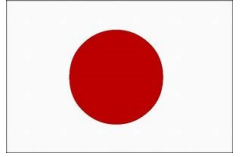




Philippines-Japan
ENVIRONMENT WEEK



Real-time Stormwater Management System

January 2025

Company Introduction of Nihon Suido

Water Supply



500
professionals

65th
Established in 1959

70
countries

Overseas



We are an engineering consultant company specializing in water and sewerage infrastructure.



We will provide total solution for Water-related Projects at Every Stage

Sewerage



River



Machinery,
Electricity,
Plant



Architecture



Structural
Design



Environment

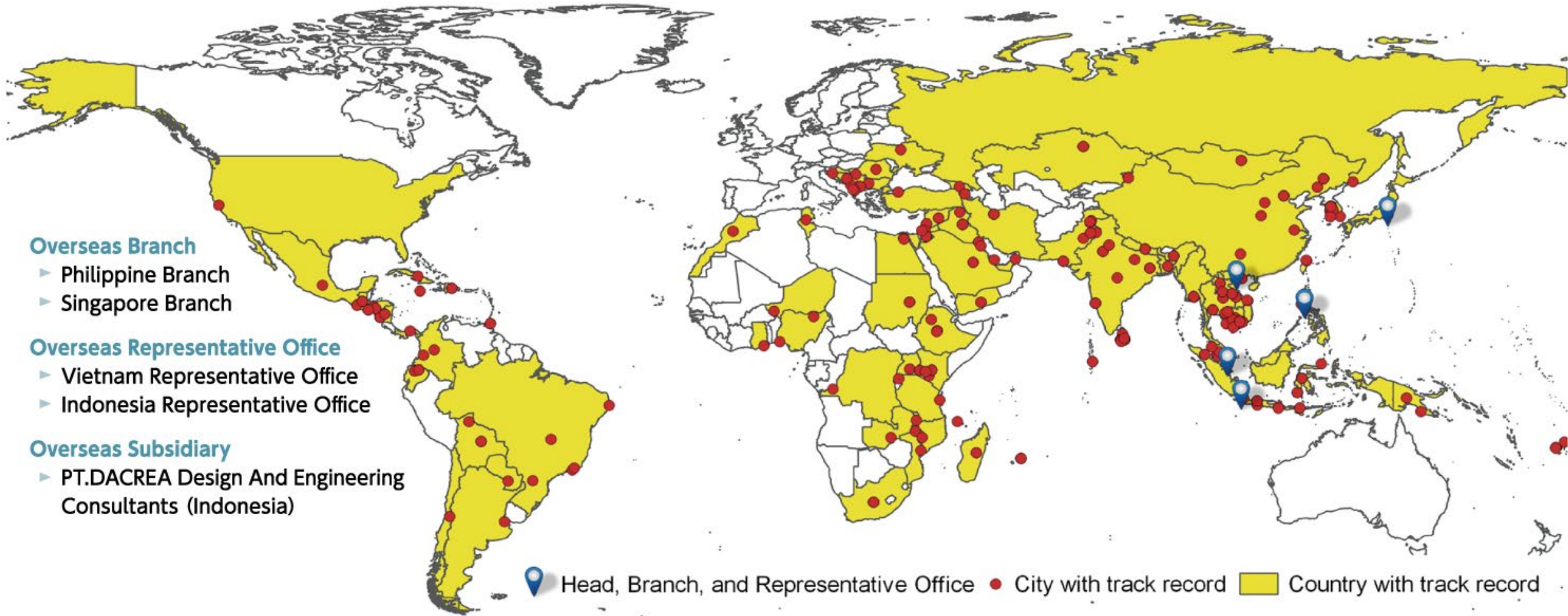


Construction



Digital
Transformation



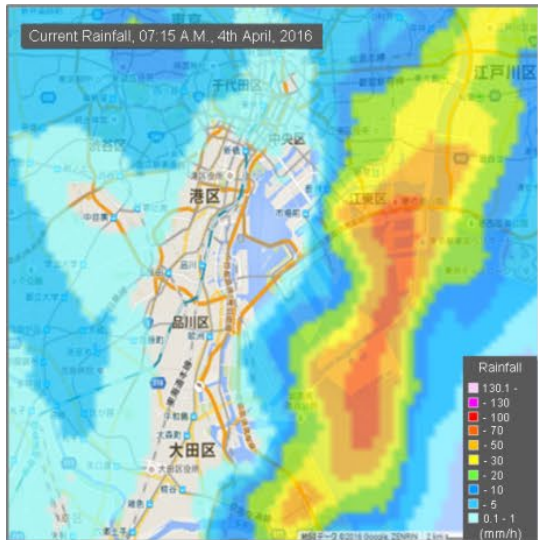


- Establishment Year: 1959
- Number of Staff: 839 (including 502 P.E.)
- ISO9001, ISO27001, ISO14001, ISO55001 registered

