

Table A: In-combination and scheme-alone nitrogen deposition impacts at receptor points within the Thames Basin Heaths SPA, with ammonia. Data compiled from HE submissions in REP10-007, with the last two rows in each transect added from Table 4 in Appendix B of REP8-022. RHS has added ammonia^a for receptors beyond 25m from the road to the results in the last two columns, which have been added to show the in-combination and scheme-alone changes as a percentage of the critical load for the SPA. Red shows a worsening and green an improvement.

Receptor ID	Distance from road (m)	Nitrogen Deposition (kg N/ha/yr)								From HE data		Corrected by RHS to include ammonia	
		2015 Base	2022 DN	2022 DM	2022 DS	2015 Base including indicative contribution from ammonia*	2022 DN including indicative contribution from ammonia*	2022DM including indicative contribution from ammonia*	2022 DS Including indicative contribution from ammonia*	In-combination Change (DS-DN) as % of critical load (HE data)	Scheme-alone Change (DS-DM) as % of critical load (HE data)	In-combination change (DS-DN) as % of critical load	Scheme-alone Change (DS-DM) as % of critical load
Transect South of M25 (west of junction 10) Transect 1													
R157	5	25.24	20.51	23.16	22.99	36.48	29.01	34.32	33.97	49.6%	-3.5%	49.6%	-3.5%
R158	10	24.06	19.61	21.22	21.31	34.13	27.21	30.44	30.61	34.0%	1.7%	34.0%	1.7%
R159	25	21.84	17.91	18.81	18.96	29.68	23.82	25.62	25.91	20.9%	2.9%	20.9%	2.9%
R160	50	19.97	16.48	17.07	17.16	19.97	16.48	17.07	17.16	6.8%	0.9%	13.6%	1.8%
R161	75	18.95	15.7	16.14	16.2	18.95	15.7	16.14	16.2	5.0%	0.6%	10.0%	1.2%
R162	100	18.3	15.2	15.56	15.62	18.3	15.2	15.56	15.62	4.2%	0.6%	8.4%	1.2%
R163	150	17.51	14.6	14.9	14.9	17.51	14.6	14.9	14.9	3.0%	0.0%	6.0%	0.0%
R164	200	17.05	14.24	14.49	14.49	17.05	14.24	14.49	14.49	2.5%	0.0%	5.0%	0.0%
Transect South of M25 (east of junction 10) Transect 2													
R188	12	23.64	19.28	20.03	20.06	33.28	26.57	28.06	28.17	16.0%	1.1%	16.0%	1.1%
R189	25	21.85	17.92	18.43	18.41	29.7	23.83	24.87	24.81	9.8%	-0.6%	9.8%	-0.6%
R190	50	20.13	16.6	16.98	16.93	20.13	16.6	16.98	16.93	3.3%	-0.5%	6.6%	-1.0%
R191	75	19.21	15.89	16.2	16.14	19.21	15.89	16.2	16.14	2.5%	-0.6%	5.0%	-1.2%
R192	100	18.41	15.28	15.53	15.51	18.41	15.28	15.53	15.51	2.3%	-0.2%	4.6%	-0.4%
R193	150	17.69	14.73	14.93	14.9	17.69	14.73	14.93	14.9	1.7%	-0.3%	3.4%	-0.6%
R194	200	17.27	14.41	14.58	14.55	17.27	14.41	14.58	14.55	1.4%	-0.3%	2.8%	-0.6%

* receptor points within 30 metres include ammonia, by assuming that the road component of N deposition from NOx is doubled

^a The ammonia has been added by doubling the NOx contribution. This is likely to underestimate the ammonia contribution, see Figure 19 of REP5-049.

