Hong Kong 2022
International Urban Forestry Conference

REVITALISATION OF TAI WAI NULLAH

Creation of Blue Green Space for Close Contact with Nature in Urban Area

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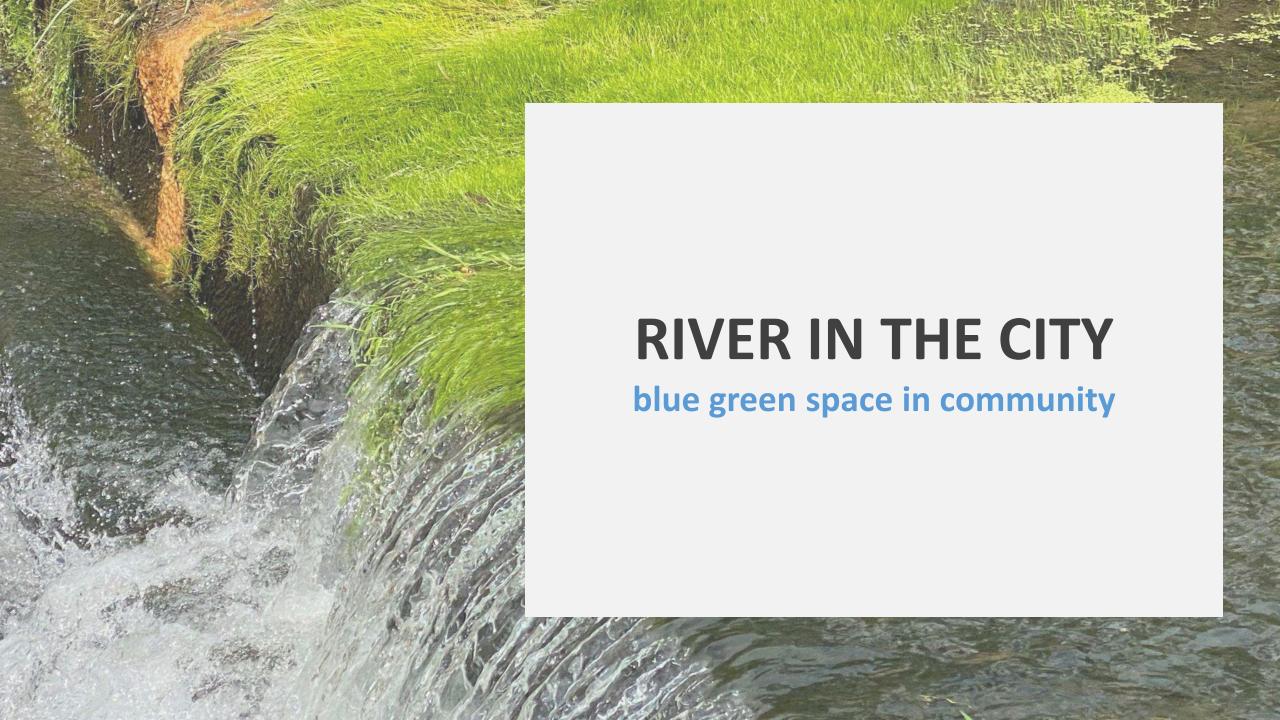