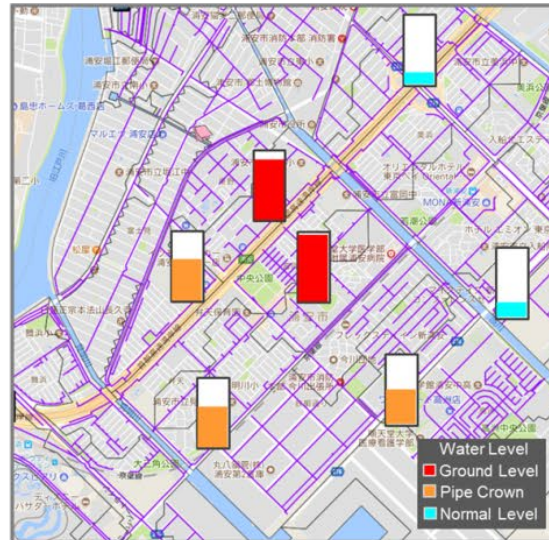
(as of Dec 2023)

Our Innovative SMART Technology

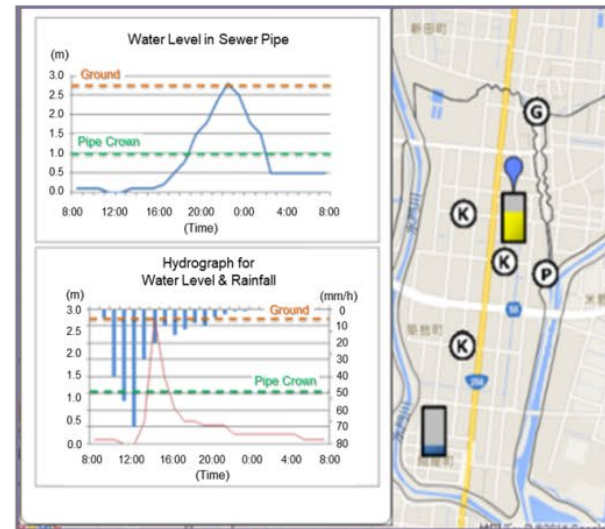
Real-time Stormwater Management System (Blitz GIS)



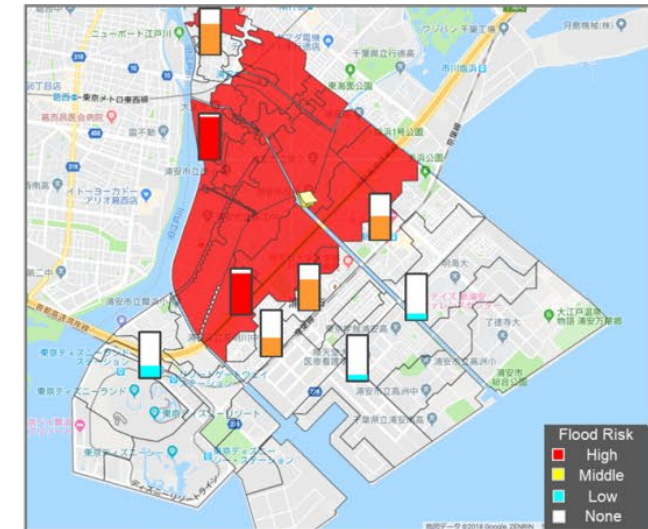
Rainfall Forecast
(Current and Forecasted Rainfall)



Water Level Forecast
(Current and Forecasted Water Level)

