59% 1.59% 1.59% 1.59% 1.59% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.85% 1.63% 1.85% 1	43.60 43.94 64.60 41.32 48.15 48.15 48.15 48.35.14 33.89 35.25 36.91 56.05 46.22 37.76 50.82 28.28 28.28 32.86 88.64 46.87	21.80% insignificant 21.97% insignificant 21.97% insignificant 22.30% Potentially Significant 22.06% insignificant 24.06% insignificant 17.57% insignificant 17.57% insignificant 17.42% insignificant 17.42% insignificant 28.03% insignificant 28.03% insignificant 28.14% insignificant 18.88% insignificant 16.43% insignificant 16.43% insignificant 4.32%	4 9932 5 38837 20.3833 3.3566 1.47418 3.666 2.68627 3.666 2.5231 1.3994 1.3996 3.20746 3.20746 3.20746 3.20745 3.20745 3.20265 3.72296	2.50% 2.69% 2.69% 10.19% 1.68% 1.68% 1.33% 1.33% 1.33% 1.33% 1.26% 0.99% 1.69% 1.69% 1.69% 1.69% 1.10% 1.31% 1.13% 1.26% 1.13% 1.13% 1.26% 1.13% 1.13% 1.26% 1.13% 1.13% 1.14%	43.56 43.95 64.53 45.31 35.15 33.87 35.85 35.85 35.85 36.88 46.23 27.84 56.08 56.08 32.28 32.28 32.28 37.00 46.24 37.00	21.778500000000 insignificant 21.9739350000000 insignificant 22.95950000000 insignificant 22.05950000000 insignificant 22.0559500000000 insignificant 17.7575000000000 insignificant 17.7575000000000 insignificant 18.935700000000 insignificant 23.04170500000000 insignificant 23.04170500000000 insignificant 23.04170500000000 insignificant 23.14126000000000 insignificant 14.1640000000000 insignificant 14.14128000000000 insignificant 23.0424000000000 insignificant 23.0215000000000 insignificant 24.0215000000000 insignificant 25.42244000000000 insignificant 24.012500000000 insignificant 24.01264000000000 insignificant 24.01264000000000 insignificant 24.01264000000000 insignificant 24.01264000000000 insignificant 24.012640000000000000 insignificant	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0134 -0.0136 -0.0952 -0.0309 0.0291 0.0040 0.0836 0.0347 0.0270 0.0269 -1.6381 -0.0306
BERNETE AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Carwey Wick SSSI Cohlam Woods and Lodge Hill SSSI Cohlam Woods SSSI Cohlam A model SSSI Conuch & AoncAL Estuaries SSSI Datham Farm SSSI ESSEX ESTUARIES SAC Garrold's Maadow SSSI Great Crabbles Wood SSSI Great Wood & Bock SSI Great Wood & Aodri & Grove SSI Hanningfield Revenorit SSSI Heckley Woods SSSI Hockley Woods SSSI Hockley Woods SSSI Langton Rigge SSSI Long Rigge SSSI	Mean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.6 49.2 25.4 30.9 56.1 43.1 65.1	5.03811 5.3756 20.4608 3.36511 4.58177 3.65268 2.88784 3.76127 2.55408 1.37034 1.98255 3.12383 1.6462 2.84231 1.99971 3.75354	2.52% 2.89% 10.23% 1.69% 2.29% 1.33% 1.43% 1.43% 1.43% 0.69% 0.09% 1.56% 0.62% 1.42% 1.00% 1.63% 0.62% 0	43.60 43.94 43.94 43.94 43.51 35.14 35.14 33.80 35.25 36.91 56.05 46.22 37.76 50.82 28.28 28.28 28.28 32.86 88.64 46.63	21.80% insignificant 21.97% insignificant 20.97% Ordentially Significant 20.66% insignificant 24.68% insignificant 17.57% insignificant 16.94% insignificant 28.03% insignificant 28.03% insignificant 28.11% insignificant 28.31% insignificant 28.34% insignificant 28.43% insignificant	4 993 5 38837 20.3833 3.35266 1.47418 3.6661 3.6661 2.85827 3.6661 1.95964 1.95964 1.95964 2.6321 2.02657 30.953 3.7224 30.953 3.7225	2.50% 2.69% 10.19% 1.68% 1.33% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.43% 1.26% 0.99% 1.60% 1.60% 1.61% 1.61% 1.68% 0.61%	43.56 43.85 64.53 45.21 35.15 35.15 35.15 35.68 46.23 37.84 50.86 22.83 22.88 87.00 46.24 37.84 50.86 22.83 22.88 87.00 46.54 66.54 66.54	21.7765000000000 insignificant 21.97383500000000 insignificant 32.262950000000% insignificant 20.641345000000% insignificant 22.655905000000% insignificant 12.757500000000% insignificant 17.757500000000% insignificant 16.93413000000% insignificant 17.575500000000% insignificant 18.435970000000% insignificant 28.04129000000% insignificant 28.13450000000% insignificant 28.13450000000% insignificant 18.139570000000% insignificant 18.13450000000% insignificant 18.13450000000% insignificant 18.13450000000% insignificant 14.5460000000% insignificant 14.5460000000% insignificant 14.54250000000% insignificant 13.501500000000% insignificant 43.50150000000% insignificant 33.162575000000% insignificant	
BERNEET AND SOUTHEND WARSHES SPA Benfleet and Southend Marshes SSI Canwey Wick SSSI Contamoter Woods and Lodge Hill SSSI Contamoter Woods SSI Concurs & Anoch. Estuanies (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuanies (SMID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuanies SSI Datham Fam SSI ESSEX ESTUARIES SAC Garold's Madow SSI Grand's Madow SSI Grand's Madow SSI Grand Tubened & Doneholes SSI Hangmar's Wood SSI Grant Undow SSI Hangmar's Wood SSI Honding Heservoir SSI Hockiey Woods SSI Hotelayen Creek SSI Hotelayen Creek SSI Liangton Ridge SSSI Liangton Ridge SSSI Liangton Ridge SSSI Liangton Ridge SSSI Liangton Ridge SSSI Liangton Ridge SSSI	Mean) 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 34.4 44.2 34.6 49.2 25.4 30.9 56.1 43.1	5.03811 5.3758 20.4608 3.36511 4.5817 3.65268 3.65268 1.37612 2.5540 1.37034 1.98295 3.12333 1.6462 2.84231 1.98275 3.12333	2.52% 2.69% 10.23% 1.69% 2.29% 1.33% 1.43% 1.28% 0.99% 1.59% 1.59% 1.59% 1.59% 1.59% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.63% 1.85% 1.63% 1.85% 1	43.60 43.94 64.60 41.32 48.15 48.15 48.15 48.35.14 33.89 35.25 36.91 56.05 46.22 37.76 50.82 28.28 28.28 32.86 88.64 46.87	21.80% insignificant 21.97% insignificant 22.30% Potentially Significant 22.06% insignificant 24.06% insignificant 17.57% insignificant 17.57% insignificant 16.94% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.13% insignificant 25.41% insignificant 16.43% insignificant 16.43% insignificant 23.31% insignificant 23.31% insignificant 23.34% insignificant	4 9932 5 38837 20.3833 3.3566 1.47418 3.666 2.68627 3.666 2.5231 1.3994 1.3996 3.20746 3.20746 3.20746 3.20745 3.20745 3.20265 3.72296	2 50% 2 69% 2 69% 10.19% 10.19% 1.68% 1.35% 1.35% 1.35% 1.35% 1.35% 1.26% 0.99% 1.60% 0.99% 1.60% 1.60% 1.60% 1.60% 1.60% 1.66% 1.66% 1.5.48% 1.21%	43.56 43.95 64.53 45.31 35.15 33.87 35.85 35.85 35.85 36.88 46.23 27.84 56.08 56.08 32.28 32.28 32.28 37.00 46.24 37.00	21.778500000000 insignificant 21.97850000000 insignificant 22.6298000000000 insignificant 22.629800000000 insignificant 22.659900000000 insignificant 17.5750000000000 insignificant 17.5750000000000 insignificant 18.03957000000000 insignificant 18.03957000000000 insignificant 18.03957000000000 insignificant 28.04170500000000 insignificant 28.14124000000000 insignificant 28.14124000000000 insignificant 28.14124000000000 insignificant 28.04120500000000 insignificant 28.14124000000000 insignificant 28.04120500000000 insignificant 23.162257000000000 insignificant 23.16225700000000 insignificant 23.16225700000000 insignificant 23.16225700000000 insignificant 23.16225700000000 insignificant 23.16225700000000 insignificant 23.162257000000000 insignificant 23.162257000000000000000000 insignificant 23.16225700000000000000000000000000000000000	-0.0449 0.0081 -0.0769 -0.0324 -2.8400 0.0134 -0.0134 -0.0136 -0.0952 -0.0309 0.0291 0.0040 0.0836 0.0347 0.0270 0.0269 -1.6381 -0.0306
BERNEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSI Canvey Wick SSSI Cohamo Woods and Lodge Hill SSSI Cohamo Woods SSI Cobamo SSI Concore & Anouch Estuartes SSI Dathana Fam SSI ESSEX ESTUARIES SAC Garrold's Meadow SSSI Great Chalk PH SSSI Hangman's Wood & Deneholes SSSI Hangman's Wood & Deneholes SSSI Hangman's Wood & Deneholes SSSI Hockley Woods SSSI Langton Ridge SSSI Langton Ridge SSSI Langton Ridge SSSI MEDWAYE STUARY & MARSHES SPA Medway Estuary and Marshes SSSI	Mean) 200	38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 25.4 30.9 56.1 43.1 65.1 55.3 55.3	5.03811 5.3758 20.4608 3.38511 4.58177 2.55408 1.85268 1.37034 1.86256 3.1238 1.4662 2.86744 3.75354 1.2034 3.75354 3.08734 3.08734	2.52% 2.89% 10.23% 1.69% 1.83% 1.43% 1.88% 1.43% 0.99% 0.99% 1.56% 0.92% 1.00% 1.65% 0.02% 1.65% 0.02% 1.65% 1.83% 0.05% 1.65% 1	43.60 43.94 43.94 43.94 43.51 35.14 33.51 35.14 33.89 35.25 35.23 36.91 56.05 36.05 36.05 36.23 37.76 38.28 28.28 23.28 88.64 46.87 66.33 56.43 56.43	21.80% insignificant 21.97% insignificant 20.97% Ordertially Significant 20.06% insignificant 20.06% insignificant 21.75% insignificant 21.75% insignificant 21.75% insignificant 21.76% insignificant 22.03% insignificant 23.11% insignificant 23.11% insignificant 25.41% insignificant 25.41% insignificant 24.32% insignificant 23.34% insignificant	4 993 5 3887 2 0 383 3 35566 1 7431 3 6661 2 6521 4 13964 1 1966 3 30746 1 16608 2 62314 1 6808 2 6232 2 0 2657 3 0 2532 3 7 2596 1 2 1535 2 4 1068 2 4 1068	2.50% 2.69% 1.01% 1.01% 1.03%	43.56 43.95 64.53 45.21 35.15 33.67 35.15 36.88 46.23 37.94 56.06 28.31 32.28 87.00 46.84 57.75 57.75 57.75	21.778600000000 insignificant 21.9738350000000 insignificant 22.2629500000000 Potentially Significant 20.64134500000000 insignificant 22.6559050000000 insignificant 22.65590500000000 insignificant 17.57505000000000 insignificant 16.9341300000000 insignificant 17.57505000000000 insignificant 18.4357000000000 insignificant 28.64175000000000 insignificant 18.13957000000000 insignificant 18.1395000000000 insignificant 18.439570000000000 insignificant 18.13950000000000 insignificant 18.1395000000000000000000 insignificant 18.1426000000000000000000000000000000000000	-0.0449 0.0081 -0.0789 -0.0789 -0.0789 -0.0724 -2.8400 0.0134 -0.0134 -0.0194 -0.0952 -0.0304 -0.0291 -0.0291 -0.0291 -0.029 -1.6381 -0.0299 -1.6381 -0.019 -0.019 -0.019 -0.6785 -0.0785 -0.6785 -0.6785 -0.078 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Chattenden Woods and Lodge Hill SSSI Chattenden Woods SSI Chattenden Woods SSI Coolum & Rock-H ESUARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Rock-H ESUARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Rock-H ESUARIES (SSI Dalham Farm SSI SSIS ESTUARIES SAC Garolt'S Madow SSSI Grants Wood SSSI Grants Wood SSSI Grant Wood SSSI Grant Chatter SSIS Hanningfield Reserver SSSI Hanningfield Reserver SSSI Hotkley Woods SSI