SUPPLEMENTARY MATERIAL

Stormwater runoff management in Sandomierz, as an example of medium-sized European city, using SCALGO Live

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Table S1. Results for modelling of retention properties for selected precipitation amounts and runoff areas (rainfall duration 24h/1440 min; state for year 2022; forecast for years 2070–2099; AA/BB/CC – (sub)runoff area)

Parameter						Scenario I		Scenario II				Scenario III			Changes between scenarios II and III			
return period (years)	climate scenario	climate factor		precipitation (mm) with climate factor	runoff area	runoff area size (ha)	runoff scenario I (only rainfall) (m^3)	runoff area size (ha)	runoff scenario II stormwater runoff (m^3)	rainfall infiltrated or drained (m^3)	runoff change between scenario II to scenario I (%)	runoff area size (ha)	runoff scenario III modelling (m^3)	rainfall infiltrated or drained (m^3)	runoff change between scenario III to scenario II (%)	change between scenario III to scenario II (%)	rainfall infiltrated or drained (between scenario III to scenario II) (%)	infiltration capabilities, increase (%)
10	RCP 8.5	0	0	59	AA	2.63	1,548.44	2.63	1,073.00	475.43	69.30	2.63	979.78	568.65	91.31	**8.69**	119.61	19.61
					BB	4.40	2,538.32	4.40	1,220.92	1,317.40	48.10	4.40	1,158.06	1,380.26	94.85	5.15	104.77	4.77
					CC	2.59	1,519.72	2.59	1,111.71	408.78	73.15	2.59	1,071.40	449.62	96.37	3.63	109.99	9.99
	RCP 4.5	ANA	14	67	AA	2.63	1,759.08	2.63	1,219.18	539.90	69.31	2.63	1,113.32	645.76	91.32	**8.68**	119.61	19.61
					BB	4.40	2,889.95	4.40	1,393.92	1,496.03	48.23	4.40	1,322.53	1,567.42	94.88	5.12	104.77	4.77
					CC	2.59	1,727.04	2.59	1,263.70	464.21	73.17	2.59	1,217.93	510.58	96.38	3.62	109.99	9.99
	RCP 8.5	ANA	25	74	AA	2.63	1,943.40	2.63	1,347.09	596.31	69.32	2.63	1,230.17	713.23	91.32	**8.68**	119.61	19.61
					BB	4.40	3,197.62	4.40	1,545.29	1,652.33	48.33	4.40	1,466.44	1,731.18	94.90	5.10	104.77	4.77
					CC	**2.90**	1,924.39	**2.59**	1,396.70	512.71	72.58	**2.59**	1,346.14	563.93	96.38	3.62	109.99	9.99
50	RCP 4.5	0	0	74	AA	2.63	1,943.40	2.63	1,347.09	596.31	69.32	2.63	1,230.17	713.23	91.32	**8.68**	119.61	19.61
					BB	4.40	3,197.62	4.40	1,545.29	1,652.33	48.33	4.40	1,466.44	1,731.18	94.90	5.10	104.77	4.77
					CC	**2.90**	1,924.39	**2.59**	1,396.70	512.71	72.58	**2.59**	1,346.14	563.93	96.38	3.62	109.99	9.99
	RCP 8.5	ANA	25	93	AA	2.63	2,443.69	2.63	1,694.28	749.41	69.33	2.63	1,547.34	896.35	91.33	**8.67**	119.61	19.61
					BB	4.40	4,033.91	4.40	1,956.15	2,076.58	48.49	4.40	1,857.05	2,175.67	94.93	5.07	104.77	4.77
					CC	**2.90**	2,475.58	**2.90**	1,762.75	714.04	71.21	**2.79**	1,696.63	756.79	96.25	3.75	105.99	**5.99**
	RCP 8.5	W	28	95	AA	2.63	2,496.35	2.63	1,730.82	765.53	69.33	2.63	1,580.72	915.63	91.33	**8.67**	119.61	19.61
					BB	4.40	4,121.96	4.40	1,999.39	2,121.24	48.51	4.40	1,898.17	2,222.46	94.94	5.06	104.77	4.77
					CC	**2.90**	2,533.60	**2.90**	1,805.44	729.40	71.26	**2.79**	1,736.21	773.07	96.17	3.83	105.99	**5.99**
	RCP 8.5	S	19	88	AA	2.63	2,312.03	2.63	1,602.91	709.12	69.33	2.63	1,463.87	848.16	91.33	**8.67**	119.61	19.61
					BB	4.40	3,813.78	4.40	1,848.03	1,964.93	48.46	4.40	1,754.26	2,058.70	94.93	5.07	104.77	4.77
					CC	**2.90**	2,330.53	**2.59**	1,662.69	609.70	71.34	**2.59**	1,602.57	670.62	96.38	3.62	109.99	**9.99**

Explanations: ANA = annual average, W = winter, S = summer. Significant changes are in bold. Source: own study.