

Supplementary Material 1: Results of the gap analysis from the “Assessment and Spatial Planning for Peatland Conservation and Restoration: Europe’s Trans-Border Neman River Basin as a Case Study”

Table 1 Fen gap analyses of protection within the Neman River sub-basins at 2 levels i) to meet the Convention of Biological Diversity target #11 as a proxy (17% protection in quantity) and ii) level i with the exclusion of protected fens that are drained (Convention of Biological Diversity’s targets 11, 14 and 15 relating to both quantity and quality). A minus value in the overall protection gap/surplus (E) column indicates that the current area amount (quantity) of protection is inadequate and conservation is required. Whereas column F indicates both area quantity and quality by excluding protected peatlands that are impacted by drainage. Note: columns A to F refer to section “2.4.1 Procedure” in the main document.

Country	Sub-basin	Fen gap analysis					
		A Area (ha)	B Protected (ha)	B2 Protected and not drained (ha)	D Conservation target	E Overall protection gap/surplus	F Protected undrained gap/surplus
Belarus	Berezina	51655	24008	22800	8781	15227	14018
	Czarna Hancza	4875	202	135	829	-627	-694
	Merkys	8906	512	512	1514	-1003	-1003
	Neman small rivers	181790	30277	27908	30904	-627	-2996
	Viliya (BY) / Neris (LT)	75012	4852	4678	12752	-7900	-8074
	Shchara	69573	14813	14722	11827	2986	2894
	Swislocz	4970	60	60	845	-785	-785
Lithuania	Dubysa	13637	2722	1151	2318	404	3361
	Jura	14988	953	366	2548	-1595	-1167
	Merkys	40016	5630	2733	6803	-1173	-2182
	Minija	16254	5682	1816	2763	2919	-4070
	Neman small rivers	56409	14626	5937	9590	5036	-948
	Neris (LT) / Viliya (BY)	35224	3655	1343	5988	-2333	-3652
	Nevezis	35211	7241	1941	5986	1256	-4645
	Sesupe	36495	10760	2340	6204	4556	-4045
	Sventoji	69185	10943	4680	11762	-819	-3864
	Zeimena	31637	12426	8132	5378	7048	-7082
Poland	Czarna Hancza	11693	10263	3061	1988	8276	2754
	Neman small rivers	635	477	75	108	369	-28902

	Sesupe	1670	1382	300	284	1098	1073
	Swislocz	2368	2097	185	403	1694	-33
	Neman small rivers	968	682	603	165	517	16
Russia	Sesupe	833	0	0	142	-142	-218

Table 2. Transition mire gap analyses of protection within the Nemean River sub-basins at 2 levels i) to meet the Convention of Biological Diversity target #11 as a proxy (17% protection in quantity) and ii) level i with the exclusion of protected transition mires that are drained (Convention of Biological Diversity's targets 11, 14 and 15 relating to both quantity and quality). A minus value in the overall protection gap/surplus (E) column indicates that the current area amount (quantity) of protection is inadequate and conservation is required. Whereas column F indicates both area quantity and quality by excluding protected peatlands that are impacted by drainage. Note: columns A to F refer to section "2.4.1 Procedure" in the main document.

Country	Sub basin	Transitional mire gap analysis					
		A Area (ha)	B1 Protected (ha)	B2 Protected and not drained (ha)	D Conservation target	E Overall protection gap/surplus	F Protected undrained gap/surplus
Belarus	Berezina	0	0	0	0	0	0
	Czarna Hancza	0	0	0	0	0	0
	Merkys	2269	0	0	386	-386	-386
	Neman small rivers	3688	816	634	627	189	7
	Viliya (BY) / Neris (LT)	7613	3248	2846	1294	1953	1552
	Shchara	35393	23570	22805	6017	17553	16788
	Swislocz	0	0	0	0	0	0
Lithuania	Dubysa	5088	3321	384	865	2456	17962
	Jura	2949	331	290	501	-170	-481
	Merkys	6881	2217	1758	1170	1047	-211
	Minija	4529	2369	1006	770	1599	588
	Neman small rivers	9849	4505	2509	1674	2831	236
	Neris (LT) / Viliya (BY)	5917	1027	714	1006	21	834
	Nevezis	6774	3796	893	1152	2644	-292
	Sesupe	3225	1290	658	548	741	-259
	Sventoji	10128	2349	1366	1722	628	110
	Zeimena	8863	5595	4628	1507	4088	-355
Poland	Czarna Hancza	2940	2841	789	500	2342	3121
	Neman small rivers	28	28	25	5	24	3291
	Sesupe	167	146	27	28	118	289
	Swislocz	29	21	3	5	16	21
Russia	Neman small rivers	0	0	0	0	0	0
	Sesupe	181	0	0	31	-31	-2

Table 3. Raised bog gap analyses of protection within the Neman River sub-basins at 2 levels: i) to meet Convention of Biological Diversity target #11 as a proxy (17% protection in quantity) and ii) level i with the exclusion of protected raised bogs that are drained (Convention of Biological Diversity's targets 11, 14 and 15 relating to both quantity and quality). A minus value in the overall protection gap/surplus (E) column indicates that the current area amount (quantity) of protection is inadequate and conservation is required. Whereas column F indicates both area quantity and quality by excluding protected peatlands that are impacted by drainage. Note: columns A to F refer to section "2.4.1 Procedure" in the main document.

Country	Sub basin	Raised bog gap analysis					
		A Area (ha)	B Protected (ha)	B2 Protected and not drained (ha)	D Conservation target	E Overall protection gap/surplus	F Protected undrained gap/surplus
Belarus	Berezina	2297	2297	2046	390	1906	1655
	Czarna Hancza	868	0	0	148	-148	-148
	Merkys	9	0	0	2	-2	-2
	Neman small rivers	18875	2294	2176	3209	-915	-1033
	Viliya (BY) / Neris (LT)	44994	4327	4210	7649	-3322	-3439
	Shchara	6889	3281	3281	1171	2110	2110
	Swislocz	0	0	0	0	0	0
Lithuania	Dubysa	1775	1000	538	302	698	-856
	Jura	2711	756	693	461	295	236
	Merkys	3846	2818	2767	654	2165	232
	Minija	4802	3944	2055	816	3127	2113
	Neman small rivers	7674	5476	5394	1305	4171	1239
	Neris (LT) / Viliya (BY)	3795	1553	1537	645	908	4090
	Nevezis	2102	864	594	357	506	892
	Sesupe	6162	4609	4483	1048	3561	236
	Sventoji	3909	2151	1907	664	1486	3436
	Zeimena	3956	2620	2445	673	1948	1243
Poland	Czarna Hancza	3261	3253	2407	554	2699	1772
	Neman small rivers	280	280	177	48	232	15489
	Sesupe	173	170	72	29	140	1853
	Swislocz	24	24	24	4	20	130
Russia	Neman small rivers	1891	1891	257	321	1569	42
	Sesupe	5997	0	0	1020	-1020	20