Langfon Ridge SSI Lung Phase Hotelawan Creak SSSI Lung Phase Hotelawan Creak SSI Lung Phase Hotelawan Creak Phase Hotelawan Phase Hotelawan Creak Phase	Mean) 200	38.6 38.6 38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.6 49.2 25.4 30.9 56.1 43.1 65.1 55.3 55.3 31.9	5.03811 5.3758 20.4608 3.38511 4.58177 2.55408 3.65288 3.65288 3.65288 3.65288 1.37034 1.37034 1.37034 1.37034 1.37034 1.37034 1.37034 1.37034 1.37034 1.2934 3.08734 3.08734 1.47708	2.52% 2.69% 10.23% 1.69% 1.33% 1.83% 1.83% 1.83% 1.83% 1.88% 0.99% 0.82% 1.56% 1.63% 1.63% 1.63% 1.63% 1.64%	43.60 43.94 43.94 44.61 35.14 35.14 33.89 36.95 46.22 37.76 50.82 28.28 28.28 28.28 28.28 28.28 32.86 66.31 56.63 35.64 35.64 35.64 33.36	21.80% insignificant 21.97% insignificant 22.30% Potentially Significant 22.06% insignificant 24.06% insignificant 17.57% insignificant 17.57% insignificant 16.94% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.41% insignificant 28.41% insignificant 25.41% insignificant	4 9932 5.38397 20.3833 3.35266 3.36661 2.68527 3.6661 2.652314 1.9984 1.69089 2.20857 3.0274 3.0353 2.02657 3.0353 2.1055 2.1055 2.41069 2.41069 2.41069	2 50% 2 69% 2 69% 10.19% 10.19% 1.68% 1.33% 1.32	43.56 43.95 44.53 44.53 45.51 35.15 33.87 35.85 35.75 35.75 35.35 33.35 35.35	21.778500000000 insignificant 21.973850000000 insignificant 22.822800000000 insignificant 20.64134500000000 insignificant 22.659050000000 insignificant 17.57505000000000 insignificant 18.3355000000000 insignificant 18.35550000000000 insignificant 18.35570000000000 insignificant 18.415000000000 insignificant 18.435000000000 insignificant 18.1435000000000 insignificant 18.1430000000000 insignificant 18.1430000000000 insignificant 18.1430000000000 insignificant 18.143250000000000 insignificant 18.14250000000000 insignificant 18.14250000000000 insignificant 18.1425000000000000000000000000000000000000	-0.0449 0.0051 0.0051 -0.0769 -0.0324 -2.8400 0.0134 -0.0134 -0.0134 -0.0396 0.0291 0.0291 0.0291 0.0293 -0.0396 -0.0397 0.0270 0.0286 -0.0395 -1.6381 -0.0306 -0.0119 -0.6765 -0.6765 -0.6765 -0.0049 -0.004
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SS3 Canvey Wick SS3 Coham Woods and Lodge Hill SSS1 Coham Woods SS3 Coham Woods SS3 Concurs & Rock-Estuaries SS1 Datham Farm SS3 ESSEX ESTUARIES SAC Grand's Maadow SS3 Grand's Thadow SS3 Grand's Thadow SS3 Grand's SS1 Grand's SS1 Grand's SS1 Hangman's Wood & Deneholes SS3 Hangman's SS3 Hockley Woods SS3 Ilanght Ridge SS3 Lianght Ridge SS3 Lianght Ridge SS3 Mill Madows Billericay SS3 Mill Madows Billericay SS3	Meanj 200 </td <td>38.6 38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 31.5 34.4 54.7 44.2 30.9 56.1 45.3 55.3 31.9 62.5</td> <td>5.03811 5.3758 20.4608 3.38511 3.65268 1.37034 1.65268 1.37034 1.66265 3.12363 1.6462 2.86744 1.99971 3.25541 1.99971 3.25541 1.2034 1.</td> <td>2.52% 2.89% 10.23% 1.69% 2.29% 1.33% 1.43% 1.43% 1.88% 0.69% 1.65% 0.62% 1.65% 0.62% 1.65% 0.62% 1.65% 0.60% 1.88% 0.60% 1.54% 0.75% 0.75%</td> <td>43.60 43.94 43.94 44.60 41.32 48.15 35.14 35.14 33.88 35.25 36.91 56.05 56.05 56.05 56.05 56.05 24.62 23.77 76 50.82 28.28 23.28 88.64 46.87 36.84 35.84 35.84 35.84 35.84 33.36 87.442</td> <td>21.80% insignificant 21.97% insignificant 20.97% Potentially Significant 20.06% insignificant 24.08% insignificant 17.57% insignificant 17.57% insignificant 18.49% insignificant 28.03% insignificant 29.02% insignificant 20.02% insignificant</td> <td>4 9932 5.3837 20.3833 3.35266 1.7418 3.6661 2.8521 1.39941 1.9696 3.20746 3.20746 3.20745 3.02657 3.22265 3.72296 1.21535 2.21658 2.41089 2.41089 1.47588 2.41089</td> <td>2 50% 2 69% 2 69% 10.19% 1.09% 1.03% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.43% 1.25% 1.00% 1.00% 1.01% 1.21% 1.01% 1.26% 1.21%</td> <td>43.56 43.95 64.53 45.31 35.15 33.87 35.15 33.87 35.15 33.87 46.23 37.84 50.66 2.83 37.84 50.66 2.83 37.84 50.66 32.88 37.84 50.66 50.75 57.75 57.75 33.35 57.73 53.35 57.73 57.73</td> <td>21.7786000000000 insignificant 21.97383500000000 insignificant 22.829500000000 insignificant 22.829500000000 insignificant 22.65590500000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 18.4355000000000 insignificant 18.4357000000000 insignificant 18.431245000000000 insignificant 18.431245000000000 insignificant 18.431245000000000 insignificant 23.42844000000000 insignificant 24.5015000000000 insignificant 24.5015000000000 insignificant 23.42844000000000 insignificant 23.428440000000000 insignificant 23.428440000000000000000000000000000000000</td> <td>-0.0449 0.0081 -0.0789 -0.0789 -0.0724 -2.8400 0.0134 -0.0134 -0.0194 -0.0952 -0.0952 -0.0040 0.0221 0.0040 0.0221 0.0040 0.0289 -1.6381 -0.0289 0.0270 0.0289 -0.028 -0.008 -0.028 -0.008 -0.028 -0.008 -0.028 -0.008 -0.028 -0.008 -0.028 -0.008 -0.008 -0.008 -0.028 -0.008 -0.008 -0.008 -0.028 -0.008 -0.028 -0.008 -0.008 -0.028 -0.008 -0.008 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.08 -</td>	38.6 38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 31.5 34.4 54.7 44.2 30.9 56.1 45.3 55.3 31.9 62.5	5.03811 5.3758 20.4608 3.38511 3.65268 1.37034 1.65268 1.37034 1.66265 3.12363 1.6462 2.86744 1.99971 3.25541 1.99971 3.25541 1.2034 1.	2.52% 2.89% 10.23% 1.69% 2.29% 1.33% 1.43% 1.43% 1.88% 0.69% 1.65% 0.62% 1.65% 0.62% 1.65% 0.62% 1.65% 0.60% 1.88% 0.60% 1.54% 0.75% 0.75%	43.60 43.94 43.94 44.60 41.32 48.15 35.14 35.14 33.88 35.25 36.91 56.05 56.05 56.05 56.05 56.05 24.62 23.77 76 50.82 28.28 23.28 88.64 46.87 36.84 35.84 35.84 35.84 35.84 33.36 87.442	21.80% insignificant 21.97% insignificant 20.97% Potentially Significant 20.06% insignificant 24.08% insignificant 17.57% insignificant 17.57% insignificant 18.49% insignificant 28.03% insignificant 29.02% insignificant 20.02% insignificant	4 9932 5.3837 20.3833 3.35266 1.7418 3.6661 2.8521 1.39941 1.9696 3.20746 3.20746 3.20745 3.02657 3.22265 3.72296 1.21535 2.21658 2.41089 2.41089 1.47588 2.41089	2 50% 2 69% 2 69% 10.19% 1.09% 1.03% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.43% 1.25% 1.00% 1.00% 1.01% 1.21% 1.01% 1.26% 1.21%	43.56 43.95 64.53 45.31 35.15 33.87 35.15 33.87 35.15 33.87 46.23 37.84 50.66 2.83 37.84 50.66 2.83 37.84 50.66 32.88 37.84 50.66 50.75 57.75 57.75 33.35 57.73 53.35 57.73 57.73	21.7786000000000 insignificant 21.97383500000000 insignificant 22.829500000000 insignificant 22.829500000000 insignificant 22.65590500000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 18.4355000000000 insignificant 18.4357000000000 insignificant 18.431245000000000 insignificant 18.431245000000000 insignificant 18.431245000000000 insignificant 23.42844000000000 insignificant 24.5015000000000 insignificant 24.5015000000000 insignificant 23.42844000000000 insignificant 23.428440000000000 insignificant 23.428440000000000000000000000000000000000	-0.0449 0.0081 -0.0789 -0.0789 -0.0724 -2.8400 0.0134 -0.0134 -0.0194 -0.0952 -0.0952 -0.0040 0.0221 0.0040 0.0221 0.0040 0.0289 -1.6381 -0.0289 0.0270 0.0289 -0.028 -0.008 -0.028 -0.008 -0.028 -0.008 -0.028 -0.008 -0.028 -0.008 -0.028 -0.008 -0.008 -0.008 -0.028 -0.008 -0.008 -0.008 -0.028 -0.008 -0.028 -0.008 -0.008 -0.028 -0.008 -0.008 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.004 -0.088 -0.08 -
BENFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Cantey Wick SSI Canter Microsoft SSI Canter Microsoft SSI Canter Microsoft SSI Canter Microsoft SSI Cancel And Roach Estuantes (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuantes (SMID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuantes SSI Datham Farm SSI SSI SSI Service SSI Cancel SSI Ca	Mean) 200 </td <td>38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.4 55.7 34.6 492 25.4 30.9 56.1 55.3 55.3 31.9 62.5 29.9</td> <td>5 0.3811 5 3.758 20.4600 3.36511 4.58177 3.65268 3.65268 3.7512 2.85744 3.75127 2.55406 1.37034 1.98971 1.99971 1.99971 1.99971 1.99971 1.90971 1.0044 1.0044 1.0054 1.0054 1.0054 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.075555 1.0755555555 1.07555</td> <td>2.52% 2.69% 10.23% 1.69% 1.33% 1.43% 1.43% 1.43% 1.84% 0.99% 0.69% 0.62% 1.56% 0.62% 1.63% 1.63% 1.63% 1.64% 1.54% 0.74% 0.60% 0.60%</td> <td>43.60 43.94 43.94 44.61 35.14 35.14 35.14 33.88 36.25 36.91 56.05 46.22 37.76 50.82 37.76 50.82 32.86 46.62 33.88 46.67 66.33 56.43 35.643 35.643 33.36 42.22 32.86 43.35 36.43 33.36 42.22 31.10 31.1</td> <td>21.00% insignificant 21.07% insignificant 22.00% Potentially Significant 20.06% insignificant 20.06% insignificant 24.06% insignificant 24.06% insignificant 26.75% insignificant 27.57% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.04% insignificant 29.04% insignificant 20.04% insignificant 20.04% insignificant 20.02% insignificant</td> <td>4 9932 5.38397 20.3833 3.3566 3.3666 3.3666 3.3666 3.3666 3.3204 1.9898 3.2024 3.020 3.2024 3.0202 3</td> <td>2 50% 2 69% 2 69% 2 69% 10.19% 1.68% 1.03% 1.33%</td> <td>43.56 43.95 44.53 44.53 45.51 35.15 33.87 35.85 36.88 46.23 37.84 36.88 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-0.0025</td>	38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.4 55.7 34.6 492 25.4 30.9 56.1 55.3 55.3 31.9 62.5 29.9	5 0.3811 5 3.758 20.4600 3.36511 4.58177 3.65268 3.65268 3.7512 2.85744 3.75127 2.55406 1.37034 1.98971 1.99971 1.99971 1.99971 1.99971 1.90971 1.0044 1.0044 1.0054 1.0054 1.0054 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.0754 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.07555 1.075555 1.0755555555 1.07555	2.52% 2.69% 10.23% 1.69% 1.33% 1.43% 1.43% 1.43% 1.84% 0.99% 0.69% 0.62% 1.56% 0.62% 1.63% 1.63% 1.63% 1.64% 1.54% 0.74% 0.60% 0.60%	43.60 43.94 43.94 44.61 35.14 35.14 35.14 33.88 36.25 36.91 56.05 46.22 37.76 50.82 37.76 50.82 32.86 46.62 33.88 46.67 66.33 56.43 35.643 35.643 33.36 42.22 32.86 43.35 36.43 33.36 42.22 31.10 31.1	21.00% insignificant 21.07% insignificant 22.00% Potentially Significant 20.06% insignificant 20.06% insignificant 24.06% insignificant 24.06% 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BENFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Cantey Wick SSI Canter Microsoft SSI Canter Microsoft SSI Canter Microsoft SSI Canter Microsoft SSI Cancel And Roach Estuantes (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuantes (SMID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuantes SSI Datham Farm SSI SSI SSI Service SSI Cancel SSI Ca	Meanj 200	38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.6 49.2 25.4 30.9 56.1 45.1 55.3 55.3 31.9 62.5 29.9 31.0	5.03811 5.3758 20.4608 3.38511 3.65268 1.37034 1.65268 1.37034 1.66265 3.12363 1.6462 2.86744 1.99971 3.25541 1.99971 3.25541 1.2034 1.	