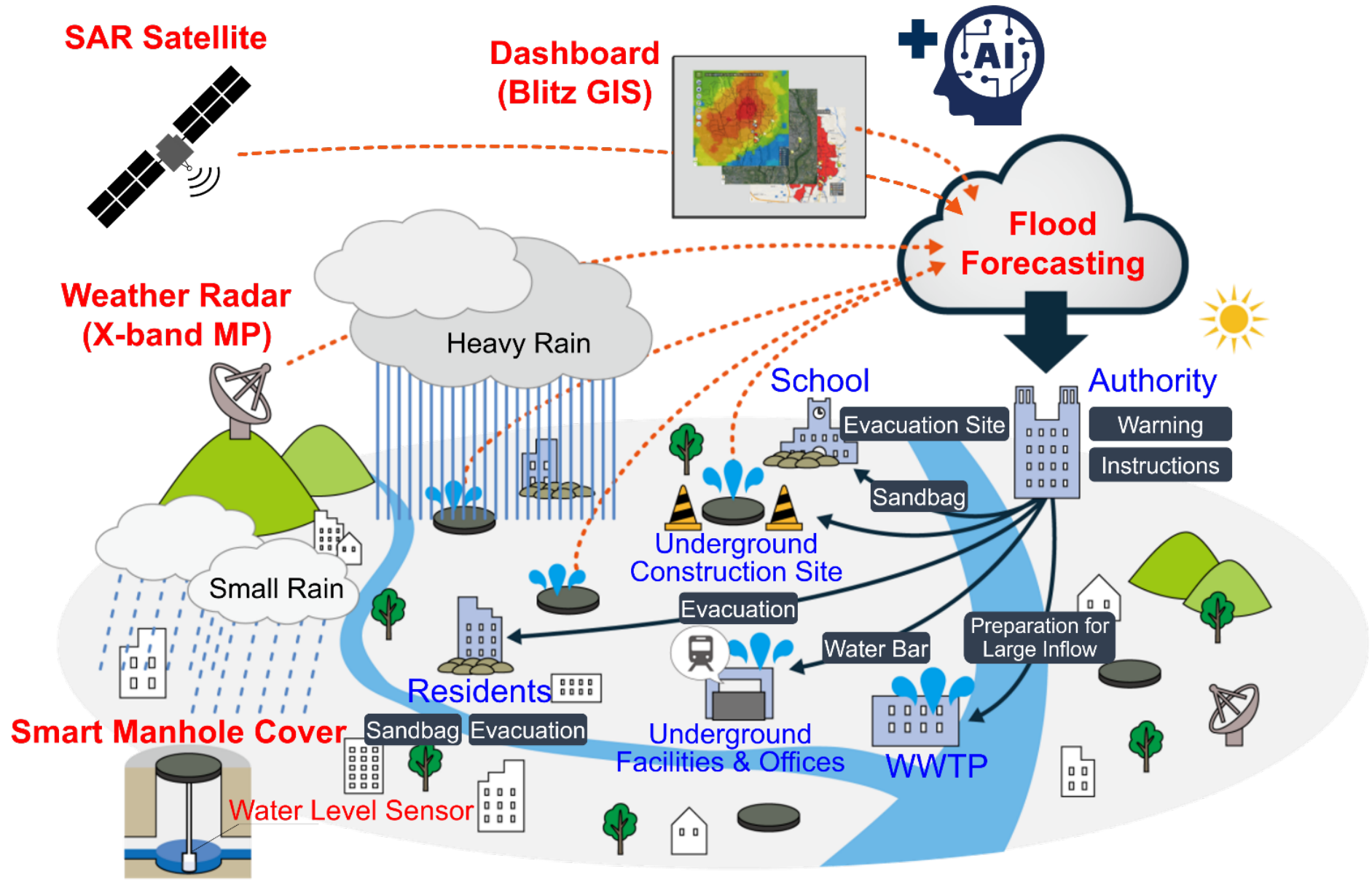


**Hydrograph for
Water Level and Rainfall**