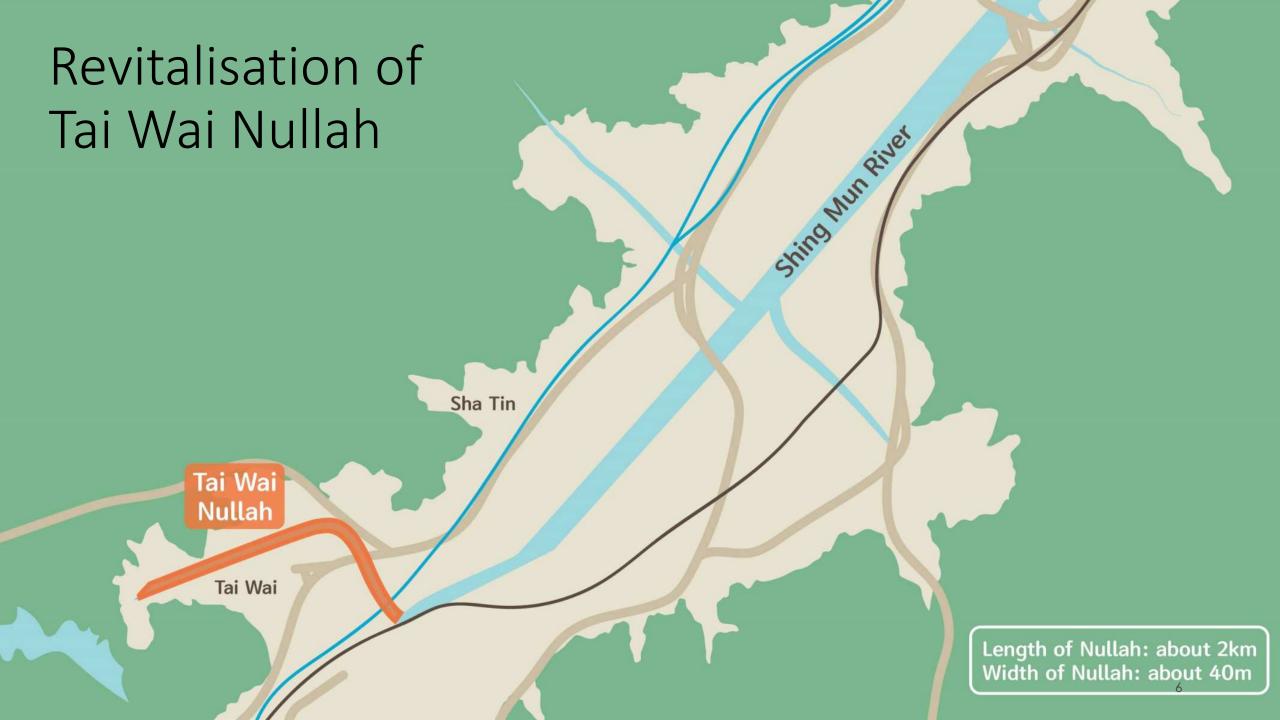




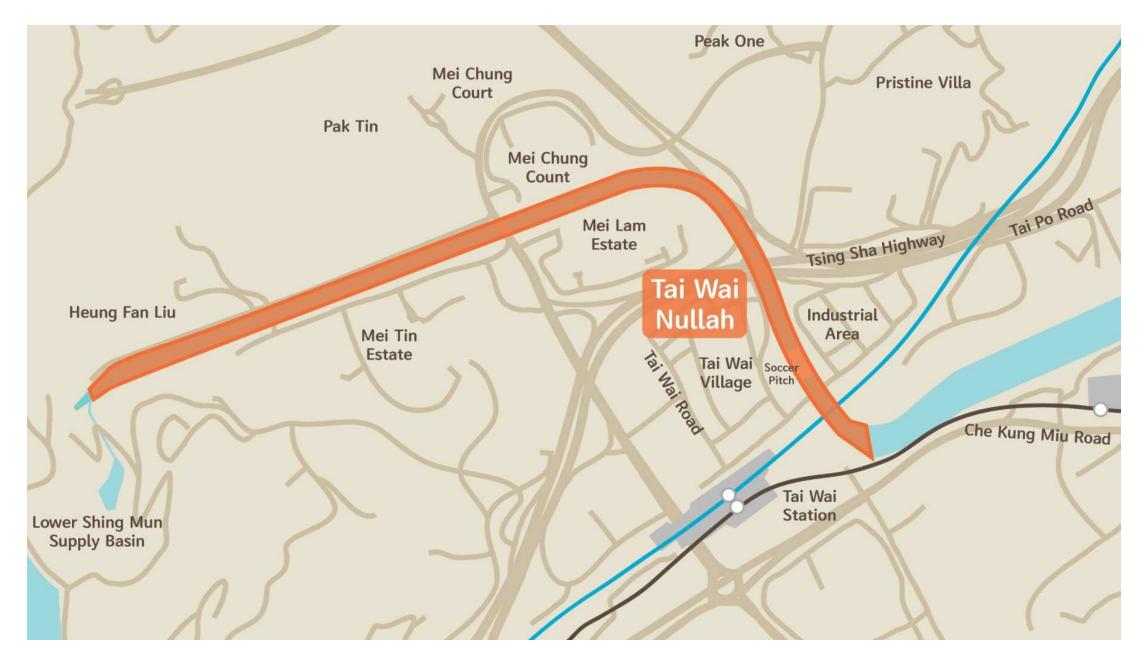


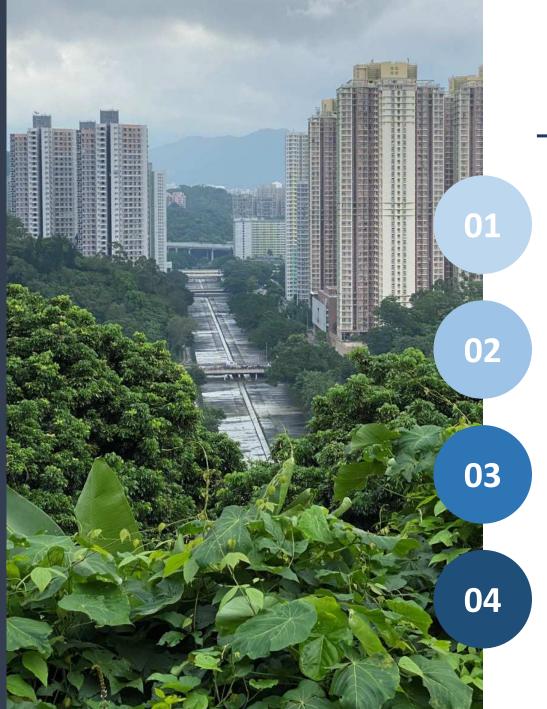






Revitalisation of Tai Wai Nullah





Our Goals

provide a greener environment

enhance ecological value

promote water friendliness

build a liveable city

Greening & Biodiversity Initiatives



Upstream Ecology Characteristics

- lower level of disturbance
- existing wetland in stilling basin Revitalisation Initiatives
