

# THE **LONDON** RESORT

## The London Resort Development Consent Order

BC080001

### Environmental Statement Volume 2: Appendices

### Appendix 16.5 – Modelled Results (Ecological Receptors)

Document reference: 6.2.16.5

Revision: 00

December 2020

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009  
Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017  
Regulation 12(1)

[This page is intentionally left blank]

## Appendix 16.5 Modelled Results (Ecological Receptors)

**Table 1- Ecological Nutrient Deposition Results (Road traffic modelling)**

Ecological Receptor Name	Worst case receptor location (X,Y)	Maximum Road Contribution NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	Minimum Critical Load (kg n/ ha/ yr)	Process Contribution as percentage of minimum critical load (%)	Predicted Environmental Concentration (kg n/ ha/ yr)	PEC as percentage of minimum critical load
Cobham Hall Wood	558431.8, 188634.8	0.049	10	0.5	32.9	329%
Combegreen Wood	557496.1, 190104.8	0.098	10	<b>1.0</b>	37.3	373%
Darenth wood	558054.4, 172582.4	0.161	10	<b>1.6</b>	33.0	330%
Disused Hospital	556674.6, 172184.3	0.029	15	0.2	16.9	113%
Hangmans Wood	557669.9, 180288.0	0.023	10	0.2	31.2	312%
Hobbs Hole	558694.4, 188011.6	0.052	10	0.5	30.8	308%
Jackson Wood	557333.4, 190738.2	0.046	10	0.5	32.4	324%
Oakwood	557653.1, 181804.1	0.014	10	0.1	30.4	304%
Parkhill Wood	559711.7, 172635.9	0.109	10	<b>1.1</b>	30.9	309%
Rams Wood	553688.1, 169368.7	0.095	10	0.9	35.3	353%
Ebbsfleet Marsh	561566.7, 173010.5	0.220	15	<b>1.5</b>	15.8	105%
Chadwell Wood	559353.3, 172699.8	0.031	10	0.3	27.2	272%
The Thrift	559375.9, 172645.3	0.152	10	<b>1.5</b>	32.6	326%

**Table 2 - Ecological Critical NO<sub>x</sub> Level (Road traffic modelling)**

Ecological Receptor Name	Worst case receptor location (X,Y)	Predicted NO <sub>x</sub> Concentration ( $\mu\text{g}/\text{m}^3$ )		Operational Road Traffic Contribution ( $\mu\text{g}/\text{m}^3$ )	Critical Level ( $\mu\text{g}/\text{m}^3$ )	Operational Road Traffic Contribution (%)	Predicted Environmental Concentration ( $\mu\text{g}/\text{m}^3$ )	PEC as percentage of minimum critical Level
		2038 Do Nothing	2038 Do Something					
Cobham Hall Wood	558365, 188780	76.9	77.4	0.5	30	<b>1.6</b>	60.3	201%
Combegre en Wood	557492.5 , 190122.9	96.4	97.3	0.9		<b>3.1</b>	70.3	234%
Darenth wood	558054.4 , 172582.4	80.9	82.3	1.4		<b>4.6</b>	65.3	218%
Disused Hospital	556674.6 , 172184.3	55.3	55.7	0.4		<b>1.4</b>	37.1	124%
Hangmans Wood	557669.9 , 180288.0	52.5	52.7	0.2		0.6	35.4	118%
Hobbs Hole	558694.4 , 188011.6	62.6	63.0	0.4		<b>1.4</b>	45.9	153%
Jackson Wood	557333.4 , 190738.2	55.2	55.6	0.4		<b>1.2</b>	42.7	142%
Low Well Wood	557887.1 , 180117.7	66.1	66.4	0.3		0.9	49.1	164%
Oakwood	557653.1 , 181804.1	40.9	41.0	0.1		0.3	27.1	90%
Parkhill Wood	559711.7 , 172635.9	63.0	63.9	0.9		<b>2.9</b>	48.0	160%
Rams Wood	553688.2 , 169368.8	71.1	71.9	0.8		<b>2.6</b>	59.7	199%
Chadwell Wood	559353, 172699	41.9	42.2	0.2		0.8	26.3	88%

Ebbsfleet Marsh	561567.3 , 172981.1	49.8	52.9	3.1		<b>10.3</b>	32.1	107%
The Thrift	559375.9 , 172645.3	76.0	77.3	4.3		<b>4.3</b>	61.4	205%

**Table 3: Ecological Nutrient Deposition Results (Point Source Modelling)**

Ecological Receptor name	Location (X,Y)	Process Contribution NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	N Nutrient Deposition ( kg n/ ha/ yr)	Minimum Critical Load ( kg n/ ha/ yr)	Process Contribution compared to minimum critical load (%)
Swanscombe Marsh	559950.9, 175276.3	0.0028	<0.001	27.3	<0.01
Swanscombe, Alkerdane Lane	559888.7,174820.3	0.0059	0.005	27.3	<0.01
Ebbsfleet Marsh	561356.1, 174450.6	0.0111	0.001	15.4	<0.01
Thames Estuary Marsh	567298.8, 173948.3	0.0027	0.002	14.6	<0.01

**Table 4: Ecological Nutrient Deposition Results (Point Source Modelling)**

Ecological Receptor name	Location (X,Y)	Process Contribution NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	N Acid Deposition ( kg n/ ha/ yr)	Minimum Critical Load ( kg n/ ha/ yr)	Process Contribution compared to minimum critical load (%)
Swanscombe Marsh	559950.9, 175276.3	0.0028	<0.001	1.83	<0.01
Swanscombe, Alkerdane Lane	559888.7,174820.3	0.0059	<0.001	1.83	<0.01
Ebbsfleet Marsh	561356.1, 174450.6	0.0111	<0.001	1.08	<0.01
Thames Estuary Marsh	567298.8, 173948.3	0.0027	<0.001	1.02	<0.01