2.52% 2.89% 10.23% 1.69% 2.29% 1.33% 1.43% 1.43% 1.88% 0.69% 1.65% 0.62% 1.65% 0.62% 1.65% 0.62% 1.65% 0.60% 1.88% 0.60% 1.54% 0.75% 0.75%	43.60 43.94 43.94 44.60 41.32 48.15 35.14 35.14 33.88 35.25 36.91 56.05 56.05 56.05 56.05 56.05 24.62 23.77 76 50.82 28.28 23.28 88.64 46.87 36.84 35.84 35.84 35.84 35.84 33.36 87.442	21.80% insignificant 21.97% insignificant 20.97% Potentially Significant 20.06% insignificant 24.08% insignificant 17.57% insignificant 17.57% insignificant 18.49% insignificant 28.03% insignificant 29.02% insignificant 20.02% insignificant	4 9932 5.3837 20.3833 3.35266 1.7418 3.6661 2.8521 1.39941 1.9696 3.20746 3.20746 3.20745 3.02657 3.22265 3.72296 1.21535 2.21658 2.41089 2.41089 1.47588 2.41089	2 50% 2 69% 2 69% 2 69% 10.19% 1.68% 1.03% 1.33%	43.56 43.95 64.53 45.31 35.15 33.87 35.15 33.87 35.15 33.87 46.23 37.84 50.66 2.83 37.84 50.66 2.83 37.84 50.66 32.88 37.84 50.66 50.75 57.75 57.75 33.35 57.73 53.35 57.73 57.73	21.7786000000000 insignificant 21.97383500000000 insignificant 22.829500000000 insignificant 22.829500000000 insignificant 22.65590500000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 18.4355000000000 insignificant 18.4357000000000 insignificant 18.431245000000000 insignificant 18.431245000000000 insignificant 18.431245000000000 insignificant 23.42844000000000 insignificant 24.5015000000000 insignificant 24.5015000000000 insignificant 23.42844000000000 insignificant 23.428440000000000 insignificant 23.428440000000000000000000000000000000000	-0.0449 0.0081 -0.0780 -0.0324 -0.0324 -0.0324 -0.0134 -0.0134 -0.0380 -0.0221 -0.0380 -0.0221 -0.0390 -0.0221 -0.0306 -0.0306 -0.0306 -0.1119 -0.6785 -0.6785 -0.0491
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Coham Wick SSI Coham Wick SSI Coham Wick SSI Columa And Roach Estuaries (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries (SMID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries (SSI Datham Farm SSI ESSEX ESTUARIES SAC Garolt's Maadow SSSI Graty Touroak Chalk PHI SSSI Graty Touroak Chalk PHI SSSI Grata Tobles Wood SSSI Grata Tobles AD Extended SSI Hanningflied Reservoir SSSI Hanningflied Reservoir SSSI Hokhawen Creek SSSI Langton Ridge SSSI Medway Estuary and Marshes SSI Medway Estuary and Marshes SSI Mucking Flats and Marshes SSSI Nucking Flats and Marshes SSSI Nucking Flats and Marshes SSSI Northward Hill SSSI	Mean) 200 </td <td>38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.4 55.7 34.6 492 25.4 30.9 56.1 55.3 55.3 31.9 62.5 29.9</td> <td>5 0.3811 5 3.758 2 0.4606 3 .38511 4 .58177 3 .65268 2 .86724 3 .76127 2 .55406 1 .98255 3 .12883 1 .6462 2 .84231 1 .99971 2 .55506 1 .99971 3 .75554 1 .09947 1 .09947 1 .09971 3 .06734 3 .06734 1 .47766 1 .47555 1 .475555 1 .475555 1 .475555 1 .475555555 1 .47555555555555555555555555555555555555</td> <td>2.52% 2.69% 10.23% 1.69% 1.33% 1.33% 1.43% 1.43% 0.09% 0.25% 0.09% 1.56% 0.62% 1.56% 1.56% 1.54%</td> <td>43.60 43.94 43.94 44.60 41.92 48.15 35.14 35.14 35.14 33.88 35.25 36.91 56.05 46.22 37.76 50.82 32.88 88.64 98.64 31.58.43 35.84 33.36 88.44 33.36 88.44 33.36 35.84 31.35 36.84 31.35 37.75 37.</td> <td>21.00% insignificant 21.07% insignificant 22.00% Potentially Significant 20.06% insignificant 20.06% insignificant 24.06% insignificant 24.06% insignificant 27.57% insignificant 28.05% insignificant 29.05% insignificant 20.05% insignificant 20.05% insignificant 20.05% insignificant 20.05% insignificant 20.02% insignificant</td> <td>4 9932 5.38397 20.3830 1.74181 3.6661 2.68527 3.6661 2.52314 1.9868 3.3074 1.9868 2.268527 3.0664 1.5994 1.9868 3.3074 3.02745 3.02515 3.025555 3.025555 3.025555 3.025555 3.0255555 3.02555555555555555555555555555555555555</td> <td>2 50% 2 69% 2 69% 2 69% 2 69% 10.19% 10.3% 10.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1</td> <td>43.56 43.95 44.128 44.53 45.31 35.15 33.87 35.85 36.88 56.08 46.23 37.84 50.86 28.31 32.88 57.00 46.23 37.84 50.86 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.75 50.75 50.75 50.75 50.35 50.75 50.35 50.75 50.35 50.75 50.35</td> <td>21.778500000000 Insignificant 21.9738500000000 Insignificant 22.825800000000 Potentially Significant 20.6413450000000 Insignificant 22.659800000000 Insignificant 12.755000000000 Insignificant 13.755000000000 Insignificant 14.7575000000000 Insignificant 15.0557000000000 Insignificant 18.4357000000000 Insignificant 18.4357000000000 Insignificant 18.1357000000000 Insignificant 18.4357000000000 Insignificant 18.4357000000000 Insignificant 18.43570000000000 Insignificant 19.642255000000000 Insignificant 25.4240000000000 Insignificant 19.642550000000000 Insignificant 28.677450000000000 Insignificant 28.677450000000000 Insignificant 28.677450000000000 Insignificant 28.677450000000000 Insignificant 36.531450000000000 Insignificant 36.5314500000000000 Insignificant <</td> <td>-0.0449 0.0051 -0.0789 -0.0324 -0.0324 -0.0324 -0.0134 -0.0134 -0.0386 -0.0386 -0.0386 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.6765 -0.0049 -0.3864 -0.0025</td>	38.6 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.4 55.7 34.6 492 25.4 30.9 56.1 55.3 55.3 31.9 62.5 29.9	5 0.3811 5 3.758 2 0.4606 3 .38511 4 .58177 3 .65268 2 .86724 3 .76127 2 .55406 1 .98255 3 .12883 1 .6462 2 .84231 1 .99971 2 .55506 1 .99971 3 .75554 1 .09947 1 .09947 1 .09971 3 .06734 3 .06734 1 .47766 1 .47555 1 .475555 1 .475555 1 .475555 1 .475555555 1 .47555555555555555555555555555555555555	2.52% 2.69% 10.23% 1.69% 1.33% 1.33% 1.43% 1.43% 0.09% 0.25% 0.09% 1.56% 0.62% 1.56% 1.56% 1.54%	43.60 43.94 43.94 44.60 41.92 48.15 35.14 35.14 35.14 33.88 35.25 36.91 56.05 46.22 37.76 50.82 32.88 88.64 98.64 31.58.43 35.84 33.36 88.44 33.36 88.44 33.36 35.84 31.35 36.84 31.35 37.75 37.	21.00% insignificant 21.07% insignificant 22.00% Potentially Significant 20.06% insignificant 20.06% insignificant 24.06% insignificant 24.06% insignificant 27.57% insignificant 28.05% insignificant 29.05% insignificant 20.05% insignificant 20.05% insignificant 20.05% insignificant 20.05% insignificant 20.02% insignificant	4 9932 5.38397 20.3830 1.74181 3.6661 2.68527 3.6661 2.52314 1.9868 3.3074 1.9868 2.268527 3.0664 1.5994 1.9868 3.3074 3.02745 3.02515 3.025555 3.025555 3.025555 3.025555 3.0255555 3.02555555555555555555555555555555555555	2 50% 2 69% 2 69% 2 69% 2 69% 10.19% 10.3% 10.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1	43.56 43.95 44.128 44.53 45.31 35.15 33.87 35.85 36.88 56.08 46.23 37.84 50.86 28.31 32.88 57.00 46.23 37.84 50.86 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.75 50.75 50.75 50.75 50.35 50.75 50.35 50.75 50.35 50.75 50.35	21.778500000000 Insignificant 21.9738500000000 Insignificant 22.825800000000 Potentially Significant 20.6413450000000 Insignificant 22.659800000000 Insignificant 12.755000000000 Insignificant 13.755000000000 Insignificant 14.7575000000000 Insignificant 15.0557000000000 Insignificant 18.4357000000000 Insignificant 18.4357000000000 Insignificant 18.1357000000000 Insignificant 18.4357000000000 Insignificant 18.4357000000000 Insignificant 18.43570000000000 Insignificant 19.642255000000000 Insignificant 25.4240000000000 Insignificant 19.642550000000000 Insignificant 28.677450000000000 Insignificant 28.677450000000000 Insignificant 28.677450000000000 Insignificant 28.677450000000000 Insignificant 36.531450000000000 Insignificant 36.5314500000000000 Insignificant <	-0.0449 0.0051 -0.0789 -0.0324 -0.0324 -0.0324 -0.0134 -0.0134 -0.0386 -0.0386 -0.0386 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.6765 -0.0049 -0.3864 -0.0025
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canwey Wick SSSI Coham Woods SSSI Cohamon Woods SSSI Cohamon Woods SSSI Concurs & Anock-Estuaries SSI Daham Fam SSSI ESSEX ESTUARIES SAC Garardis Maadow SSSI Garaid's Maadow SSSI Graves Thurnex Chaik PH SSSI Hangman Yood A Dencholes SSSI Hangman Yood A Dencholes SSSI Hangman Yood A Dencholes SSSI Hackley Woods SSSI Usin PH SSSI Holehaven Creek SSSI Liangon Ridge SSSI Liangon Ridge SSSI Liangon Ridge SSSI Liangon Ridge SSSI Liangon Ridge SSSI Liangon Ridge SSSI Mail Maadows Billencing SSSI Mail Maadows Billencing SSSI Norsey Wood SSSI Norsey Wood SSSI Norsey Wood SSSI	Meanj 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.6 49.2 56.1 65.3 55.3 31.9 62.5 29.9 31.0 46.6	5.03811 5.3758 20.4600 3.35511 4.58177 3.65268 3.65268 1.37034 1.97034 1.97034 1.97034 1.98295 3.12383 1.4462 2.84213 1.99971 3.25911 3.7354 2.84213 1.99974 1.2034	2.52% 2.69% 10.23% 1.69% 2.29% 1.83% 1.43% 1.43% 1.28% 1.28% 1.28% 1.28% 1.69% 1.56% 1.25% 1.64% 1.54% 1.54% 1.54% 1.54% 1.55% 1.56% 1.56% 1.56%	43.60 43.90 43.94 43.94 43.94 48.15 35.14 33.51 43.34 35.25 36.91 56.05 56.05 26.25 32.26 88.64 46.87 32.26 88.64 46.87 35.84.43 58.43 33.36 58.43 33.36 74.42 33.36 58.43 33.46 58.43 33.46 58.43 33.46 58.43 58.43 58.43 58.43 58.43 58.43 58.43 58.43 58.43 58.43 58.43 58.43 58.43 58.44 59.55 59.	21.80% Insignificant 21.976 Insignificant 32.30% Potentially Significant 20.66% Insignificant 24.06% Insignificant 17.57% Insignificant 17.57% Insignificant 16.94% Insignificant 17.82% Insignificant 18.64% Insignificant 23.11% Insignificant 18.64% Insignificant 23.11% Insignificant 18.64% Insignificant 23.13% Insignificant 23.14% Insignificant 23.14% Insignificant 23.14% Insignificant 23.14% Insignificant 24.25% Insignificant 23.44% Insignificant 23.44% Insignificant 23.44% Insignificant 23.24% Insignificant 23.24% Insignificant 23.24% Insignificant 23.24% Insignificant 23.24%	4 9932 5.3837 20.3833 3.35666 1.47418 3.6666 2.6262 3.6661 2.52214 1.3984 1.3986 2.6653 2.0265 3.37246 1.2555 2.41089 2.41089 2.41089 1.47238 1.05369 1.2055 2.41089 2.41089 1.47238 1.05369 1.2056 2.210577 2.210577 2.210577 2.210577 2.2105777 2.2105777 2.2105777	2.50% 2.69% 10.19% 10.19% 1.68% 10.37% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.35% 1.3	43.56 43.95 64.53 45.31 35.15 33.87 35.45	21.7785000000000 insignificant 21.97383500000000 insignificant 22.629500000000 insignificant 22.64134500000000 insignificant 22.6539050000000 insignificant 17.5755000000000 insignificant 11.5755000000000 insignificant 12.575900000000 insignificant 22.61473500000000 insignificant 23.134500000000 insignificant 16.41254000000000 insignificant 16.41254000000000 insignificant 23.1345000000000 insignificant 23.1345000000000 insignificant 23.1345000000000 insignificant 16.41254000000000 insignificant 23.1345000000000 insignificant 23.1345000000000 insignificant 23.1345000000000 insignificant 23.5251500000000 insignificant 33.16227500000000 insignificant 28.5714500000000 insignificant 16.5751500000000 insignificant 15.5512000000000 insignificant 17.01357500000000 insignificant	-0.0449 0.0051 -0.0769 -0.0789 -0.0224 -2.8400 -0.0134 -0.0134 -0.0291 -0.0291 0.0291 0.0293 0.0293 0.0294 0.0347 0.0256 0.0269 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.05765 0.5785 0.0034 0.0034 0.0034 0.0034 0.0034 0.0034 0.0034
BERNEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SS3 Canvey Wick SSS1 Cohtem Woods and Lodge Hill SSS1 Cohtamoter Woods and Lodge Hill SSS1 Cohtamoter Woods SS1 ConUch & ROACH ESTUARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries SS1 Dathan Farm SS3 ESSEX ESTUARIES SAC Gards Thadow SS31 Grands Thadow SS31 Grands Thadow SS31 Grands Thadow SS31 Grands Chables Wood SS35 Grands Chables Wood SS31 Honghar Wood A Deneholes SS31 Hangmarn Wood A Deneholes SS31 Hocklay Woods SS31 Hocklay Woods SS31 Hocklay Woods SS31 Hocklay Woods SS31 Usangton Ridge SS31 Lungfort Ridge SS31 Lungfort Ridge SS31 Lungfort Ridge SS31 Mid Madows Billericay SS31 Mill Madows Billericay SS31	Mean) 200	386 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.4 50.7 44.2 34.6 49.2 25.4 30.9 56.1 55.3 55.3 31.9 62.5 29.9 31.0 46.6 41.5	5 0.3811 5 3.758 2 0.4606 3 .38511 4 .58177 3 .65268 2 .86724 3 .76127 2 .55406 1 .98255 3 .12883 1 .6462 2 .84231 1 .99971 2 .55506 1 .99971 3 .75554 1 .09947 1 .09947 1 .09971 3 .06734 3 .06734 1 .47766 1 .47555 1 .475555 1 .475555 1 .475555 1 .475555555 1 .47555555555555555555555555555555555555	2.52% 2.69% 10.23% 1.69% 1.33% 1.33% 1.43% 1.43% 0.09% 0.25% 0.09% 1.56% 0.62% 1.56% 1.56% 1.54%	43.60 43.94 43.94 44.60 41.92 48.15 35.14 35.14 35.14 33.88 35.25 36.91 56.05 46.22 37.76 50.82 32.88 88.64 98.64 31.58.43 35.84 33.36 88.44 33.36 88.44 33.36 35.84 31.35 36.84 31.35 37.75 37.	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant 24.05% Insignificant 17.57% Insignificant 17.57% Insignificant 18.49% Insignificant 23.11% Insignificant 18.49% Insignificant 23.11% Insignificant 25.41% Insignificant 25.41% Insignificant 23.44% Insignificant 23.45% Insignificant 24.32% Insignificant 23.44% Insignificant 23.44% Insignificant 23.45% Insignificant 23.45% Insignificant 23.25% Insignificant 29.22% Insignificant 29.22% Insignificant 29.22% Insignificant 29.22% Insignificant 29.22% Insignificant 29.22% Insignificant 20.22%	4 9932 5.38397 20.3830 1.74181 3.6661 2.68527 3.6661 2.52314 1.9868 3.3074 1.9868 2.268527 3.0664 1.5994 1.9868 3.3074 3.02745 3.02515 3.025555 3.025555 3.025555 3.025555 3.0255555 3.02555555555555555555555555555555555555	2.50% 2.69% 2.69% 10.19% 1.68% 1.68% 1.63% 1.33% 1.33% 1.33% 1.33% 1.33% 1.26% 0.70% 0.99% 1.60% 1.60% 1.60% 1.61% 1.61% 1.51% 1.52% 1.52% 1.51% 1.55% 1.51% 1.55\% 1.55\% 1.55\% 1.55\% 1.55\% 1.55\%	43.56 43.95 44.128 44.53 45.31 35.15 33.87 35.85 36.88 56.08 46.23 37.84 50.86 28.31 32.88 57.00 46.23 37.84 50.86 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.85 50.75 50.75 50.75 50.75 50.35 50.75 50.35 50.75 50.35	21.778600000000 insignificant 21.97383500000000 insignificant 22.2629500000000 insignificant 20.64134500000000 insignificant 22.65590500000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 18.3957000000000 insignificant 18.4957000000000 insignificant 23.11345000000000 insignificant 18.139500000000 insignificant 18.14125000000000 insignificant 18.1346000000000 insignificant 18.1346000000000 insignificant 18.1346000000000 insignificant 18.13450000000000 insignificant 18.13450000000000 insignificant 19.5150000000000000000000000000000000000	-0.0449 0.0001 -0.0769 -0.0724 -0.0724 -0.0724 -0.0724 -0.0724 -0.0724 -0.0724 -0.0724 -0.0134 -0.0134 -0.052 -0.0040 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0210 -0.0220 -0.0210 -0.0220 -0.0210 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -0.0220 -
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canwey Wick SSSI Coham Woods SSSI Coham Woods SSSI Coham Woods SSSI Concurs A nock-Estuantes (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuantes SSI Datham Farm SSSI SSI SESEX ESTUARIES SAC Garold's Maadow SSSI Grant Woods MSSI Grant Woods SSSI Grant Woods A Deneholes SSSI Hanningtien Reservoir SSSI Honckey Woods SSSI Hondayer Under SSSI Hondayer Under SSSI Hondayer Creek SSSI Langfon Ridge SSSI Holdhaven Creek SSSI Langfon Ridge SSSI Holdhaven Creek SSSI Liangfon Ridge SSSI Holdhaven Creek SSSI Liangfon Ridge SSSI Micking Flats and Marshes SSSI Mucking Flats and Marshes SSI Mucking Flats	Meanj 200	38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.6 49.2 56.1 65.3 55.3 31.9 62.5 29.9 31.0 46.6	5.03811 5.3758 20.4600 3.38511 3.65268 3.65268 3.65268 3.76127 2.55406 3.12383 1.4462 2.64233 1.99971 2.5541 3.73545 1.20542 3.08734 1.80574 1.120542 3.11007 2.75025 1.73805	2.52% 2.69% 10.23% 1.69% 2.29% 1.33% 1.43% 1.28% 0.69% 1.28% 0.69% 1.56% 1.63% 1.63% 1.63% 1.64% 1.54% 1.54% 1.54% 1.55% 0.65% 0	43.60 43.90 43.94 64.60 41.32 48.15 35.14 33.51 43.389 35.25 36.91 56.05 46.22 37.76 50.62 28.28 28.28 32.266 88.64 46.87 56.43 33.35 88.43 33.35 88.43 33.35 88.43 33.35 88.43 33.42 74.42 31.10 34.12 34.1	21.80% insignificant 21.97% insignificant 20.66% insignificant 20.66% insignificant 21.75% insignificant 24.06% insignificant 21.75% insignificant 21.75% insignificant 22.31% insignificant 22.31% insignificant 22.31% insignificant 22.31% insignificant 23.31% insignificant 25.41% insignificant 25.41% insignificant 25.41% insignificant 23.44% insignificant 23.44% insignificant 23.44% insignificant 23.44% insignificant 23.44% insignificant 23.44% insignificant 23.44% insignificant 23.44% insignificant 23.44% insignificant 23.24% in	4 9932 5 3887 20.3833 3.3566 1.7418 3.6661 2.68627 3.6661 2.52314 1.3966 3.20746 3.20746 3.20746 3.20746 3.20745 3.0565 3.72296 1.21355 2.41089 1.47353 3.72296 1.21555 2.41089 1.47353 1.05389 1.20345 1.20345 2.21816 1.20345 1.20355 1.20355 1.20355 1.20355 1.20355 1.20355 1.20355 1.	2.50% 2.69% 2.69% 10.19% 1.68% 1.03% 1.33% 1.33% 1.33% 1.33% 1.33% 1.28% 0.99% 1.60% 0.99% 1.60% 1.61% 1.35% 1.01% 1.21% 1.21% 1.21% 1.21% 1.21% 1.51% 1.51% 1.51%	43.56 43.95 64.53 45.31 35.15 33.87 35.45 35.45 35.45 35.45 36.88 36.88 37.78 46.22 37.84 46.22 37.84 46.22 37.84 46.22 37.84 46.23 37.75 57.75 57.75 57.75 37.35 37.36 37.36 46.83 32.83 37.36 46.83 32.83 37.72 57.75 57.75 57.75 57.75 57.75 57.75 57.75 57.35 33.35 37.35	21.778500000000 insignificant 21.97393500000000 insignificant 22.6295000000000 insignificant 20.64134500000000 insignificant 22.6550050000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 17.57550000000000 insignificant 18.3957000000000 insignificant 23.135000000000 insignificant 24.135000000000 insignificant 25.42844000000000 insignificant 24.135000000000 insignificant 25.428440000000000 insignificant 14.15460000000000 insignificant 23.242840000000000 insignificant 24.125000000000000000000000000000000000000	-0.0449 0.0051 -0.0769 -0.0789 -0.0224 -2.8400 -0.0134 -0.0134 -0.0291 -0.0291 0.0291 0.0293 0.0293 0.0294 0.0347 0.0256 0.0269 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.0259 0.05765 0.5785 0.0034 0.0034 0.0034 0.0034 0.0034 0.0034 0.0034
BENFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Cohaten Woods and Lodge Hill SSSI Cohaten Woods SSSI Chattenden Woods and Lodge Hill SSSI Cohaten Woods SSSI Chattenden Woods SSSI Chattenden SSI Sandraf Katadow SSSI Gray Thurack Chalk Prit SSSI Gray Thurack Chalk Prit SSSI Gray Thurack Chalk Prit SSSI Gray Thurack Chalk Prit SSSI Graat Wood SSSI Graat Wood SSSI Graat Wood SSSI Graat Wood SSSI Graat Wood SSSI Graat Wood SSSI Hanningfield Reservol: SSSI Hanningfield Reservol: SSSI Holdehaven Creek SSSI Langdon Ridge SSSI Langdon Ridge SSSI Langdon Ridge SSSI Mil Meadows Billenciay SSSI Morthward Hill SSSI Prisea Marsh SSSI South Thames Estuary and Marshes SSSI	Mean) 200	386 386 44.1 37.9 43.6 31.5 31.5 31.5 31.5 34.4 54.7 44.2 25.4 30.9 56.1 431 55.3 35.3 31.9 31.0 46.6 41.5 69.4	5 0.3811 5 3.3758 2.0 4605 3.38511 4.58177 3.65268 3.65268 1.65268 1.87054 1.82055 3.12383 1.6462 2.88724 1.92055 3.12383 1.6462 2.84231 1.69977 3.08734 3.08734 1.20911 1.2094 3.08734 1.20911 1.2094 1.2094 3.08734 1.2095 1.209	2.52% 2.69% 10.23% 1.69% 1.63% 1.43% 1.43% 1.43% 0.09% 0.28% 0.09% 0.28% 0.09% 0.28% 1.56% 0.63% 1.56% 1.56% 1.56% 1.56% 1.56%	43.60 43.90 43.94 64.60 41.32 48.10 35.14 35.14 33.80 36.52 36.91 56.05 46.22 37.76 50.02 28.28 28.28 28.28 32.286 88.64 33.30 66.31 68.43 33.30 46.87 42.23 31.10 33.11 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10 34.12 74.10	21.00% Insignificant 21.97% Insignificant 22.00% Potentially Significant 20.06% Insignificant 20.06% Insignificant 24.06% Insignificant 17.57% Insignificant 16.94% Insignificant 23.11% Insignificant 16.94% Insignificant 23.05% Insignificant 24.06% Insignificant 16.94% Insignificant 24.95% Insignificant 23.15% Insignificant 24.16% Insignificant 25.41% Insignificant 24.34% Insignificant 25.41% Insignificant 24.34% Insignificant 23.16% Insignificant 23.24% Insignificant 