6.41 Total Predicted Soil Loss (RUSLE)

Project Name: PHUSICOS (Grant Agreement no. 776681)

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Total Predicted Soil Loss (RUSLE)	Natural and Climate Hazards Green Space Management
Description and justification	Indicators of Soil Physical Resilience sub-criterion will assess if the project scenarios enhance the ability of a soil to resist or recover their healthy state in response to destabilising influences.
Definition	RUSLE is widely applied to estimate the rate of soil loss by water. The landscape profile is defined by a slope length, which is the length from the origin of overland flow to the point where the flow reaches a major flow concentration or a major area of deposition. The soil loss is an average erosion rate for the landscape profile.
Strengths and weaknesses	
Measurement procedure and tool	RUSLE (model/survey)
Scale of measurement	ton/ha/year
Data source	
Required data	Rain data, soil characteristics, land use information.
Data input type	Quantitative
Data collection frequency	
Level of expertise required	High
Synergies with other indicators	
Connection with SDGs	13
Opportunities for participatory data collection	

Additional information	
References	

6.42 Days with temperature >90th percentile (TX90p)

Project Name: UNaLab (Grant Agreement no. 730052)

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Days with temperature >90th percentile (TX90p)	Natural and Climate Hazards
Description and justification	Nature-based solutions can support climate change adaptation by reducing local ambient air temperature. They can also provide insulation from cold and/or shelter from wind. By moderating the urban microclimate, green infrastructure can support reduction in energy use and improved thermal comfort (Demuzere et al., 2014).
Definition	Percentage of days during which the maximum daily temperature (TX) exceeds the 90th percentile (TX90p) threshold of the daily maximum temperature (%)
Strengths and weaknesses	+ Straightforward assessment of heatwaves occurrence - Requires statistical tools and judgement
Measurement procedure and tool	Ambient air temperature can be assessed through continuous monitoring of temperature, near the NBS intervention area, and evaluation of the maximum daily temperature before and after NBS implementation. Evaluating the effect on the heatwave reduction by assessing the daily temperatures produces more accurate results that monthly averages, which tend to "lose" the small changes that are crucial for several domains, such as health and agriculture (Alexander *et al.*, 2006). The TX90p defines the occurrence of the extremely hot days falling above the 90th percentile (1/10th of the sample) allowing the evaluation of the *extent* of the extreme temperatures changes (Alexander *et al.*, 2006). The TX90p is evaluated as $$TX_{ij} > TX_{in}90$$ where