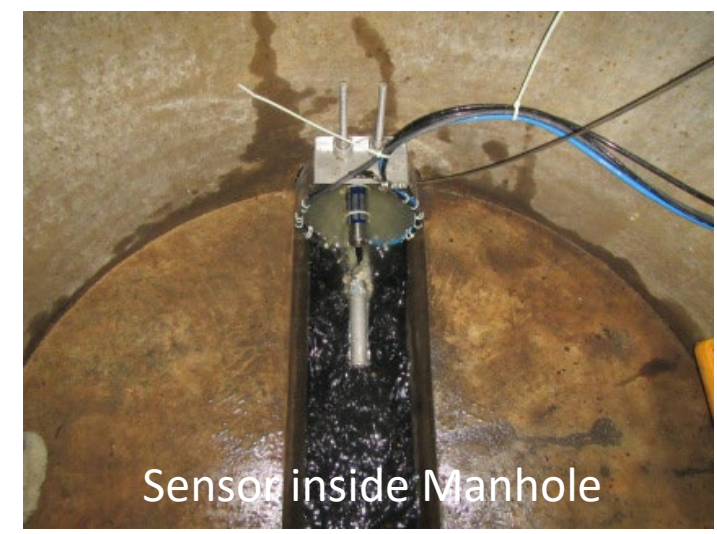
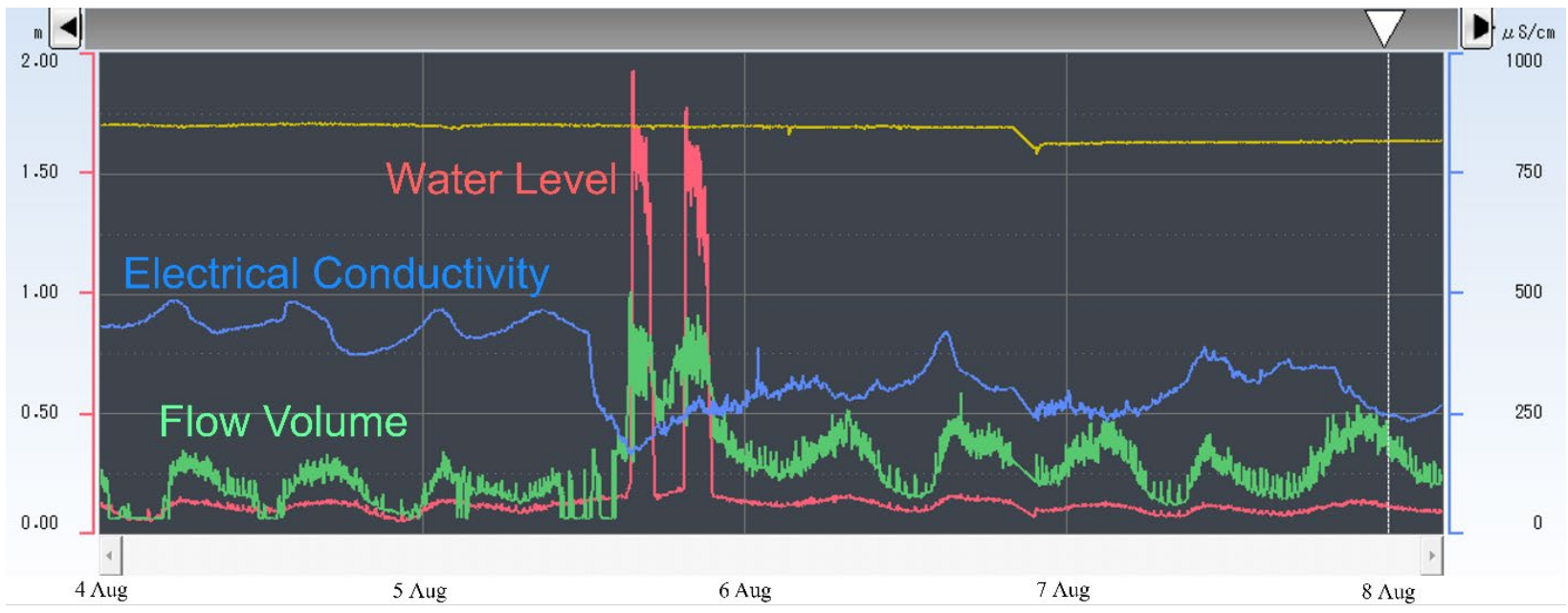
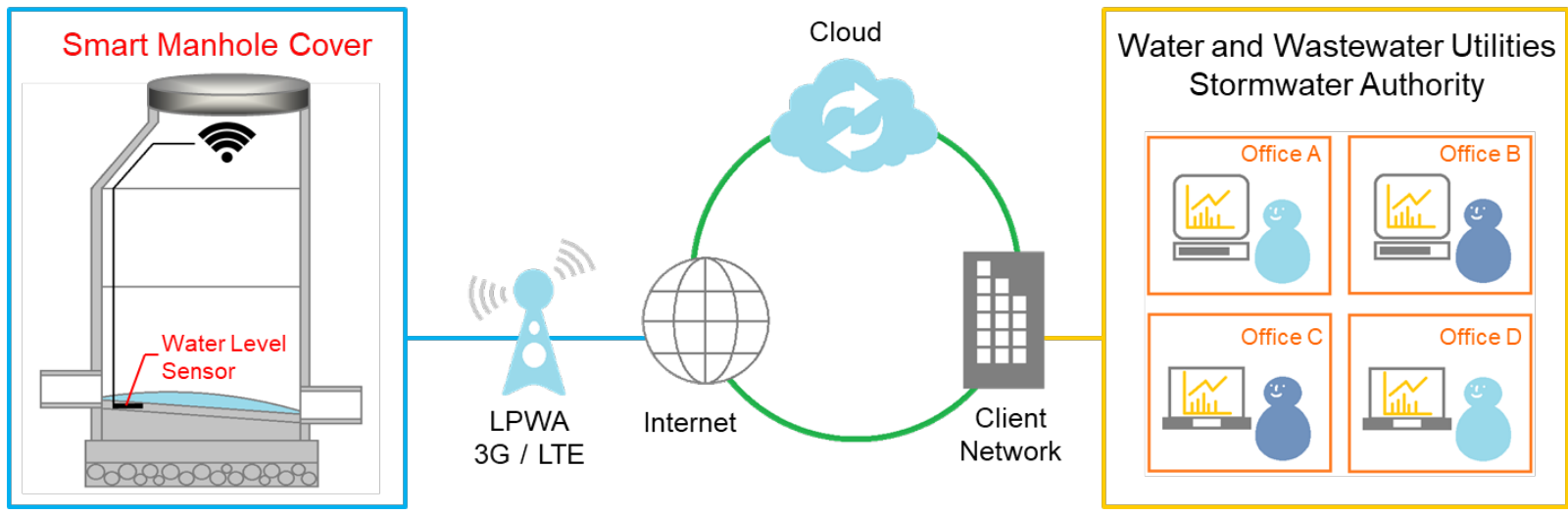