23.25% Insignificant 23.76% Insignificant 24.15% Insignificant 27.05% Potentially Significant 24.15% Insignificant 24.15	4 9932 5.3837 20.3839 1.7415 3.6661 2.6662 3.6661 1.9964 1.9966 3.3274 1.9966 3.3274 1.9966 3.3274 1.9966 3.3274 1.9966 3.3274 1.2155 2.4109 2.4109 2.4109 3.02715 3.02715 2.21661 1.2084 1.208	2 50% 2 69%	43.56 43.55 44.52 44.53 44.28 45.31 35.15 35.55 36.88 46.23 37.84 32.88 87.00 46.24 32.83 32.88 87.00 46.24 32.83 32	21.778500000000 insignificant 21.9738500000000 insignificant 22.625800000000 insignificant 20.6413450000000 insignificant 22.655800000000 insignificant 17.575600000000 insignificant 18.3957000000000 insignificant 18.3957000000000 insignificant 28.413500000000 insignificant 18.3957000000000 insignificant 28.4135000000000 insignificant 28.4135000000000 insignificant 28.13572000000000 insignificant 28.4135000000000 insignificant 28.4125000000000 insignificant 28.42000000000 insignificant 28.42000000000 insignificant 28.42744000000000 insignificant 28.42744000000000 insignificant 28.477445000000000 insignificant 28.57445000000000 insignificant 28.57445000000000 insignificant 36.531450000000000 insignificant 36.531450000000000000000 insignificant <td< td=""><td>-0.0449 0.0051 -0.0789 -0.0224 -0.0224 -0.0124 -0.0124 -0.0124 -0.0251 -0.0251 -0.0388 -0.02291 -0.0389 -0.0270 -0.0389 -0.0270 <td< td=""></td<></td></td<>	-0.0449 0.0051 -0.0789 -0.0224 -0.0224 -0.0124 -0.0124 -0.0124 -0.0251 -0.0251 -0.0388 -0.02291 -0.0389 -0.0270 -0.0389 -0.0270 <td< td=""></td<>
BERFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canwey Wick SSSI Canwey Wick SSSI Coham Woods SSI Colona Noods SSI Colona And Roach Estuaries SSI Daham Farm SSI ESSEX ESTUARIES SAC Garold's Madow SSI Grang Thurock Chalk Pit SSI Grang Wood & Dodr's Grow SSI Hangman's Wood & Denetoles SSI Hangman's Wood & Denetoles SSI Hockey Woods SSI Holehaven Creek SSI Langfon Rige SSI Holehaven Creek SSI Lon Pit SSI Metking Essi Mucking Falst and Marshes SSI Mucking Falst and Marshes SSI Northward Hill SSI Pitaea Marsh SSI Sonth Thurnes Estuary and Marshes SSI South Thumes Estuary and Marshes SSI South Thumes Estuary and Marshes SSI	Meanj 200	386 38.6 44.1 37.9 43.6 31.5 31.5 31.5 31.5 34.4 54.7 442 30.9 56.1 55.3 55.3 31.9 32.9 31.0 31.1 30.9 56.1 55.3 31.9 42.5 29.9 31.0 46.6 41.5 69.4 72.2	5.03811 5.3758 20.4600 3.38511 4.58177 3.65268 1.37034 1.85268 1.37034 1.92057 3.12383 1.6462 2.86734 1.99971 3.25911 3.75354 1.99971 3.65268 1.99971 3.65268 1.99971 3.65268 1.99971 3.65268 1.99971 3.65268 1.99971 3.65268 1.99971 3.75355 1.73605	2.52% 2.69% 10.23% 1.69% 2.29% 1.35% 1.45% 1.28% 0.99% 1.55% 1.28% 0.99% 1.55% 1.55% 1.55% 1.63% 1.64% 0.60% 1.54% 1.54% 1.54% 0.75% 0.67% 1.35% 0.67% 1.35% 0.67% 0	43.60 43.94 43.94 44.91 45.14 46.15 35.14 33.51 43.35 46.22 37.76 56.05 46.22 37.76 56.05 28.22 32.26 32.26 46.82 32.26 46.82 32.26 46.83 33.58 43 33.58 44 33.30 46.82 31.58 43 33.58 44 33.30 34.12	21.80% insignificant 21.80% insignificant 22.30% Potentially Significant 22.06% insignificant 24.06% insignificant 17.57% insignificant 17.57% insignificant 18.84% insignificant 28.03% insignificant 28.03% insignificant 28.31% insignificant 28.31% insignificant 28.41% insignificant 24.41% insignificant 25.41% insignificant 26.43% insignificant 27.44% insignificant 28.43% insignificant 29.24% insignificant 29.24% insignificant 29.24% insignificant 29.24% insignificant 29.22% insignificant 29.22% insignificant 29.22% insignificant 27.24% insignificant 27.26% insignificant	4 9932 5 3887 20.3833 3.3566 1.47418 3.666 2.68822 3.666 2.52314 1.9899 2.20265 3.22746 3.22746 3.22746 3.22746 3.22746 1.2533 2.41089 1.47883 1.2588 1.47883 1.2588 1.2588 1.4788 1.2588 1.2	2 50% 2 69% 2 69% 10.19% 10.19% 1.68% 10.37% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.26% 0.99% 1.60% 0.99% 1.60% 1.60% 1.60% 1.61% 1.12% 1.62% 1.52% 1.51% 1.51% 1.51% 1.10% 1.67% 1.51% 1.10% 1.67% 1.10% 1.67% 1.11%	43.56 43.95 44.53 44.53 45.31 35.15 33.87 35.15 36.88 46.23 37.84 50.86 28.31 32.88 87.00 46.94 32.88 32.88 87.70 46.94 46.33 35.75 57.75 33.35 37.36 46.33 36.77 33.35 37.36 46.33 36.77 33.35 37.36 46.33 36.77 33.35 37.36 37.37.36 37.37.36 37.37.36 37.37.37.37.37.37.37.37.37.37.37.37.37.3	21.778500000000 insignificant 21.978500000000 insignificant 22.6295000000000 insignificant 22.629500000000 insignificant 22.6599500000000 insignificant 17.5755000000000 insignificant 17.57550000000000 insignificant 18.3957000000000 insignificant 28.41705000000000 insignificant 28.41264000000000 insignificant 28.4240000000000 insignificant 28.4240000000000 insignificant 28.4240000000000 insignificant 28.4240000000000 insignificant 28.4240000000000 insignificant 28.4240000000000 insignificant 28.4245000000000 insignificant 28.424500000000 insignificant 28.424500000000 insignificant 28.424500000000 insignificant 28.424500000000 insignificant 28.4274500000000 insignificant 24.428704000000000 insignificant 24.42870400000000000 insignificant 24.4287040000000000000000000000000000000000	-0.0449 0.0051 -0.769 -0.0724 -0.0724 -0.0724 -0.0124 -0.0124 -0.0124 -0.0124 -0.0124 -0.0124 -0.0221 -0.0221 0.0221 0.0221 0.0221 0.0220 0.0226 -0.0226 -0.0226 -0.0306 -0.119 -0.6785 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0049 -0.0041 -0.0041 -0.0041 -0.0041 -0.0041
BERFLETAND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canvey Wick SSSI Canvey Wick SSSI Coham Woods and Lodge Hill SSSI Coham Woods SSSI SCOUCH & ROACH SETVARIES (MID-ESSEX COAST PHASE 3) SPA Crouch and Roach Estuaries SSI Dathann Farm SSSI SSI SSI Crauch Chail Keit SSSI Dathan SSI SSI SSI STATURIES SAC Canvel SSI Canvel SSI Canvel SSI Canvel SSI Maningdied Reservoir SSSI Canvel SSI Canvel SSI Shorne and Ashenbank Woods SSI South Thames Estuary and Marshes SSI Canvel SSI Canve	Meanj 200	386 38.6 44.1 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 34.4 50.7 44.2 34.4 55.3 55.3 55.3 55.3 31.9 62.5 29.9 31.0 46.6 41.5 69.4 72.2 66.5	5 0.3811 5 .3758 20 .4608 3 .38511 4 .58177 3 .65268 1 .37034 1 .66295 3 .1233 1 .66295 2 .86295 1 .73055 2 .75025 1 .73605 2 .28882 1 .64938 1 .64938	2.52% 2.89% 10.23% 1.69% 2.29% 1.33% 1.43% 1.43% 1.83% 1.28% 1.28% 1.28% 1.28% 1.28% 1.28% 1.28% 1.28% 1.28% 1.28% 1.28% 1.38% 1.88% 1.28% 1.69% 1	43.60 43.90 43.94 43.94 43.94 43.12 35.14 35.14 33.51 35.14 33.89 35.25 36.91 56.05 56.05 24.62 23.77 76 50.82 23.28 85.45 32.88 85.45 35.84 36.84 37.840 37.840 36.840 36.840 37.8400 37.8400 37.84000000000000000000000000000000000000	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant 24.05% Insignificant 17.57% Insignificant 17.57% Insignificant 17.57% Insignificant 18.64% Insignificant 28.35% Insignificant 18.64% Insignificant 28.35% Insignificant 29.22% Insignificant 29.22% Insignificant 29.22% Insignificant 33.15% Insignificant 30.21% Insignificant 30.22% Insignificant 30.22% Insignificant 31.55% Insignificant 32.55%	4 9932 5 38827 20.3833 3.35266 1.74181 3.6661 2.85214 1.39941 1.8666 3.0744 1.8606 3.0744 1.8606 3.0745 1.2153 2.2055 3.32226 3.32226 2.41080 1.47883 1.2258 3.32271 2.41080 1.47883 1.2388 1.2488 1.2388 1.2488888 1.2488888 1	2 50% 2 69% 2 69% 1 0.19% 1 0.19% 1 0.87% 1 0.37% 1 0.37% 1 0.37% 0 0.70% 0 0.97% 1 0.07% 0 0.97% 1 0.07% 0 0.94% 1 0.10% 1 0.04% 1 0.04% 1 0.04% 1 0.04% 1 0.04% 0 0.61% 1 0.15% 1 0.75% 0 0.67% 1 0.75% 0 0.67% 1 0.07% 0 0.67% 1 0.07% 0 0.67% 1 0.07% 0 0.67% 1 0.07% 0 0.67% 0 0.	43.56 43.95 64.53 45.31 35.15 33.87 35.15 33.87 46.23 37.84 56.08 37.84 50.06 37.84 50.06 37.84 50.06 37.84 50.06 37.84 50.06 65.33 57.75 57.75 33.35 57.75 33.35 57.75 33.35 57.75 33.35 57.73 34.33 34.03 34.03 34.03 34.03 34.03 34.03 34.03 34.03 34.03 34.03 34.03 34.03 34.03 35.05 37.74 37.74 37.74 37.75	21.7785000000000 insignificant 21.9738500000000 insignificant 22.622800000000 insignificant 20.6413450000000 insignificant 21.9738500000000 insignificant 22.652800000000 insignificant 11.7576800000000 insignificant 12.7576800000000 insignificant 13.7576800000000 insignificant 14.357000000000 insignificant 18.4397000000000 insignificant 28.1415000000000 insignificant 28.1415000000000 insignificant 18.1973000000000 insignificant 18.4125000000000 insignificant 28.4204000000000 insignificant 18.45125000000000 insignificant 28.42042000000000 insignificant 28.42042000000000 insignificant 28.42042000000000 insignificant 28.420420000000000 insignificant 28.4204200000000000000000000000000000000	-0.0449 -0.0789 -0.0789 -0.0789 -0.0224 -0.0124 -0.0124 -0.0124 -0.0291 -0.0291 -0.0386 -0.0291 -0.0386 -0.0394 -0.0394 -0.0394 -0.0395 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0397 -0.0396 -0.0396 -0.0397 -0.0396 -0.0396 -0.0397 -0.0396 -0.0491 -0.0591 -0.0591 -0.0591 -0.05121 -0.6813 -0.05290
BENFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canwey Wick SSSI Canwey Wick SSSI Coham Wioods SSI Coham Wioods SSI Coham Young SSSI Coham Stan SSI SSI Concurst And Roach Estuaries SSI Daham Farm SSSI SSI SSI Creact Anables Mood SSSI Grants Wadow SSSI Hanningfield Reservoir SSSI Hanningfield Reservoir SSSI Halanghon Ridge SSI Luan PI SSI Working Creek SSSI Luan PI SSI Wecking Futury and Marshes SSSI Mucking Falsa and Marshes SSSI Marshmar SSI Shome and Ashenbank Woods SSSI South Thames Estuary and Marshes SSSI South Thames Estuary and Marshes SSSI Manscomb Peninsia SSSI THAMES ISTUARY & ARASHES SPA Thoredon Park SSI	Meanj 200	38.6 38.6 34.4 37.9 43.6 31.5 31.5 31.5 31.6 31.7 34.4 54.7 44.2 254.4 30.9 56.1 55.3 55.3 31.9 62.5 29.9 31.0 46.6 69.4 72.2 66.5 69.4 72.2 66.5	5 0.3811 5 .3758 20.4600 3.38511 4.58177 3.65268 3.65268 3.76127 3.76127 3.7627 3.12833 1.69971 3.25911 3.75341 1.99971 3.25911 3.75341 1.99971 3.25911 3.75341 1.99971 3.25911 3.75341 3.65268 3.55688 3.55688 3.55	2.52% 2.69% 10.23% 1.023% 1.69% 2.29% 1.35% 1.43% 1.28% 1.28% 1.28% 1.28% 1.28% 1.28% 1.65% 1.56% 1.56% 1.63% 1.63% 1.54% 1.54% 1.56%	43.60 43.94 43.94 44.95 44.60 41.32 48.15 35.14 33.51 43.38 35.25 36.91 56.05 46.22 37.76 56.06 28.29 32.26 88.64 46.87 58.43 35.84 35.84 35.84 35.84 35.84 35.84 35.84 31.58 44.25 22.25	21.80% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant 20.66% Insignificant 20.66% Insignificant 17.57% Insignificant 17.57% Insignificant 18.64% Insignificant 23.31% Insignificant 18.64% Insignificant 23.11% Insignificant 24.14% Insignificant 25.41% Insignificant 23.44% Insignificant 23.45% Insignificant 24.25%	4 9932 5 3887 20.3833 3.3569 1.7418 3.6661 2.68527 3.6661 2.52314 1.9899 2.20267 3.2274 1.9899 2.20267 3.2274 3.02715 3.02715 2.21818 1.7488 1.20898 1.20898 1.20898 1.21898 1.20898 1.20898 1.21898 1.20898 1.20898 1.21818 1.20898 1.208	2 50% 2 69% 2 69% 10.19% 10.19% 10.8% 10.3% 10.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1	43.56 43.95 44.53 44.53 45.51 35.15 33.87 35.15 36.88 46.23 37.84 50.86 63.33 37.84 50.86 63.33 57.75	21.778500000000 insignificant 21.97850000000 insignificant 22.6298000000000 insignificant 22.629800000000 insignificant 22.6599050000000 insignificant 22.6599050000000 insignificant 27.57505000000000 insignificant 28.041705000000000 insignificant 28.041705000000000 insignificant 28.141705000000000 insignificant 28.14170500000000000 insignificant 28.242040000000000 insignificant 28.24204000000000 insignificant 28.2424000000000 insignificant 28.2744500000000 insignificant 28.2744500000000 insignificant 28.23744500000000 insignificant 28.2374500000000 insignificant 28.2374500000000 insignificant 28.2342000000000 insignificant 28.234500000000 insignificant 28.234500000000 insignificant 28.234500000000 insignificant 28.234500000000 insignificant 28.234500000000 insignificant 28.2345000000000 insignificant 28.2345000000000 insignificant 28.2345000000000 insignificant 28.2345000000000 insignificant 28.2345000000000 insignificant 28.234500000000000 insignificant 28.2345000000000000000000000000000000000000	-0.0449 0.0051 -0.7678 -0.0769 -0.0224 -0.0134 -0.0134 -0.0231 -0.0231 -0.0231 -0.0324 -0.0334 -0.0352 -0.0390 -0.2310 -0.0324 -0.0391 -0.0392 -0.0394 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0419 -0.6813 -0.0399 -0.6813 -0.0399 -0.6262
BENFLEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Cohattenden Woods and Lodge HII SSSI Cohattenden Woods and Lodge HII SSSI Cohattenden Woods SSSI Concurs & AncAccH ESTLARIES (MID-ESSEX COAST PHASE 2) SPA Crouch and Roach Estuanes SSI Datamar Farm SSSI SSSI Concurs & SSI Concurs & Concurs & SSI Concurs &	Meanj 200	386 386 44.1 37.9 43.6 31.5 31.5 31.5 31.6 31.5 34.4 54.7 44.2 25.4 30.9 56.1 55.3 355.3 31.9 56.1 65.1 55.3 31.9 66.5 46.6 41.5 69.4 72.2 66.5 39.1 39.5 39.5	5 0.3811 5 .3758 20.4608 3.38511 4.58177 3.65268 1.37034 1.66295 3.1233 1.66296 1.37034 1.66295 3.1233 1.66295 3.1233 1.66295 3.1233 1.66295 3.1233 1.66295 3.1233 1.66295 1.37034 1.66295 3.1235 1.20542	2.52% 2.69% 1.28% 1.023% 1.03% 1.03% 1.43% 1.33% 1.44% 1.88% 1.28% 1.44% 1.88% 1.28% 1.00% 1.66% 1.66% 1.66% 1.66% 1.56\% 1.56\%	43.60 43.90 43.94 43.94 43.94 43.12 35.14 35.14 33.51 35.14 33.89 35.25 36.91 56.05 56.05 24.62 23.77 76 50.82 23.28 85.44 46.87 36.84 35.84 36.	21.00% insignificant 21.07% insignificant 22.00% Potentially Significant 22.00% insignificant 22.00% insignificant 24.06% insignificant 17.07% insignificant 17.07% insignificant 16.04% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.03% insignificant 28.04% insignificant 28.04% insignificant 28.04% insignificant 28.04% insignificant 28.04% insignificant 29.24% insignificant 29.25% insignificant 29.25% insignificant 20.25% insignificant 20.25% insignificant 27.05% insignificant 27.05% insignificant 27.05% insignificant 28.05% insignificant 29.05% insignificant 20.25% insignificant 20.23% insignificant	4 9932 5 38827 20.3833 3.35266 1.74181 3.6661 2.8521 1.39941 1.8666 3.0744 1.8686 2.45231 1.39941 1.8695 2.4055 2.2055 3.37226 2.41080 1.47588 1.2358 2.41080 2.41080 1.47588 1.2358 1.2358 2.21817 1.2485 2.21817 1.2585 2.41080 1.4788 1.2358	2 50% 2 69% 2 69% 1 0 19% 1 0 19% 1 0 19% 1 0 3% 1	43.56 43.95 64.53 45.31 35.15 33.87 35.15 33.87 46.23 37.84 56.08 37.84 50.06 37.84 50.06 37.84 50.06 37.84 50.06 37.84 50.06 57.75 57.75 33.35 57.75 33.35 57.75 33.35 57.75 33.35 57.73 33.35 34.10 34.03 36.04 34.03 34.03 34.03 34.03 36.04 37.33 35.05 37.35	21.7785000000000 insignificant 21.9738500000000 insignificant 22.622800000000 insignificant 20.6413450000000 insignificant 21.9738500000000 insignificant 22.652800000000 insignificant 17.5756500000000 insignificant 18.395700000000 insignificant 28.413500000000 insignificant 18.3957000000000 insignificant 28.1435000000000 insignificant 28.1435000000000 insignificant 28.1435000000000 insignificant 28.1435000000000 insignificant 28.1435000000000 insignificant 28.4204000000000 insignificant 28.4204000000000 insignificant 28.4204000000000 insignificant 28.4204000000000 insignificant 28.42040000000000 insignificant 28.4204000000000000000000000000000000000	- 0.0449 - 0.0081 - 0.0789 - 0.0724 - 2.8400 - 0.0739 - 0.0324 - 2.8400 - 0.0134 - 0.0134 - 0.0134 - 0.0194 - 0.052 - 0.0291 - 0.029 - 0.029 - 0.029 - 0.029 - 0.028 - 0.0347 - 0.026 - 0.0119 - 0.6785 - 0.0775 - 0.029 - 0.029 - 0.0121 - 0.6813 - 0.039 - 0.6283 - 0.029 - 0.0221 - 0.6813 - 0.039 - 0.6283 - 0.029
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canwey Wick SSSI Coham Wixeds SSSI Coham Wixeds SSSI Coham Woods SSSI Coham Fam SSSI SSI Concurs & Anoch Estuaries SSI Daham Fam SSSI ESSEX ESTUARIES SAC Garols' Madow SSSI Grant Ymdow SSSI Hanningfield Reservor SSSI Holehaven Creek SSSI Langfon Rigg SSSI Langfon Rigg SSSI Langfon Rigg SSSI Langfon Rigg SSSI Langfon Rigg SSSI Langfon Rigg SSSI Marthmer SSSI Mit Madows Billerica SSSI Mucking Flats and Marshes SSSI Northward Hill SSSI South Thames Estuary and Marshes SSSI South Thames Estuary and Marshes SSSI South Thames Estuary and Marshes SSSI Northward Hill SSSI THAMES ISTUARY & MARSHES SPA Thomdon Park SSSI Thandersking Sisai Thandersking Sisai Thandersking Sisai	Meanj 200	38.6 38.6 34.4 37.9 43.6 31.5 31.5 31.5 34.4 54.7 44.2 254 30.9 56.1 45.3 55.3 31.9 62.5 29.9 31.0 46.6 69.4 72.2 66.5 39.1 39.5 44.6	5 0.3811 5 3.758 20.4600 3.38511 4.58177 3.65268 3.65268 3.65268 3.7512 2.55406 1.37034 1.98257 3.12383 1.64626 2.84231 1.69971 3.75354 1.63971 3.75354 1.63971 3.75354 1.63971 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.75354 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 1.6443 1.64455 1.64455 1.64455 1.644555 1.644555555 1.6445555555555555555555	2.52% 2.69% 2.69% 10.23% 10.23% 10.23% 1.69% 1.33% 1.43% 1.88% 0.99% 1.56% 1.56% 1.62% 1.64% 1.56% 1.56% 1.56% 1.56% 1.56% 1.56% 1.56% 1.56% 1.56% 1.37% 1.37%	43.60 43.94 43.94 44.95 44.60 41.32 48.15 35.14 33.51 43.35 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 47.22 40.47 42.66 47.22 40.47 42.66 47.22	21.00% Insignificant 21.97% Insignificant 22.00% Potentially Significant 20.00% Insignificant 20.00% Insignificant 20.00% Insignificant 21.07% Insignificant 21.07% Insignificant 21.07% Insignificant 11.7.57% Insignificant 11.0.94% Insignificant 28.03% Insignificant 28.03% Insignificant 28.03% Insignificant 28.04% Insignificant 28.04% Insignificant 29.24% Insignificant 21.64% Insignificant 23.14% Insignificant 23.44% Insignificant 24.24% Insignificant 29.22% Insignificant 29.22% Insignificant 31.65% Insignificant 31.65% Insignificant 31.65% Insignificant 31.65% Insignificant 32.65%	4 9932 5 38397 20.3833 3.35661 3.6661 2.66827 3.6661 2.52314 1.9898 3.2074 1.9898 2.20837 2.02857 3.02715 2.1408 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 1.7234 1.7234 1.7234 3.02715 2.21816 1.7481 3.02715 2.2.2667 1.74815 2.2.2667 3.02715 2.2.1816 3.02715 2.2.583 3.02715 3.	2 50% 2 69% 2 69% 10.19% 10.19% 10.68% 10.37% 1.33% 1.33% 1.33% 1.33% 1.33% 1.33% 1.43% 1.	43.56 43.95 64.53 41.22 64.53 35.15 33.87 35.15 33.87 35.85 35	21.778500000000 insignificant 21.973850000000 insignificant 22.6228000000000 insignificant 20.64134500000000 insignificant 22.65396500000000 insignificant 17.57505000000000 insignificant 18.3957000000000 insignificant 18.3957000000000 insignificant 18.435000000000 insignificant 18.4357000000000 insignificant 23.143600000000 insignificant 24.135000000000 insignificant 23.1436000000000 insignificant 24.135000000000 insignificant 25.4240000000000 insignificant 24.3426000000000 insignificant 23.42426000000000 insignificant 23.42426000000000 insignificant 23.82426000000000 insignificant 23.82451000000000 insignificant 24.72450000000000 insignificant 28.874450000000000 insignificant 36.831450000000000 insignificant 21.614075000000000 insignificant <td< td=""><td>- 0.0449 0.0061 0.0061 - 0.0753 - 0.0324 - 2.8400 - 0.0324 - 2.8400 - 0.0134 - 0.0134 - 0.0134 - 0.0394 - 0.0394 - 0.0394 - 0.0394 - 0.0394 - 1.6381 - 0.0306 - 0.039 - 0.0204 - 0.037 - 0.005 - 0.005 - 0</td></td<>	- 0.0449 0.0061 0.0061 - 0.0753 - 0.0324 - 2.8400 - 0.0324 - 2.8400 - 0.0134 - 0.0134 - 0.0134 - 0.0394 - 0.0394 - 0.0394 - 0.0394 - 0.0394 - 1.6381 - 0.0306 - 0.039 - 0.0204 - 0.037 - 0.005 - 0.005 - 0
