

Countryside Conservation Funding Scheme
Research Activities on Countryside Conservation and Revitalisation

Project Number	EEB(EB) 27/24/11-52
Project Proponent	World Wide Fund for Nature Hong Kong
Project Title	Smart Wetland 2.0 – A Smart Monitoring Network for Mai Po Nature Reserve
Target Site	Mai Po Nature Reserve
Project Brief *	Riding on the success of Smart Wetland 1.0 launched in December 2022, World Wide Fund (WWF) has set up the smart infrastructure and embedded the smart devices into our reserve management protocol. As a result we are able to automatically collect real-time data on water level and quality, as well as buffalo ranging data in the remote location of Mai Po Nature Reserve (MPNR), improving our reserve management efficiency. This past learning journey has equipped WWF to better apply smart skills and technology required for more efficient wetland management. With the experience and knowledge gained, we are ready and confident to progress to this Smart Wetland 2.0 project by setting up a smart monitoring system for MPNR to further enhance reserve management efficiency and effectiveness of target wildlife monitoring, and to showcase a proof of concept for smart wetland management technology application to the wider region. Smart Wetland 2.0 encompasses building a solar-powered camera trap network augmented with an artificial intelligence (AI) online data management platform, real-time data can be collected via a mobile ad-hoc network (MANET) and automatically analysed using AI species identification software. These smart solutions will continue to serve as the knowledge foundation and empowerment of future smart wetland management in the region.
Project Duration	1 July 2024 to 30 June 2026
Grant Approved	\$2,997,683

***The project description is provided by the project proponent**