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Quantitative evaluation of soil functions

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Efficient soil protection and guidelines for sustainable soil management require clear and agreed upon concepts for the quantitative, site-specific evaluation of soil functions. This should include not only agricultural production but also the other essential soil functions for the regulation of terrestrial ecosystems.

We propose a set of measurable soil attributes that are deemed to carry substantial information on soil processes and their interactions so that they are formidable candidates as indicators for soil functions. They are used as basis for a site-specific evaluation of the actual state of soil functions and additionally to evaluate the natural potential of soils to fulfill the various functions.