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SS3 Canwey Wick SS3 Cohamon Woods and Lodge Hill SSS1 Cohamon Woods SSS1 Cohamon Woods SSS1 Concord & Rock-Estuaries SS3 Datham Fam SS3 ESSEX ESTUARIES SAC Garaid's Maadow SS3 Grays Thureack Chaik PH SSS1 Grays Thureack Chaik PH SSS1 Hangman's Wood A Deneholes SSS1 Hangman's Wood SSS1 Grays Thureack Chaik PH SSS1 Hockley Woods SSS1 Hockley Woods SSS1 Hill Madows Billencay SSS1 Mill Madows Billencay SSS1 Mill Madows Billencay SSS1 Norsey Wood SSS1 Shorne and Ashenbank Woods SSS1 THAMES ESTLARY & MARSHES SPA Thuredon Purk SSS1 Thurderstey Great Common SSS1 Tower Hill Cockham Wood SSS1 Tower Hill Cockham Wood SSS1	Meanj 200	386 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.6 31.7 31.6 31.5 34.4 54.7 55.3 31.9 55.3 31.9 55.3 31.0 55.3 31.0 46.6 69.4 72.2 66.5 39.5 44.6	5.03811 5.3758 20.4600 3.38511 4.58177 3.65268 1.37034 1.65268 1.37034 1.65268 1.37034 1.6226 3.1238 1.6462 2.6423 1.2034 1.4662 2.6423 1.2034 1.2034 1.2034 1.2034 2.2011 2.2042 1.73905 1.20842 1.20842 1.47759 1.20842 1.47868 1.47759 1.4887 1.47868 1.478	2.52% 2.69% 2.29% 10.23% 1.69% 2.29% 1.33% 1.43% 1.44% 1.28% 1.48% 1.28% 1.69% 1.56% 1.60% 1.56% 1.65% 1.54% 1.54% 1.54% 1.54% 1.54% 1.55% 1.54% 1.56\% 1.56\%	43.60 43.90 43.94 43.94 43.94 43.95 44.152 48.15 35.14 33.88 35.25 36.91 56.05 56.052 37.76 50.62 37.76 50.62 32.266 32.266 32.266 32.266 33.30 66.31 58.43 35.44 27.422 31.10 34.12 34.12 33.90 33.90 61.25 44.22 37.390 61.25 40.47 42.25 58.60	21.80% Insignificant 21.91% Insignificant 32.30% Potentially Significant 20.66% Insignificant 20.66% Insignificant 17.57% Insignificant 17.57% Insignificant 17.57% Insignificant 18.49% Insignificant 23.01% Insignificant 17.57% Insignificant 18.49% Insignificant 28.03% Insignificant 28.03% Insignificant 28.03% Insignificant 28.24% Insignificant 28.25% Insignificant 29.25% Insignificant 20.55% Insignificant 20.55% Insignificant 21.55% Insignificant 22.63%	4 9932 5 3887 20.3833 3.5569 1.7418 3.6661 2.8527 3.6661 2.8527 3.6661 3.3661 3.3661 3.3661 2.8527 3.3661 3.3074 1.39841 1.39841 1.39841 3.0744 3.0745 3.7229 3.37259 2.41089 3.7229 4.11089 3.7259 4.1108 3.7259 3.759 3.7759	2 50% 2 69% 2 69% 1 0.19% 1 0.19% 1 0.87% 1 0.37% 1 0.37% 1 0.37% 1 0.70% 0 0.70% 0 0.99% 1 0.09% 1 0.04% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.15% 1 0.15% 1 0.7% 0 0.87% 1 0.97% 0 0.87% 1 0.98% 0 0.87% 1 0.98% 0 0.87% 1 0.95% 0 0.87% 0 0.85% 0 0.15% 0 0.15% 0 0.85% 0 0.1	43.56 43.95 64.53 44.28 45.31 35.15 33.87 35.45 36.88 46.23 37.84 56.08 37.84 56.08 37.84 56.08 37.84 56.08 57.75 57.75 57.75 57.75 57.75 57.75 57.73 33.35 37.30 46.84 66.33 37.34 46.84 66.33 37.34 46.83 37.34 46.83 37.34 46.83 37.35 57.75 57.75 57.75 57.75 57.75 57.75 57.75 57.75 57.73 57	21.778600000000 insignificant 21.97383500000000 insignificant 22.6295000000000 insignificant 22.64134500000000 insignificant 22.65980500000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 18.435000000000 insignificant 18.435000000000 insignificant 23.1345000000000 insignificant 14.1545000000000 insignificant 24.64125000000000 insignificant 25.428440000000000 insignificant 24.5015000000000 insignificant 23.13450000000000 insignificant 24.542440000000000 insignificant 25.512000000000 insignificant 28.877445000000000 insignificant 28.87845000000000 insignificant 25.5120000000000 insignificant	-0.0449 0.0061 -0.0769 -0.0724 -0.0324 -0.0324 -0.0324 -0.0324 -0.0324 -0.0324 -0.0324 -0.0324 -0.0324 -0.0324 -0.0326 -0.0390 0.0221 0.0686 -0.0307 0.0226 -0.0304 -0.0305 -0.04119 -0.6785 -0.0341 -0.0341 -0.0341 -0.0341 -0.6813 -0.3209 0.0321 -0.6813 -0.3209 0.0121 -0.6813 -0.0122 -0.0123 -0.0124 -0.0125 -0.0055
BEINFLET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SSSI Canwey Wick SSSI Coham Wixeds SSSI Coham Wixeds SSSI Coham Woods SSSI Coham Fam SSSI SSI Concurs & Anoch Estuaries SSI Daham Fam SSSI ESSEX ESTUARIES SAC Garols' Madow SSSI Grant Ymdow SSSI Hanningfield Reservor SSSI Holehaven Creek SSSI Langfon Rigg SSSI Langfon Rigg SSSI Langfon Rigg SSSI Langfon Rigg SSSI Langfon Rigg SSSI Langfon Rigg SSSI Marthmer SSSI Mit Madows Billerica SSSI Mucking Flats and Marshes SSSI Northward Hill SSSI South Thames Estuary and Marshes SSSI South Thames Estuary and Marshes SSSI South Thames Estuary and Marshes SSSI Northward Hill SSSI THAMES ISTUARY & MARSHES SPA Thomdon Park SSSI Thandersking Sisai Thandersking Sisai Thandersking Sisai	Meanj 200	386 386 44.1 37.9 43.6 31.5 31.5 31.5 31.5 34.4 54.7 44.2 25.4 30.9 56.1 43.1 55.3 55.3 55.3 31.9 31.0 46.6 41.5 69.4 72.2 665.5 39.5 39.1 39.5 39.5 38.6	5 0.3811 5 3.758 20.4600 3.38511 4.58177 3.65268 3.65268 3.65268 3.7512 2.55406 1.37034 1.98257 3.12383 1.64626 2.84231 1.69971 3.75354 1.63971 3.75354 1.63971 3.75354 1.63971 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.75354 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 3.65268 1.6423 1.6443 1.64455 1.64455 1.64455 1.644555 1.644555555 1.6445555555555555555555	2.52% 2.69% 2.69% 10.23% 10.23% 10.23% 1.69% 1.33% 1.43% 1.88% 0.99% 1.56% 1.56% 1.62% 1.64% 1.56% 1.56% 1.56% 1.56% 1.56% 1.56% 1.56% 1.56% 1.56% 1.37% 1.37%	43.60 43.94 43.94 44.95 44.60 41.32 48.15 35.14 33.51 43.35 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 46.22 37.75 56.05 47.22 40.47 42.66 47.22 40.47 42.66 47.22	21.00% Insignificant 21.97% Insignificant 32.30% Potentially Significant 20.66% Insignificant 20.66% Insignificant 20.66% Insignificant 21.75% Insignificant 17.57% Insignificant 16.94% Insignificant 18.64% Insignificant 28.15% Insignificant 28.15% Insignificant 28.15% Insignificant 28.41% Insignificant 29.25% Insignificant 29.25% Insignificant 29.25% Insignificant 20.32% Insignificant 20.32% Insignificant 20.32% Insignificant 31.55% Insignificant 37.21% Insignificant 37.35% Insignificant 36.95% Insignificant 36.95% Insignificant 36.95% Insignificant 37.35% Insignificant 36.95%	4 9932 5 38397 20.3833 3.35661 3.6661 2.66827 3.6661 2.52314 1.9898 3.2074 1.9898 2.20837 2.02857 3.02715 2.1408 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 2.41089 1.7234 1.7234 1.7234 3.02715 2.21816 1.7481 3.02715 2.2.2667 1.74815 2.2.2667 3.02715 2.2.1816 3.02715 2.2.583 3.02715 3.	2 50% 2 69% 2 69% 1 0.19% 1 0.19% 1 0.87% 1 0.37% 1 0.37% 1 0.37% 1 0.70% 0 0.70% 0 0.99% 1 0.09% 1 0.04% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.15% 1 0.15% 1 0.7% 0 0.87% 1 0.97% 0 0.87% 1 0.98% 0 0.87% 1 0.98% 0 0.87% 1 0.95% 0 0.87% 0 0.85% 0 0.15% 0 0.15% 0 0.85% 0 0.1	43.56 43.95 64.53 41.22 64.53 35.15 33.87 35.15 33.87 35.85 35	21.778500000000 insignificant 21.97383500000000 insignificant 22.8228000000000 insignificant 20.64134500000000 insignificant 22.6258000000000 insignificant 22.6258000000000 insignificant 10.5758000000000 insignificant 11.5758000000000 insignificant 12.62585000000000 insignificant 13.6355000000000 insignificant 13.6355000000000 insignificant 13.435000000000 insignificant 23.1345000000000 insignificant 24.41705000000000 insignificant 25.4284000000000 insignificant 26.42745000000000 insignificant 26.42745000000000 insignificant 23.6275000000000 insignificant 26.827445000000000 insignificant 26.42745000000000 insignificant 26.427450000000000 insignificant 26.4274500000000000000000000000000000000000	-0.0449 0.0091 -0.0789 -0.0241 -0.0241 -0.0241 -0.0241 -0.0241 -0.0124 -0.0124 -0.0124 -0.0124 -0.0391 -0.0392 -0.0392 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0396 -0.0414 -0.0414
BERNEET AND SOUTHEND MARSHES SPA Benfleet and Southend Marshes SS3 Canney Wick SSS1 Cohamon Woods and Lodge Hill SSS1 Cohamon Woods SSS1 Cohamon Woods SSS1 Cohamon Woods SSS1 Concurs & Anoche Estuantes SS3 Dahama Fam SS3 ESSEX ESTUARIES SAC Garardis Maadow SSS1 Great Crabbles Wood SSS1 Great Crabbles Wood SSS1 Great Crabbles Wood SSS1 Great SSS1 Hocklay Woods SSS1 Hocklay Marshes SSS1 Hocklay Marshes SSS1 Hocklay Blandwarshes SSS1 Hocklay Blandwarshes SSS1 Main Maadows Blandcay SSS1 Hocklay Gass1 Hocklay Blandwarshes SSS1 Some and Ashenbank Woods SSS1 Hocklay Gass1 Hamsen Stuay and Marshes SSS1 Some and Ashenbank Woods SSS1 Thamsen Stuay and Marshes SSS1 Some and Ashenbank Woods SSS1 Thamsen Stuay and Marshes SSS1 Hamsen SSS1 Hidels SS1 Hidels SS1 Hi	Meanj 200	386 38.6 38.6 44.1 37.9 43.6 31.5 31.5 31.6 31.7 31.6 31.5 34.4 54.7 55.3 31.9 55.3 31.9 55.3 31.0 55.3 31.0 46.6 69.4 72.2 66.5 39.5 44.6	5.03811 5.3758 20.4600 3.38511 4.58177 3.65268 1.37034 1.65268 1.37034 1.65268 1.37034 1.6226 3.1238 1.6462 2.6423 1.2034 1.4662 2.6423 1.2034 1.2034 1.2034 1.2034 2.2011 2.2042 1.73905 1.20842 1.20842 1.47759 1.20842 1.47868 1.47759 1.4887 1.47868 1.478	2.52% 2.69% 2.29% 10.23% 1.69% 2.29% 1.33% 1.43% 1.44% 1.28% 1.48% 1.28% 1.69% 1.56% 1.60% 1.56% 1.65% 1.54% 1.54% 1.54% 1.54% 1.54% 1.55% 1.54% 1.56\% 1.56\%	43.60 43.90 43.94 43.94 43.94 43.95 44.152 48.15 35.14 33.88 35.25 36.91 56.05 56.052 37.76 50.62 37.76 50.62 32.266 32.266 32.266 32.266 33.30 66.31 58.43 35.44 27.422 31.10 34.12 34.12 33.90 33.90 61.25 44.22 37.390 61.25 40.47 42.25 58.60	21.80% Insignificant 21.91% Insignificant 32.30% Potentially Significant 20.66% Insignificant 20.66% Insignificant 17.57% Insignificant 17.57% Insignificant 17.57% Insignificant 18.49% Insignificant 23.01% Insignificant 17.57% Insignificant 18.49% Insignificant 28.03% Insignificant 28.03% Insignificant 28.03% Insignificant 28.24% Insignificant 28.25% Insignificant 29.25% Insignificant 20.55% Insignificant 20.55% Insignificant 21.55% Insignificant 22.63%	4 9932 5 3887 20.3833 3.5569 1.7418 3.6661 2.8527 3.6661 2.8527 3.6661 3.3661 3.3661 3.3661 2.8527 3.3661 3.3074 1.39841 1.39841 1.39841 3.0744 3.0745 3.7229 3.37259 2.41089 3.7229 4.11089 3.7259 4.1108 3.7259 3.759 3.7759	2 50% 2 69% 2 69% 1 0.19% 1 0.19% 1 0.87% 1 0.37% 1 0.37% 1 0.37% 1 0.70% 0 0.70% 0 0.99% 1 0.09% 1 0.04% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.14% 1 0.15% 1 0.15% 1 0.7% 0 0.87% 1 0.97% 0 0.87% 1 0.98% 0 0.87% 1 0.98% 0 0.87% 1 0.95% 0 0.87% 0 0.85% 0 0.15% 0 0.15% 0 0.85% 0 0.1	43.56 43.95 64.53 44.28 45.31 35.15 33.87 35.45 36.88 46.23 37.84 56.08 37.84 56.08 37.84 56.08 37.84 56.08 57.75 57.75 57.75 57.75 57.75 57.75 57.73 33.35 37.30 46.84 66.33 37.34 46.84 66.33 37.34 46.83 37.34 46.83 37.34 46.83 37.35 57.75 57.75 57.75 57.75 57.75 57.75 57.75 57.75 57.73 57	21.778600000000 insignificant 21.97383500000000 insignificant 22.6295000000000 insignificant 22.64134500000000 insignificant 22.65980500000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 17.57505000000000 insignificant 18.435000000000 insignificant 18.435000000000 insignificant 23.1345000000000 insignificant 14.1545000000000 insignificant 24.64125000000000 insignificant 23.1345000000000 insignificant 24.64125000000000 insignificant 25.624400000000000 insignificant 28.877445000000000 insignificant 28.877445000000000 insignificant 28.87845000000000 insignificant 24.64400000000000 insignificant 25.5120000000000 insignificant	-0.0449 0.0081 -0.0789 -0.0789 -0.0224 -2.8400 -0.0134 -0.0134 -0.0291 -0.0291 -0.0291 -0.0347 -0.0296 -0.2291 -0.0347 -0.2290 -0.2291 -0.3310 -0.3295 -0.4296 -0.1199 -0.6785 -0.6785 -0.0919 -5.3209 0.0121 -0.6813 -0.3266 -0.0121 -0.6813 -0.0226 -0.0231 -0.6813 -0.0234 -0.0234 -0.0234 -0.0234 -0.0234 -0.0234 -0.0255 -0.04034 -0.055 -0.055 -0.055