- ecology enhancement

Mid-stream Ecology Characteristics

- high-density residential developments

Revitalisation Initiatives

- green space
- cultural / recreation area

Downstream Ecology Characteristics

- tidally influenced
- existing feeding resources for wetland avifauna

Revitalisation Initiatives

- ecology enhancement

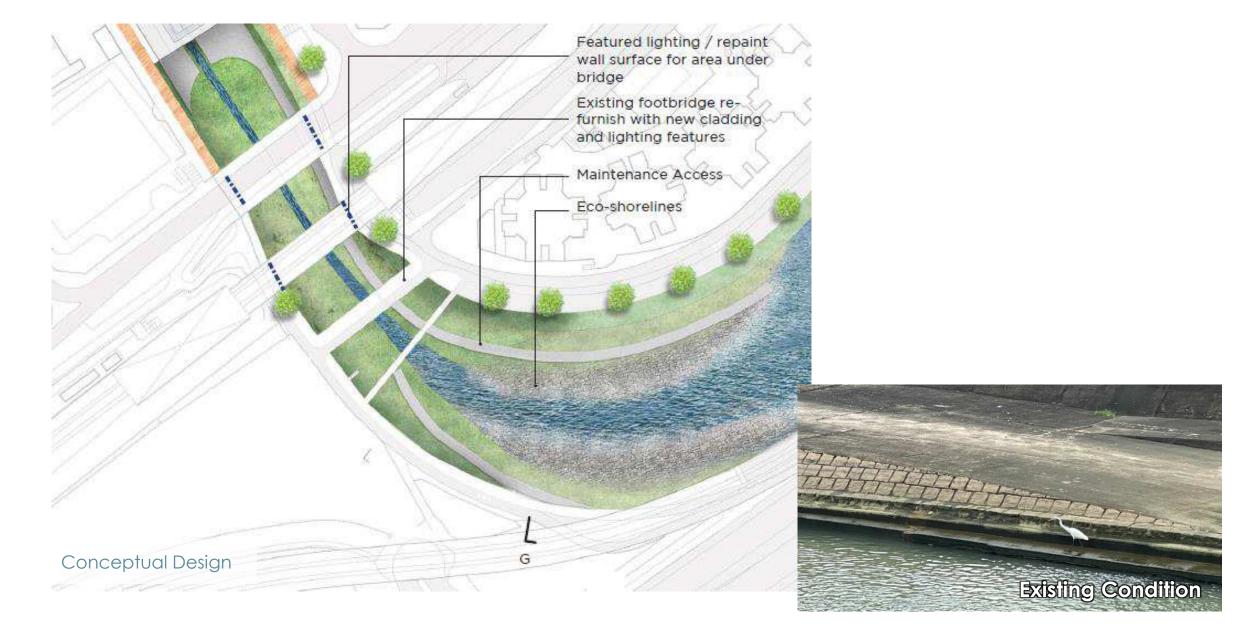
Greening & Biodiversity Initiatives (Upstream)



