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Soil properties and desealing strategies: feedback from the DésiVille project (France)

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Abstract (max. 400 words)

The 'No Net Land Take' European objective by 2050 obliges territories to integrate soils in their land management strategies. In this sense, desealing is a driver to reduce soil artificialization through renaturation of urbanized spaces. This action will influence the water cycle through generally reducing the risks of flooding (by promoting water infiltration). It will improve the well-being of the inhabitants (green spaces, freshness islands, etc.) and promote biodiversity. Can we deseal everywhere? No, some areas are more appropriate than others. But which properties of soils and their close environment should be therefore considered? Our objective is to discuss the soil properties to be taken into account when developing desealing strategies at the scale of urbanized territories.

A list of criteria selected to support territorial desealing strategies will be presented (DésiVille project (France)). The method is based on a bibliographical review, exchanges with experts on soils, hydrology and urban microclimate, as well as with stakeholders in development and urban planning. The different criteria are crossed with each other in order to map the potential for desealing. The influence of soil-related criteria (pollution, infiltrability, etc.) on the graphic representations produced for the test territories, including that of Nantes Métropole and a district of the city undergoing redevelopment, will be discussed.