

Wetlands of the oceanic islands of French Polynesia (South Pacific): ecosystems at high risk !

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The wetlands of French Polynesia are spread across 120 subtropical and tropical oceanic islands divided in 5 major archipelagoes (Austral, Gambier, Marquesas, Society, Tuamotu), and are probably the most threatened and the least valued ecosystems of this South Pacific French overseas territory. They are mainly found at low elevation on coastal areas of most high volcanic islands and in some low-lying atolls, with a few high elevation habitats in the largest island of Tahiti (ca. 1045 km², 2241 m elevation). These wetlands undergo intense and continuous stress derived from multiple human pressures which are direct (urbanization, pollutions, drainage, dams, overfishing of some freshwater species) or indirect (invasive plants and animals, climate change impacts such as sea-level rise and strong swells). We first describe the different wetlands and freshwater habitats, their plant and animal communities (including the introduced mangrove *Rhizophora stylosa*), and their current conservation status, with examples from different French Polynesian islands. We then highlight their ecological but also scientific importance as windows to the past (through paleoecological and paleoclimatic studies recently conducted in Tahiti and the Austral Islands), and raise the urgency to protect, conserve or restore these unique ecosystems and their associated biota.