Greening & Biodiversity Initiatives (Midstream)



Greening & Biodiversity Initiatives (Downstream)





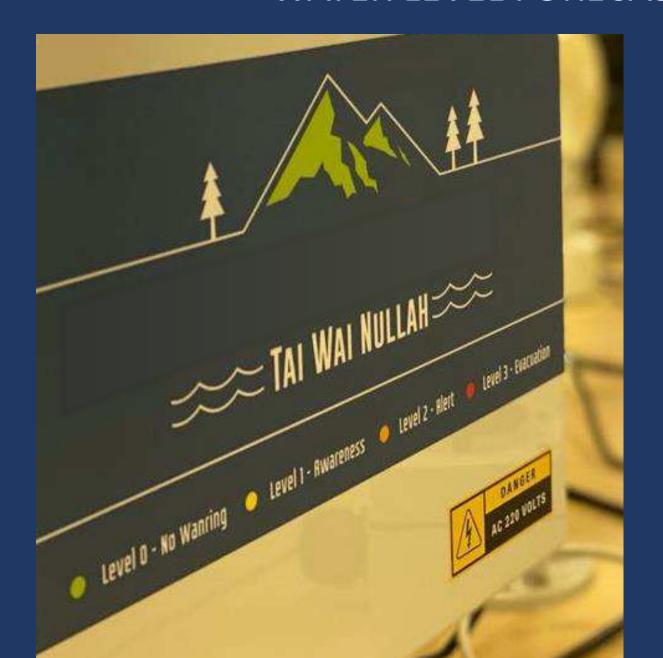
01

Water Level Forecast System