Flood Risk Distribution
(Forecasted by Rainfall and Water Level)

Outline of Smart Stormwater Management System



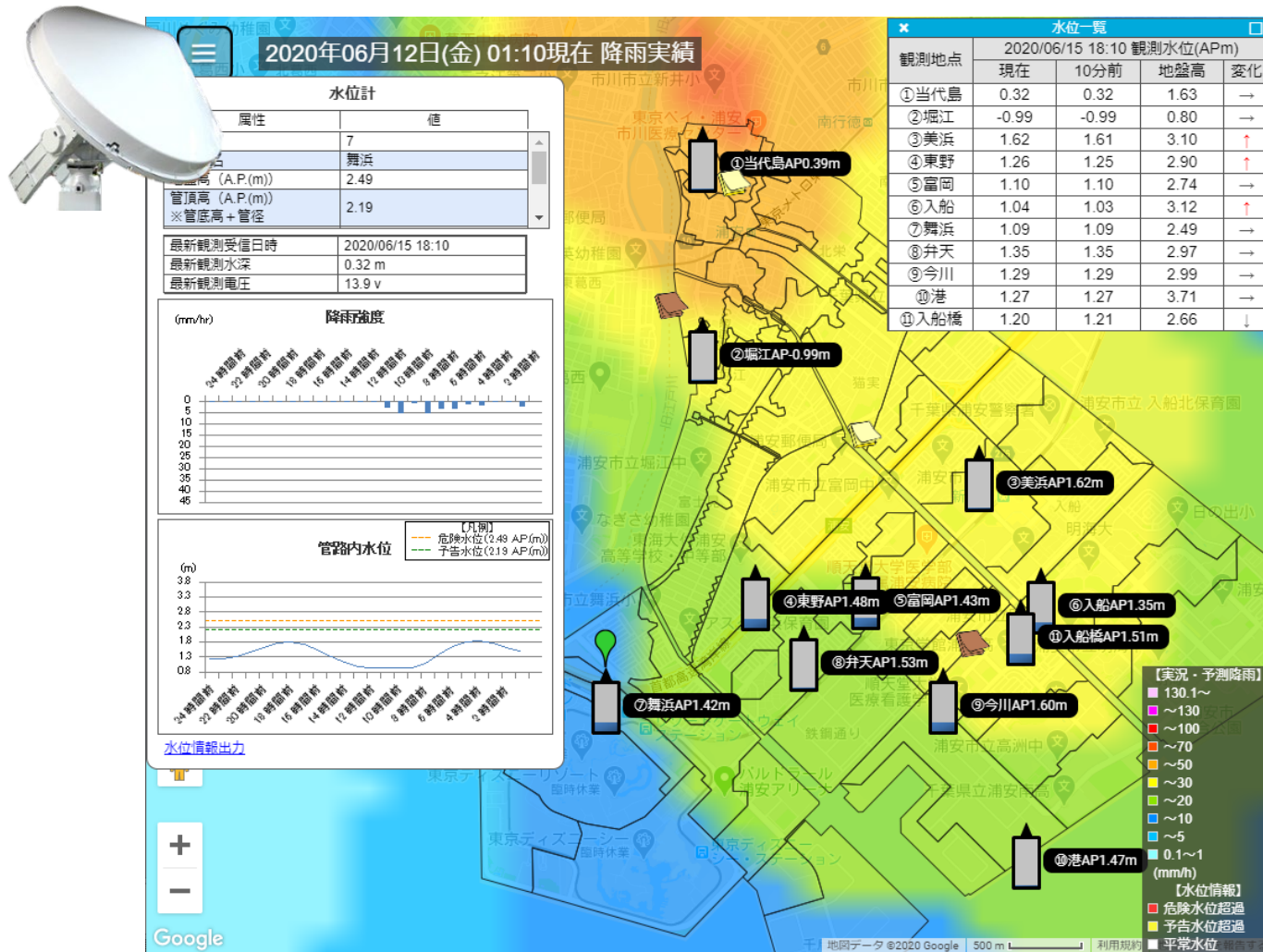
Real-time Monitoring for Drainage Networks



Sensor inside Manhole

Stormwater Management System Overview

Rainfall information (weather radar) & water level: Real-time observation



Alert Notification (E-mail)

Water Level Alert(Tulip Drive: Tul01s)

Alert@nisuicon-rd-dashboard.link
宛先: 戸部 達也 (Tobe Tatsuya)

