



Using GIS and Earth Observation to Report Changes in Extent and Integrity of Aquatic Ecosystems Aligned with Global Biodiversity Framework Targets

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Four new Goals and 23 Targets have been set for the years 2030 and 2050 under the Global Biodiversity Framework (GBF). Goal A focus on changes in the extent, integrity and connectivity of systems, including of Inland Waters, that includes rivers, estuarine and freshwater wetlands. Target 2 focus on ensuring that 30% of the extent of degraded ecosystems are under effective restoration, whereas Target 3 aims at 30% of the extent of systems are effectively conserved and managed. GIS and remote sensing play a key role in being able to track changes over time for reporting to these two targets of Goal A. The use of GIS and remote sensing in mapping and typing of Inland Waters for South Africa will be presented, demonstrating progress and challenges with ongoing projects. Challenges in the reporting to these targets will be raised, both from a South African and global perspective.

Dr Heidi van Deventer is a principal researcher at Natural Resources Enabling Infrastructure & Professional Services of the Council for Scientific and Industrial Research (CSIR). She focuses on the use of Geographical Information Systems (GIS) and Earth Observation (EO) technology or Remote Sensing (RS) for the mapping, classification, and monitoring of Inland Waters for the Post-2020 Global Biodiversity Framework, related to both estuarine and freshwater ecosystems.