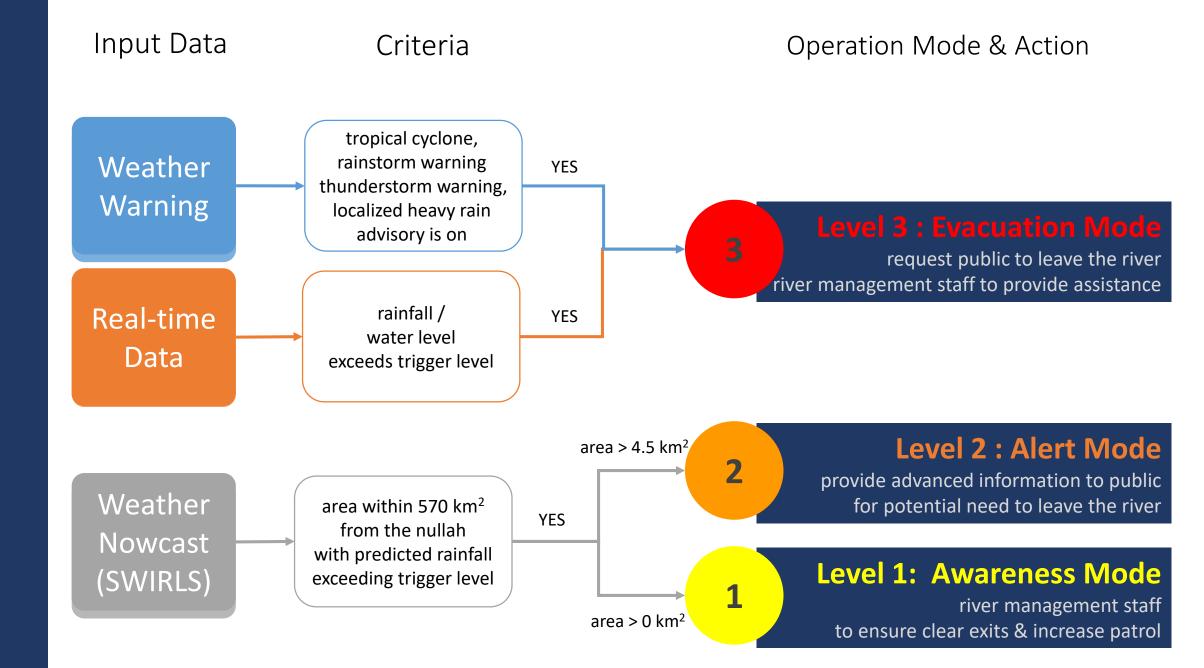
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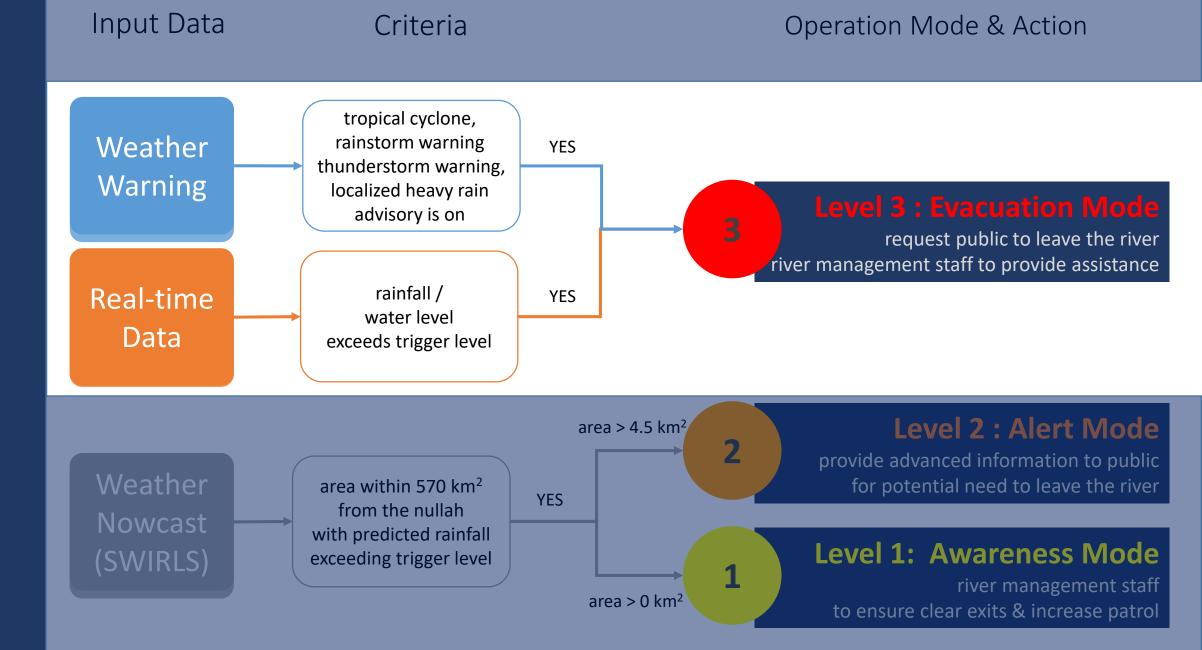
AI-base River Management System

