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# ESA's WorldPeatland project – Developing Earth Observation-based peatland mapping and monitoring tools for peatland restoration and conservation

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Peatland restoration and conservation, including sustainable peatland management, require robust, consistent, efficient, and accessible methodologies to map peatlands, and identify and better understand the changes and impacts of natural and anthropogenic changes, including restoration measures. Peatland mapping and monitoring tools should enable users to (i) locate peat soils; (ii) identify peatlands at risk of degradation and in need of protection and/or restoration; (iii) monitor the success of management interventions; and (iv) support national and international reporting requirements. Given the spatial scale of peatlands lend themselves to use of Earth Observation techniques. In response to these needs, ESA's WorldPeatland project will work closely with stakeholders in the peatland community to define, validate, and promote Earth Observation-based products and tools that facilitate the mapping and monitoring of peatlands in different states and biomes.

This presentation consists of two parts. In the first part, we summarize the outcome of a survey on the user requirements for Earth Observation-based peatland mapping and monitoring and the associated EO-based tools. The survey consisted of an online questionnaire and two user requirement workshops. In the second part, the project structure is presented with details about the planned development of innovative monitoring products and tools along with some initial results from case studies.