保持: アイテム10年保持ポリシー (10年) 有効期限: 2034/10/05 (木) 23:35

The water level has been over the Hazardous Water Level (Pipe Crown Level)

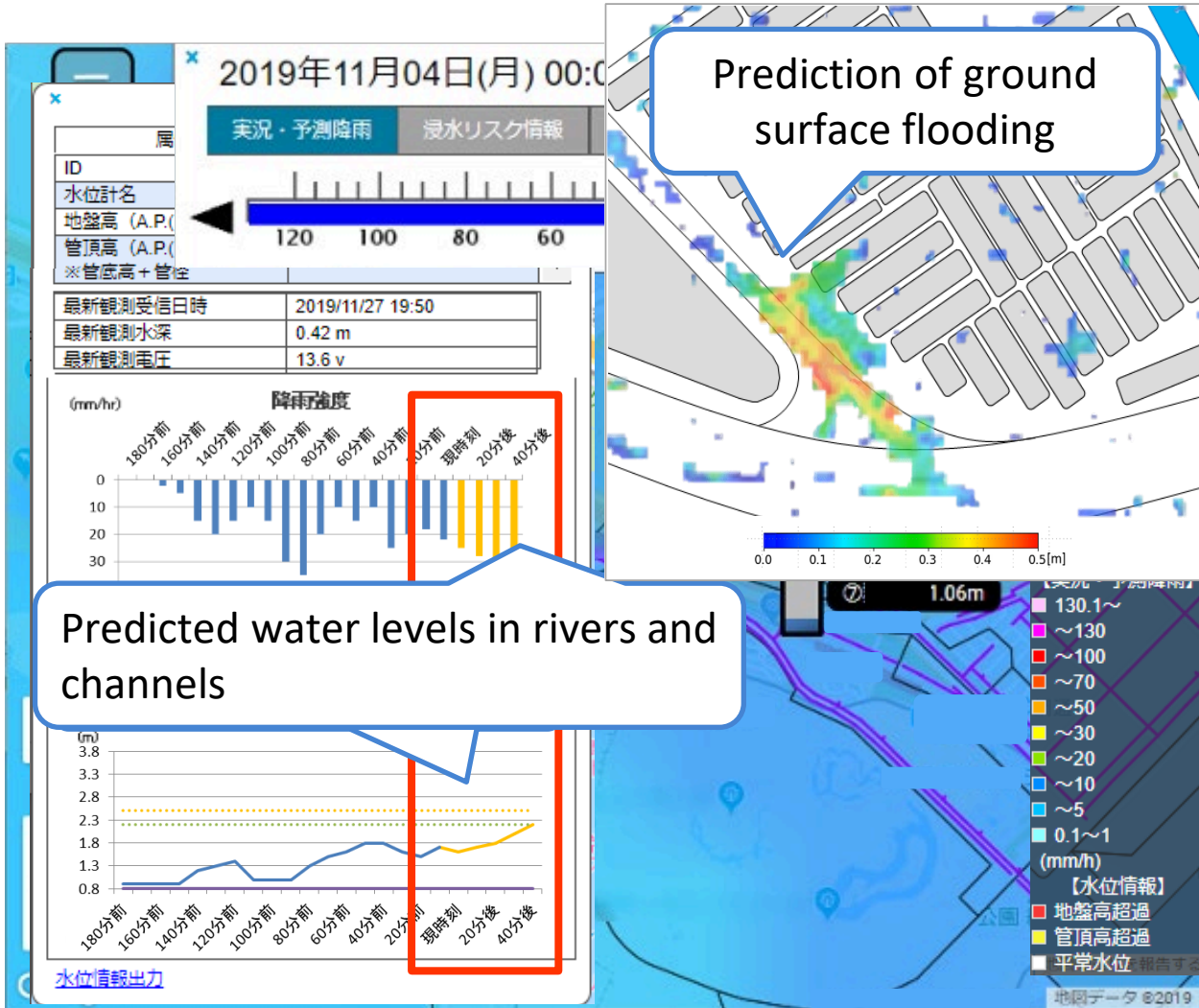
[Over Hazardous Water Level (0.9 m)]
10:30 PM, 07/10/2024 at Tulip Drive: Tul01s, Observed Water Level: 1.127 m

Alert Symbol in Blitz-GIS

Water Level	Condition	Symbol
Flooding	Over Flooding Water Level (Ground Level)	
Hazardous	Over Hazardous Water Level (Pipe Crown Level)	
Normal	Water Flow over 80% of Pipe Crown Height	
	Water Flow over 20% of Pipe Crown Height	
	Water Flow below 20% of Pipe Crown Height	