WATER LEVEL FORECAST SYSTEM

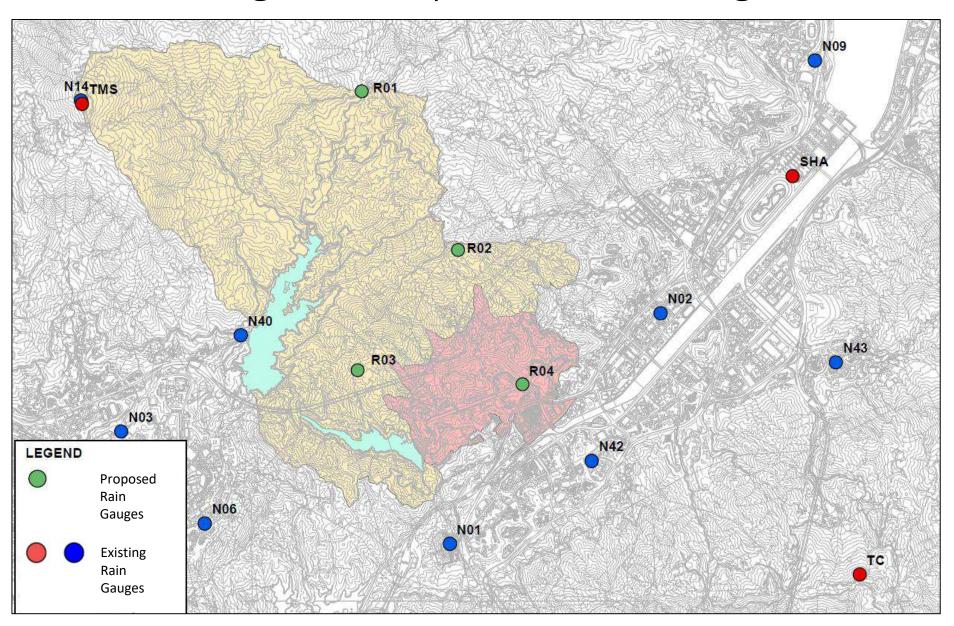




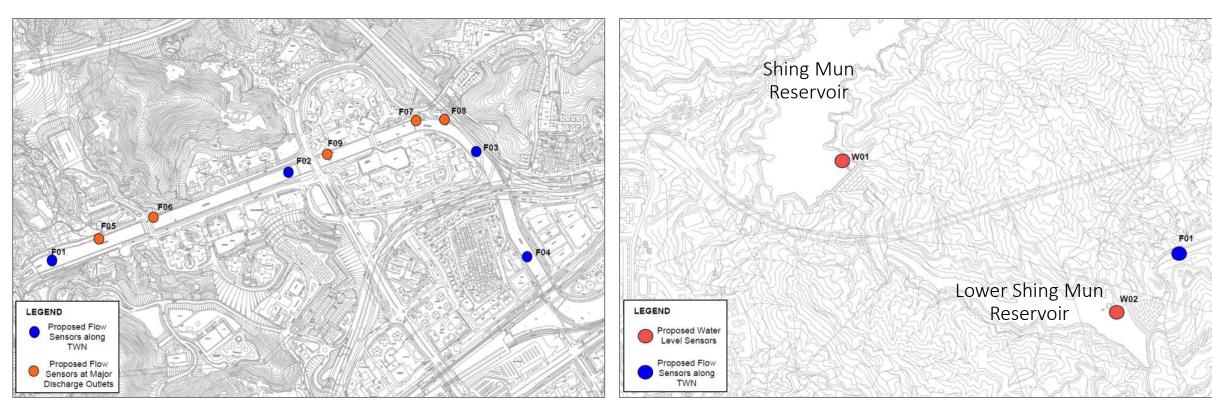




Existing and Proposed Rain Gauges

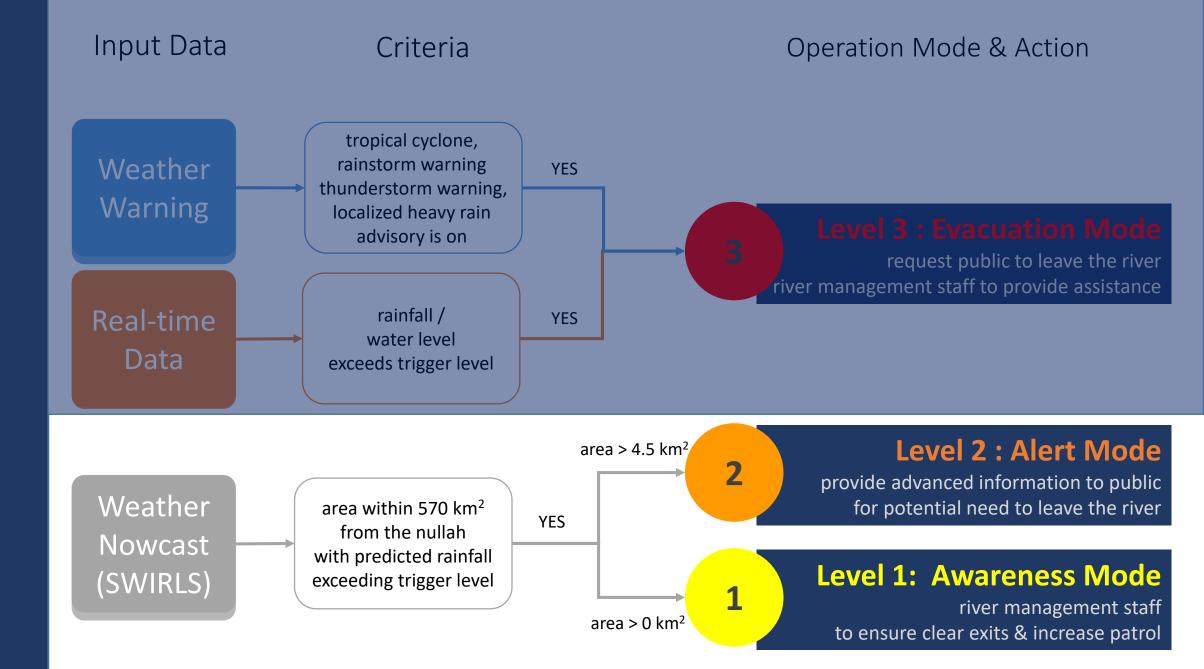


Proposed Water Level Sensors

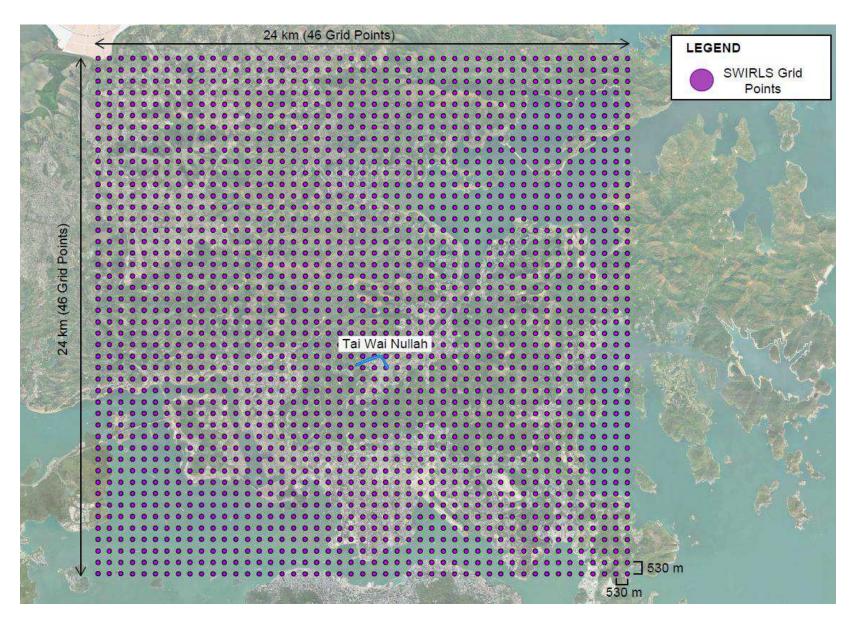


Proposed Water Level Sensors along Tai Wai Nullah

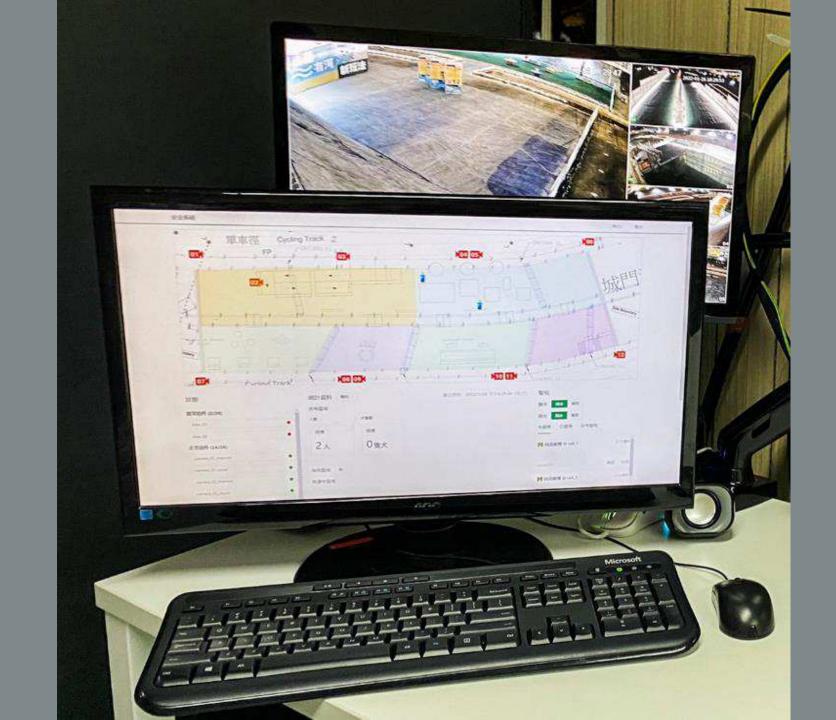
Proposed Water Level Sensors at Shing Mun Reservoir and Lower Shing Mun Reservoir



