

# **Threats to intact Amazonian peatlands and opportunities for their conservation**

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Peatlands recently described in the Peruvian Amazon store substantial amounts of below-ground carbon (BGC), harbor a unique biodiversity, and hold significant cultural and socio-economic importance for local forest communities. The full range and importance of these values are still poorly understood but it is clear that these ecosystems now face an unprecedented level of threat. In this poster we identify and map the threats to, and protected areas in, the largest peatland complex in Amazonia, the Pastaza-Marañón Foreland Basin (PMFB), north-east Peru. We find that although some parts of the peatland fall within existing protected areas, the area of highest carbon density, north of the Rio Marañón where domed peatlands are most abundant, currently has little formal legal protection. The hydrological balance of the PMFB peatlands, which is critical for maintaining the long-term carbon store and ecosystem function, is primarily threatened by the expansion of commercial agriculture and associated transport infrastructure and, potentially, climate change. We identify opportunities for avoiding or mitigating these threats to ensure the long-term carbon storage function of these peatlands while supporting sustainable development for local forest communities. Research priorities include providing regional and national agencies with a comprehensive map of Amazonian peatlands, improving our understanding of the sensitivity of these peatlands to climate change (especially via its effect on flood/drought periodicity), understanding the full range of values of the peatlands on local and global scales and establishing effective peatland monitoring, conservation and management programmes.