

Lantau Conservation Fund

Research Project

Project Number	RE-2021-10
Recipient Organisation	The Chinese University of Hong Kong
Project Title	Investigating the impacts of flow regulation on the ecosystem functioning and fauna connectivity in ecologically important freshwater streams of Lantau: implications to habitat restoration and biodiversity enhancement
Project Description*	<p>The freshwater ecosystems in Lantau harbour an exceptionally high biodiversity and many ecologically important sites were identified. However, habitat modification through flow regulation by water canals and dams, of which collect water for local usage, represent a major threat to freshwater biodiversity. Therefore, it is important for us to evaluate the impact of flow regulation and hence to design mitigation plan accordingly. In this project we aim to 1/ compared the physiochemical environment and biodiversity distribution pattern of freshwater fauna in two ecologically important natural and two disturbed streams on Lantau to identify impact of water canal We would also 2/ quantify food web structures in order to evaluate their current healthiness, and 3/ estimate the population connectivity and genetic diversity of selected freshwater fauna. The findings will provide a better understanding on community health and contribute insights on efficient habitat management and conservation planning. To promote public awareness and engagement of biodiversity conservation, we would develop SOP for species identification and survey, as well as physiochemical parameter</p>

	measurements/monitoring on Lantau freshwater fauna for citizen science and future STEAM education in secondary school.
Project Period	1 January 2023 – 31 December 2024 (24 months)
Approved Grant	\$1,725,880

*The project description is provided by the project proponent