Receptor ID	Distance from road (m)	Nitrogen Deposition (kg N/ha/yr)								From HE data		Corrected by RHS to include ammonia	
		2015 Base	2022 DN	2022 DM	2022 DS	2015 Base including indicative contribution from ammonia*	2022 DN including indicative contribution from ammonia*	2022DM including indicative contribution from ammonia*	2022 DS Including indicative contribution from ammonia*	In-combination Change (DS-DN) as % of critical load (HE data)	Scheme-alone Change (DS-DM) as % of critical load (HE data)	In-combination change (DS-DN) as % of critical load	Scheme-alone Change (DS-DM) as % of critical load
Transect West of A3 (close to junction 10) Transect 3													
R141	7	24.83	20.2	20.84	21.28	35.67	28.39	29.68	30.55	21.6%	8.7%	21.6%	8.7%
R142	10	23.74	19.36	19.62	19.92	33.49	26.73	27.25	27.83	11.0%	5.8%	11.0%	5.8%
R143	25	20.9	17.19	17.27	17.36	27.8	22.38	22.55	22.72	3.4%	1.7%	3.4%	1.7%
R144	50	19.12	15.83	15.94	15.94	19.12	15.83	15.94	15.94	1.1%	0.0%	2.2%	0.0%
R145	75	18.29	15.19	15.3	15.27	18.29	15.19	15.3	15.27	0.8%	-0.3%	1.6%	-0.6%
R146	100	17.89	14.89	15.04	15.01	17.89	14.89	15.04	15.01	1.2%	-0.3%	2.4%	-0.6%
R147	150	17.34	14.47	14.64	14.64	17.34	14.47	14.64	14.64	1.7%	0.0%	3.4%	0.0%
R148	200	17.05	14.24	14.4	14.4	17.05	14.24	14.4	14.4	1.6%	0.0%	3.2%	0.0%
Transect East of A3 (close to junction 10) Transect 4													
R149	5	32.29	25.89	23.77	24.38	50.57	39.79	35.54	36.76	-30.3%	12.2%	-30.3%	12.2%
R150	10	28.58	23.06	22.18	22.64	43.15	34.11	32.35	33.28	-8.3%	9.3%	-8.3%	9.3%
R151	25	23.99	19.55	18.99	19.19	33.98	27.1	25.97	26.38	-7.2%	4.1%	-7.2%	4.1%
R152	50	21.06	17.31	17.07	17.16	21.06	17.31	17.07	17.16	-1.5%	0.9%	-3.0%	1.8%
R153	75	19.67	16.25	16.14	16.2	19.67	16.25	16.14	16.2	-0.5%	0.6%	-1.0%	1.2%
R154	100	18.73	15.53	15.51	15.51	18.73	15.53	15.51	15.51	-0.2%	0.0%	-0.4%	0.0%
R155	150	17.77	14.8	14.84	14.81	17.77	14.8	14.84	14.81	0.1%	-0.3%	0.2%	-0.6%
R156	200	17.23	14.38	14.46	14.46	17.23	14.38	14.46	14.46	0.8%	0.0%	1.6%	0.0%

The in-combination changes for Transect 4 are not considered reliable, as described elsewhere in the Deadline 11 submission by RHS.

Receptor ID	Distance from road (m)	Nitrogen Deposition (kg N/ha/yr)								From HE data		Corrected by RHS to include ammonia	
		2015 Base	2022 DN	2022 DM	2022 DS	2015 Base including indicative contribution from ammonia*	2022 DN including indicative contribution from ammonia*	2022DM including indicative contribution from ammonia*	2022 DS Including indicative contribution from ammonia*	In-combination Change (DS-DN) as % of critical load (HE data)	Scheme-alone Change (DS-DM) as % of critical load (HE data)	In-combination change (DS-DN) as % of critical load	Scheme-alone Change (DS-DM) as % of critical load
		Transect West of A3 (north of Wisley Lane) Transect 5											
R126	8	26.38	21.38	22.9	22.38	38.75	30.75	33.8	32.76	20.1%	-10.4%	20.1%	-10.4%
R127	10	24.99	20.31	21.71	21.25	35.98	28.63	31.42	30.49	18.6%	-9.3%	18.6%	-9.3%
R128	25	20.79	17.11	18.03	17.71	27.58	22.21	24.06	23.42	12.1%	-6.4%	12.1%	-6.4%
R129	50	18.46	15.32	15.85	15.68	18.46	15.32	15.85	15.68	3.6%	-1.7%	7.2%	-3.4%
R130	75	17.47	14.57	14.95	14.84	17.47	14.57	14.95	14.84	2.7%	-1.1%	5.4%	-2.2%
R131	100	16.91	14.14	14.43	14.32	16.91	14.14	14.43	14.32	1.8%	-1.1%	3.6%	-2.2%
R132	150	16.32	13.69	13.88	13.85	16.32	13.69	13.88	13.85	1.6%	-0.3%	3.2%	-0.6%
R133	200	16.01	13.45	13.59	13.56	16.01	13.45	13.59	13.56	1.1%	-0.3%	2.2%	-0.6%
		Transect East of A3 (near Bolder Mere) Transect 6											
R134	10	26.84	21.73	24.87	23.8	39.68	31.46	37.74	35.6	41.4%	-21.4%	41.4%	-21.4%
R135	25	22.35	18.29	19.97	19.42	30.69	24.59	27.94	26.84	22.5%	-11.0%	22.5%	-11.0%
R136	50	19.58	16.18	17.1	16.81	19.58	16.18	17.1	16.81	6.3%	-2.9%	12.6%	-5.8%
R137	75	18.35	15.24	15.85	15.68	18.35	15.24	15.85	15.68	4.4%	-1.7%	8.8%	-3.4%
R138	100	17.63	14.69	15.16	15.01	17.63	14.69	15.16	15.01	1.8%	-1.1%	6.4%	-3.0%
R139	150	16.8	14.06	14.35	14.29	16.8	14.06	14.35	14.29	2.3%	-0.6%	4.6%	-1.2%
R140	200	16.33	13.69	13.91	13.85	16.33	13.69	13.91	13.85	1.6%	-0.6%	3.2%	-1.2%