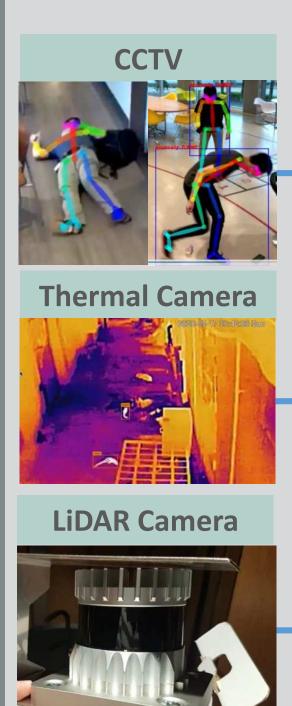
Coverage of SWIRLS Spatial Analysis



Al-based
River
Management
System



AI-based River Management System



Al-based video analytics system



Daily Management

- count no. of visitors
- identify unauthorized entrance

Emergency Evacuation Assistance

 identify visitors' location during evacuation

Post Analysis

- daily visitor no.
- time for evacuation

Tai Wai River Garden

Operation of Water Level Forecast System & Al-based River Management System

















Public Engagement Exercises for Revitalisation of Tai Wai Nullah







PUBLIC ENGAGEMENT build a liveable city with the community

Rivers in the City



Kai Tak River



Lam Tsuen River



Tsui Ping River



Jordan Valley Nullah



Tung Chung River



Anderson Road Quarry Lake Park



Yuen Long Nullah



Fo Tan Nullah

