

Appendix 7.4 PSYM Pond Habitat Quality Assessment Summaries for Surveys Undertaken in July 2013

Pond Name	Description	Macrophytes			Invertebrates			Index of Biotic Integrity Score	Quality assessment
		Number of submerged and emergent plant species	Number of uncommon plant species	Trophic ranking score for aquatic and emergent plants	Average score per taxon	Number of dragonfly (<i>Odonta</i>) and alderfly (<i>Megaloptera</i>) families	Number of beetle (<i>Coleoptera</i>) families		
Hampstead Pond Chain									
Vale of Health Pond	Situated at the top of the Hampstead Chain this is the third largest pond at a surface area of 8,646m ² . The depth of the pond is approximately 1.5 to 2m with silt and sand substrate throughout. The margins of the lake are dominated by bankside trees (25% shade) with patches of emergent macrophytes that provide approximately 2% cover. The pond also supports the highest number of submerged plant species (No. 4) as well as floating leaved plants.	14	4	8.56	3.40	0	0	44	Poor
Viaduct Pond	This is the smallest pond in the chain at a surface area of 3,329m ² and is located within a steep sided valley setting. The depth is approximately 1 to 1.5m throughout and the substrate dominated by silt which has accumulated to depth of over 1m in places. The pond margin is characterised by the presence of trees (10 shade) and emergent plants (15% cover). The pond also supports an abundance of submerged plant species composed of three species.	11	3	8.83	4.18	2	1	61	Moderate
Mixed Bathing Pond	This is the second smallest pond in the chain at a surface area of 7,148m ² . The pond is generally between 2m and 3m deep with a silt substrate throughout. The pond supports a limited range of aquatic plants with only 1% emergent plant cover. The centre of the pond is buoyed off for swimming. The pond margin is characterised by the presence of overhanging trees and is heavily shaded (40% shading), although these are absent on the downstream dam face. This pond supports the fewest number of emergent and submerged plant species (No. 4).	4	2	9.17	3.67	0	0	33	Poor
Hampstead No.2 Pond	This is the second largest pond in the chain at a surface area of 10,910m ² . The pond is approximately 4m at its deepest point, although is more generally 1 to 2m in depth with a silt substrate. The eastern and western banks are moderately shaded by bankside trees with emergent macrophytes in the shallower margins (10% cover). The southern and northern banks are re-inforced with a hard edge and therefore have very little emergent vegetation. The pond also supports four species of submerged and floating leaved plants.	13	2	8.64	3.94	1	0	44	Poor
Hampstead No.1 Pond	This is the largest of the ponds in the Hampstead Chain at a surface are of 15,190m ² . The pond is generally >2m deep and has a gravel and silt substrate throughout. Silt accumulations are in excess of 1m in places. The margins of the pond are dominated by bankside trees (20% shade) with emergent macrophytes in the margins (15% cover). This pond supports the greatest number of submerged and emergent plant species (No. 16) with submerged species being abundant throughout the pond.	16	4	8.75	4.69	1	0	56	Moderate
Highgate Pond Chain									

Pond Name	Description	Macrophytes			Invertebrates			Index of Biotic Integrity Score	Quality assessment
		Number of submerged and emergent plant species	Number of uncommon plant species	Trophic ranking score for aquatic and emergent plants	Average score per taxon	Number of dragonfly (<i>Odonta</i>) and alderfly (<i>Megaloptera</i>) families	Number of beetle (<i>Coleoptera</i>) families		
Stock Pond	This is the second smallest pond in the chain at a surface area of 4,401 m ² . The pond is generally <1m deep with silt substrate throughout. The southern area of the pond is particularly shallow with high cover of detritus and coarse woody debris, a reedbed extends into the pond in the northern section. The banks are heavily shaded by bank side trees (20% shade) and therefore emergent macrophyte growth was limited (10% cover). Some scrub clearance along the banks has encouraged emergent plant species growth. This is the only pond across both chains that does not support any uncommon aquatic macrophyte species.	9	0	8.72	4.24	2	0	44	Poor
Kenwood Ladies' Bathing Pond	This relatively small pond has a surface area of 6,926 m ² . It is generally >2m deep, and up to 4m at its deepest. The substrate is dominated by silt which has accumulated to depth of over 0.5m in places. The margins of the pond are dominated with bankside trees (15% shade) although there are patches of emergent vegetation (10% cover) located along the eastern side of the pond.	8	1	8.28	4.41	2	2	56	Moderate
Bird Sanctuary Pond	This pond has a surface area of 7,694m ² with a depth of generally 1 to 2m. It has a silt and sand substrate throughout. In places the silt accumulations are over 1m deep. The banks are dominated by emergent macrophytes (10% cover) including a reedbed in the south-west arm. Elsewhere, the pond margins are dominated by bankside trees (20% shade).	9	1	7.83	5.00	1	0	33	Poor
Model Boating Pond	This is the second largest pond in the chain at a surface area of 16,280m ² . The pond is generally over 2m in depth and there appears to be a silt substrate throughout. The banks are entirely re-enforced and there is very little bankside vegetation. Planted gabions have been installed along some of the banks and as small islands.	14	1	8.44	4.00	0	0	33	Poor
Highgate Men's Bathing Pond	This is the largest pond in the chain at a surface area of 18,250m ² . The pond is generally deep (typically >2.5m) with soft substrate. The majority of the pond is surrounded by bankside trees (20% shade) which in places limit the extent of emergent plant growth (5% cover). Re-enforced (sheet piled) banks are present along the toe of the current dams.	8	3	8.40	4.68	1	0	50	Moderate
Highgate No.1 Pond	At 13,660m ² in area Highgate No.1 Pond is located at the southern extent of the Highgate Chain. The pond is generally shallow (typically <2m deep) with soft silt substrate and abundant submerged macrophytes. Vegetation cover on the banks varied with some areas characterised by trees and bushes, and others by grassy banks, some emergent macrophytes were present in the pond margin. This pond supports the greatest number of submerged and emergent species in the chain (No. 16).	16	3	8.98	3.89	2	0	56	Moderate