Optional Features

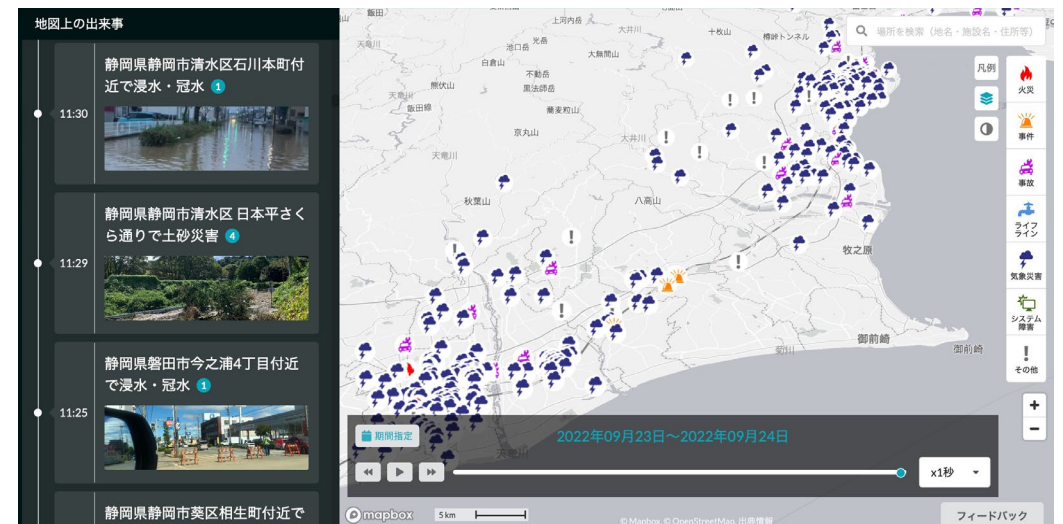
1. Real-time Flood Forecasting



2. Flooded area map using SAR satellite



3. Disaster Information from Social Media

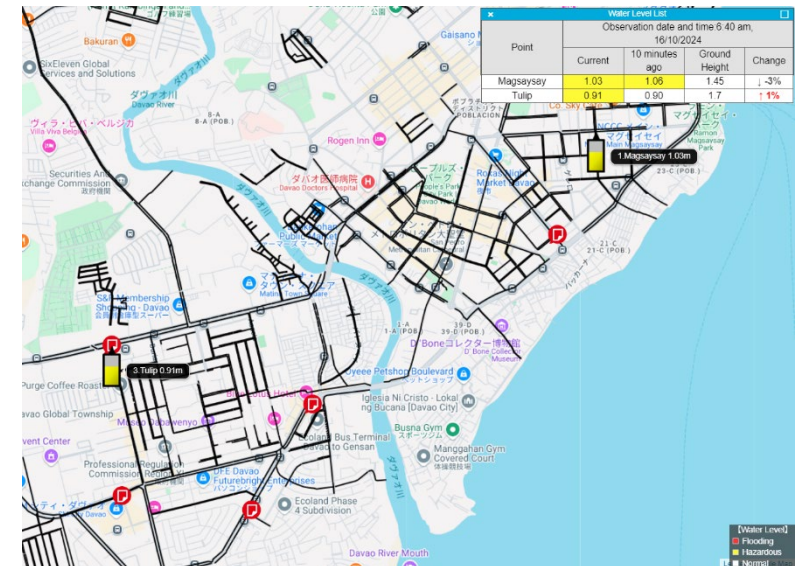


- Project Name: Smart JAMP – Feasibility Study for Smart City (Disaster Prevention) in Davao City
- Period: June 2024 to March 2025
- Funded by: Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan
- Counterpart in Philippines: City Government of Davao
- Implemented by: Yachiyo Engineering Co., Ltd.
Nihon Suido Consultants Co., Ltd.