Modelled Nutrient Nitrogen Depositio	n (kgN/ha/yr) - Source A1+A2

Habitat name	Туре	Minimum CL	Background	NO2 deposition velocity	Base - NO2 annual PC (μg/m ³)	Base Deposition as PC	Base Deposition PC as % of CL	Base Deposition as PEC	Base Deposition PEC as % of CL	Significance	Future - NO2 annual PC (µg/m ³)	Future Deposition as PC	Future Deposition PC as % of CL	Future Deposition as PEC	Future Deposition PEC as % of CL	Significance	Delta
BENFLEET AND SOUTHEND MARSHES SPA	Grassland	10	11.661	0.0015	0.0457	6.58E-03	0.07%	11.67	116.68%	Insignificant	0.0439	0.00631	0.06%	11.67	116.67%	Insignificant	-2.66E-04
Benfleet and Southend Marshes SSSI	Grassland	10	11.661	0.0015	0.0457	6.58E-03	0.07%	11.67	116.68%	Insignificant	0.0439	0.00631	0.06%	11.67	116.67%	Insignificant	-2.66E-04
Chattenden Woods and Lodge Hill SSSI	Woodland	10	9.316	0.003	0.0083	2.38E-03	0.02%	9.32	93.18%	Insignificant	0.0081	0.00234	0.02%	9.32	93.18%	Insignificant	-3.80E-05
Cobham Woods SSSI	Woodland	15	11.4	0.003	0.0092	2.64E-03	0.02%	11.40	76.02%	Insignificant	0.0060	0.00172	0.01%	11.40	76.01%	Insignificant	-9.22E-04
CROUCH & ROACH ESTUARIES (MID-ESSEX (Woodland	10	9.125	0.003	0.0334	9.61E-03	0.10%	9.13	91.35%	Insignificant	0.0330	0.00950	0.09%	9.13	91.34%	Insignificant	-1.16E-04
Crouch and Roach Estuaries SSSI	Woodland	10	9.125	0.003	0.0334	9.61E-03	0.10%	9.13	91.35%	Insignificant	0.0330	0.00950	0.09%	9.13	91.34%	Insignificant	-1.16E-04
ESSEX ESTUARIES SAC	Woodland	5	9.352	0.003	0.0347	9.99E-03	0.20%	9.36	187.24%	Insignificant	0.0336	0.00967	0.19%	9.36	187.23%	Insignificant	-3.19E-04
Garrold's Meadow SSSI	Grassland	10	10.586	0.0015	0.0260	3.74E-03	0.04%	10.59	105.90%	Insignificant	0.0261	0.00376	0.04%	10.59	105.90%	Insignificant	1.64E-05
Great Crabbles Wood SSSI	Woodland	15	10.342	0.003	0.0067	1.93E-03	0.01%	10.34	68.96%	Insignificant	0.0067	0.00193	0.01%	10.34	68.96%	Insignificant	5.34E-06
Great Wood & Dodd's Grove SSSI	Woodland	15	10.636	0.003	0.0293	8.42E-03	0.06%	10.64	70.96%	Insignificant	0.0293	0.00843	0.06%	10.64	70.96%	Insignificant	8.86E-06
Hanningfield Reservoir SSSI	Woodland	10	9.901	0.003	0.0086	2.48E-03	0.02%	9.90	99.03%	Insignificant	0.0085	0.00243	0.02%	9.90	99.03%	Insignificant	-4.64E-05
Hockley Woods SSSI	Woodland	15	10.434	0.003	0.0196	5.64E-03	0.04%	10.44	69.60%	Insignificant	0.0198	0.00569	0.04%	10.44	69.60%	Insignificant	4.34E-05
Holehaven Creek SSSI	Woodland	10	9.787	0.003	0.1435	4.13E-02	0.41%	9.83	98.28%	Insignificant	0.1339	0.03852	0.39%	9.83	98.26%	Insignificant	-2.78E-03
Langdon Ridge SSSI	Woodland	10	10.271	0.003	0.0162	4.65E-03	0.05%	10.28	102.76%	Insignificant	0.0161	0.00463	0.05%	10.28	102.76%	Insignificant	-2.67E-05
MEDWAY ESTUARY & MARSHES SPA	Grassland	5	11.163	0.0015	0.0263	3.78E-03	0.08%	11.17	223.34%	Insignificant	0.0071	0.00102	0.02%	11.16	223.28%	Insignificant	-2.76E-03
Medway Estuary and Marshes SSSI	Grassland	5	11.163	0.0015	0.0263	3.78E-03	0.08%	11.17	223.34%	Insignificant	0.0071	0.00102	0.02%	11.16	223.28%	Insignificant	-2.76E-03
Mill Meadows Billericay SSSI	Grassland	10	9.431	0.0015	0.0037	5.31E-04	0.01%	9.43	94.32%	Insignificant	0.0037	0.00053	0.01%	9.43	94.32%	Insignificant	3.47E-06
Mucking Flats and Marshes SSSI	Grassland	10	9.616	0.0015	0.0281	4.04E-03	0.04%	9.62	96.20%	Insignificant	0.0275	0.00396	0.04%	9.62	96.20%	Insignificant	-8.27E-05
Norsey Wood SSSI	Woodland	15	9.321	0.003	0.0035	1.01E-03	0.01%	9.32	62.15%	Insignificant	0.0036	0.00103	0.01%	9.32	62.15%	Insignificant	1.58E-05
Pitsea Marsh SSSI	Grassland	15	9.295	0.0015	0.1046	1.50E-02	0.10%	9.31	62.07%	Insignificant	0.0811	0.01167	0.08%	9.31	62.04%	Insignificant	-3.38E-03
Shorne and Ashenbank Woods SSSI	Woodland	15	11.317	0.003	0.0064	1.85E-03	0.01%	11.32	75.46%	Insignificant	0.0064	0.00185	0.01%	11.32	75.46%	Insignificant	1.84E-06
South Thames Estuary and Marshes SSSI	Grassland	5	9.877	0.0015	0.1199	1.72E-02	0.34%	9.89	197.88%	Insignificant	0.1132	0.01629	0.33%	9.89	197.87%	Insignificant	-9.60E-04
THAMES ESTUARY & MARSHES SPA	Grassland	5	9.699	0.0015	0.0404	5.80E-03	0.12%	9.70	194.10%	Insignificant	0.0383	0.00550	0.11%	9.70	194.09%	Insignificant	-3.02E-04
Thorndon Park SSSI	Grassland	15	10.467	0.0015	0.0034	4.83E-04	0.00%	10.47	69.78%	Insignificant	0.0033	0.00048	0.00%	10.47	69.78%	Insignificant	-2.72E-06
Thundersley Great Common SSSI	Grassland	5	9.613	0.0015	0.0252	3.62E-03	0.07%	9.62	192.33%	Insignificant	0.0252	0.00363	0.07%	9.62	192.33%	Insignificant	1.18E-05
Tower Hill to Cockham Wood SSSI	Woodland	15	10.457	0.003	0.0066	1.90E-03	0.01%	10.46	69.73%	Insignificant	0.0065	0.00188	0.01%	10.46	69.73%	Insignificant	-1.74E-05
Benfleet and Southend Marshes RAMSAR	Grassland	10	11.661	0.0015	0.0446	6.42E-03	0.06%	11.67	116.67%	Insignificant	0.0439	0.00631	0.06%	11.67	116.67%	Insignificant	-1.06E-04
THAMES ESTUARY & MARSHES RAMSAR	Grassland	5	9.699	0.0015	0.1199	1.72E-02	0.34%	9.72	194.32%	Insignificant	0.1132	0.01629	0.33%	9.72	194.31%	Insignificant	-9.60E-04

Modelled Nutrient Nitrogen Deposition	(kgN/ha/yr) - All Sources

Habitat name	Туре	Minimum CL	Background	NO2 deposition velocity	Base - NO2 annual PC (μg/m ³)	Base Deposition as PC	Base Deposition PC as % of CL	Base Deposition as PEC	Base Deposition PEC as % of CL	Significance	Future - NO2 annual PC (µg/m ³)	Future Deposition as PC	Future Deposition PC as % of CL	Future Deposition as PEC	Future Deposition PEC as % of CL	Significance	Delta
BENFLEET AND SOUTHEND MARSHES SPA	Grassland	10	11.661	0.0015	0.0596	8.57E-03	0.09%	11.67	116.70%	Insignificant	0.0577	0.00830	0.08%	11.67	116.69%	Insignificant	4.95E-04
Benfleet and Southend Marshes SSSI	Grassland	10	11.661	0.0015	0.0597	8.59E-03	0.09%	11.67	116.70%	Insignificant	0.0578	0.00832	0.08%	11.67	116.69%	Insignificant	4.97E-04
Chattenden Woods and Lodge Hill SSSI	Woodland	10	9.316	0.003	0.0124	3.58E-03	0.04%	9.32	93.20%	Insignificant	0.0124	0.00356	0.04%	9.32	93.20%	Insignificant	4.43E-05
Cobham Woods SSSI	Woodland	15	11.4	0.003	0.0124	3.56E-03	0.02%	11.40	76.02%	Insignificant	0.0080	0.00229	0.02%	11.40	76.02%	Insignificant	2.83E-05
CROUCH & ROACH ESTUARIES (MID-ESSEX	Woodland	10	9.125	0.003	0.0423	1.22E-02	0.12%	9.14	91.37%	Insignificant	0.0419	0.01205	0.12%	9.14	91.37%	Insignificant	5.10E-04
Crouch and Roach Estuaries SSSI	Woodland	10	9.125	0.003	0.0423	1.22E-02	0.12%	9.14	91.37%	Insignificant	0.0419	0.01205	0.12%	9.14	91.37%	Insignificant	5.10E-04
ESSEX ESTUARIES SAC	Woodland	5	9.352	0.003	0.0442	1.27E-02	0.25%	9.36	187.29%	Insignificant	0.0429	0.01233	0.25%	9.36	187.29%	Insignificant	5.45E-04
Garrold's Meadow SSSI	Grassland	10	10.586	0.0015	0.0323	4.65E-03	0.05%	10.59	105.91%	Insignificant	0.0325	0.00468	0.05%	10.59	105.91%	Insignificant	1.51E-04
Great Crabbles Wood SSSI	Woodland	15	10.342	0.003	0.0087	2.51E-03	0.02%	10.34	68.96%	Insignificant	0.0088	0.00252	0.02%	10.34	68.96%	Insignificant	2.20E-05
Great Wood & Dodd's Grove SSSI	Woodland	15	10.636	0.003	0.0366	1.05E-02	0.07%	10.65	70.98%	Insignificant	0.0367	0.01057	0.07%	10.65	70.98%	Insignificant	3.87E-04
Hanningfield Reservoir SSSI	Woodland	10	9.901	0.003	0.0115	3.30E-03	0.03%	9.90	99.04%	Insignificant	0.0114	0.00327	0.03%	9.90	99.04%	Insignificant	3.74E-05
Hockley Woods SSSI	Woodland	15	10.434	0.003	0.0240	6.91E-03	0.05%	10.44	69.61%	Insignificant	0.0242	0.00697	0.05%	10.44	69.61%	Insignificant	1.67E-04
Holehaven Creek SSSI	Woodland	10	9.787	0.003	0.2669	7.68E-02	0.77%	9.86	98.64%	Insignificant	0.2596	0.07468	0.75%	9.86	98.62%	Insignificant	1.99E-02
Langdon Ridge SSSI	Woodland	10	10.271	0.003	0.0205	5.90E-03	0.06%	10.28	102.77%	Insignificant	0.0204	0.00586	0.06%	10.28	102.77%	Insignificant	1.20E-04
MEDWAY ESTUARY & MARSHES SPA	Grassland	5	11.163	0.0015	0.0328	4.71E-03	0.09%	11.17	223.35%	Insignificant	0.0100	0.00144	0.03%	11.16	223.29%	Insignificant	4.71E-05
Medway Estuary and Marshes SSSI	Grassland	5	11.163	0.0015	0.0328	4.71E-03	0.09%	11.17	223.35%	Insignificant	0.0101	0.00145	0.03%	11.16	223.29%	Insignificant	4.75E-05
Mill Meadows Billericay SSSI	Grassland	10	9.431	0.0015	0.0048	6.87E-04	0.01%	9.43	94.32%	Insignificant	0.0048	0.00069	0.01%	9.43	94.32%	Insignificant	3.30E-06
Mucking Flats and Marshes SSSI	Grassland	10	9.616	0.0015	0.0488	7.03E-03	0.07%	9.62	96.23%	Insignificant	0.0472	0.00679	0.07%	9.62	96.23%	Insignificant	3.31E-04
Norsey Wood SSSI	Woodland	15	9.321	0.003	0.0045	1.30E-03	0.01%	9.32	62.15%	Insignificant	0.0046	0.00132	0.01%	9.32	62.15%	Insignificant	5.96E-06
Pitsea Marsh SSSI	Grassland	15	9.295	0.0015	0.1694	2.44E-02	0.16%	9.32	62.13%	Insignificant	0.1430	0.02058	0.14%	9.32	62.10%	Insignificant	3.49E-03
Shorne and Ashenbank Woods SSSI	Woodland	15	11.317	0.003	0.0082	2.37E-03	0.02%	11.32	75.46%	Insignificant	0.0083	0.00238	0.02%	11.32	75.46%	Insignificant	1.96E-05
South Thames Estuary and Marshes SSSI	Grassland	5	9.877	0.0015	0.1973	2.84E-02	0.57%	9.91	198.11%	Insignificant	0.1876	0.02699	0.54%	9.90	198.08%	Insignificant	5.32E-03
THAMES ESTUARY & MARSHES SPA	Grassland	5	9.699	0.0015	0.0615	8.84E-03	0.18%	9.71	194.16%	Insignificant	0.0594	0.00854	0.17%	9.71	194.15%	Insignificant	5.25E-04
Thorndon Park SSSI	Grassland	15	10.467	0.0015	0.0043	6.19E-04	0.00%	10.47	69.78%	Insignificant	0.0043	0.00062	0.00%	10.47	69.78%	Insignificant	2.66E-06
Thundersley Great Common SSSI	Grassland	5	9.613	0.0015	0.0304	4.37E-03	0.09%	9.62	192.35%	Insignificant	0.0306	0.00440	0.09%	9.62	192.35%	Insignificant	1.34E-04
Tower Hill to Cockham Wood SSSI	Woodland	15	10.457	0.003	0.0096	2.77E-03	0.02%	10.46	69.73%	Insignificant	0.0096	0.00277	0.02%	10.46	69.73%	Insignificant	2.67E-05
Benfleet and Southend Marshes RAMSAR	Grassland	10	11.661	0.0015	0.0584	8.40E-03	0.08%	11.67	116.69%	Insignificant	0.0577	0.00830	0.08%	11.67	116.69%	Insignificant	4.85E-04
THAMES ESTUARY & MARSHES RAMSAR	Grassland	5	9.699	0.0015	0.1973	2.84E-02	0.57%	9.73	194.55%	Insignificant	0.1876	0.02699	0.54%	9.73	194.52%	Insignificant	5.32E-03



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