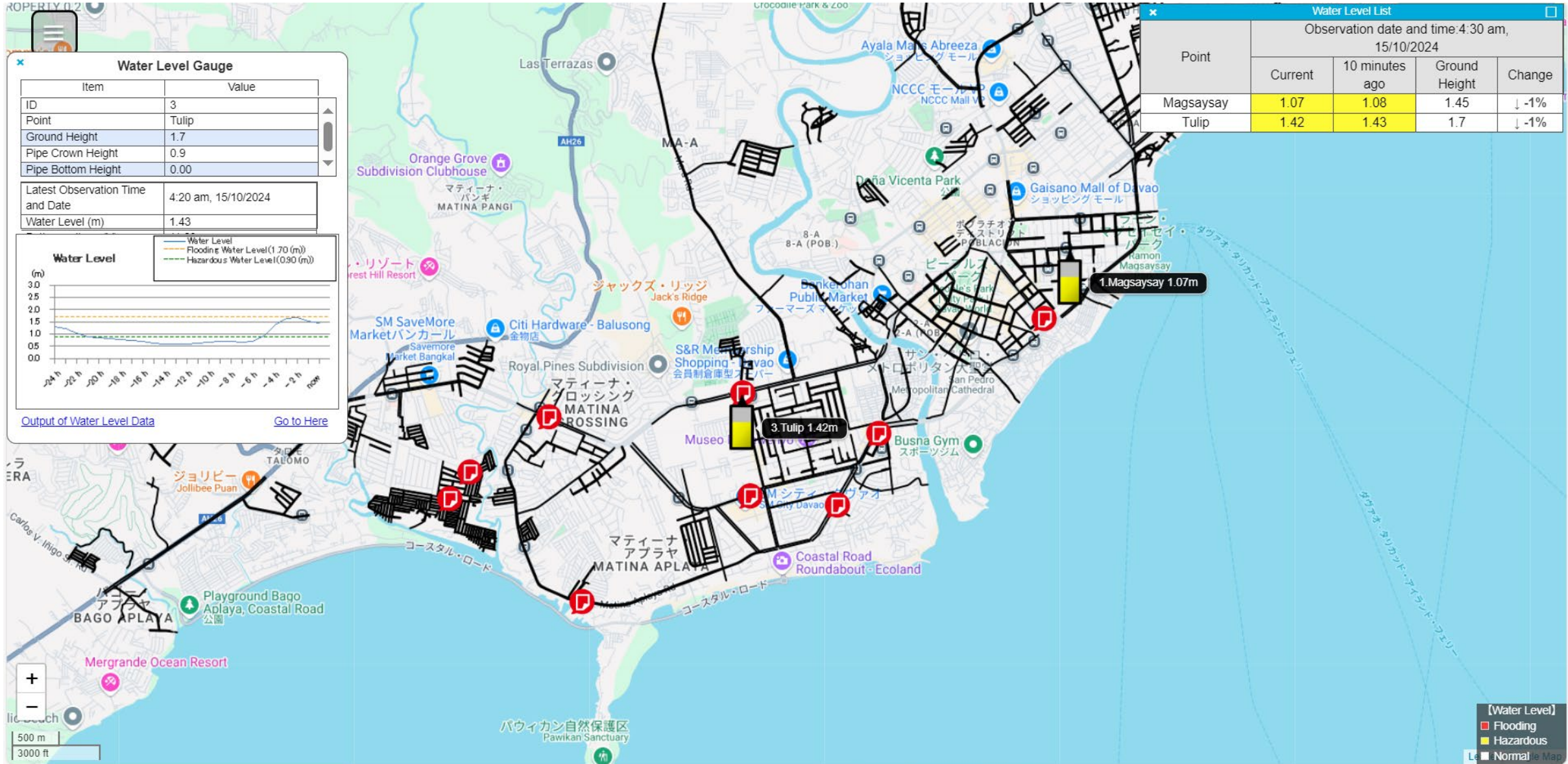
Project Description

1. PoC for the stormwater management system (Blitz GIS) in Davao
2. Enhance the capacity for flood management in Davao City
3. Enhance urban functions and citizen quality of life



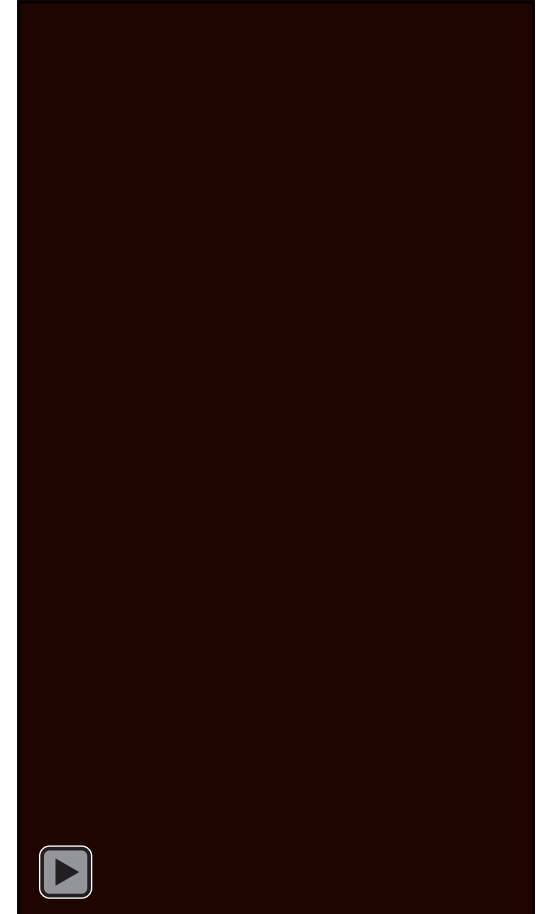
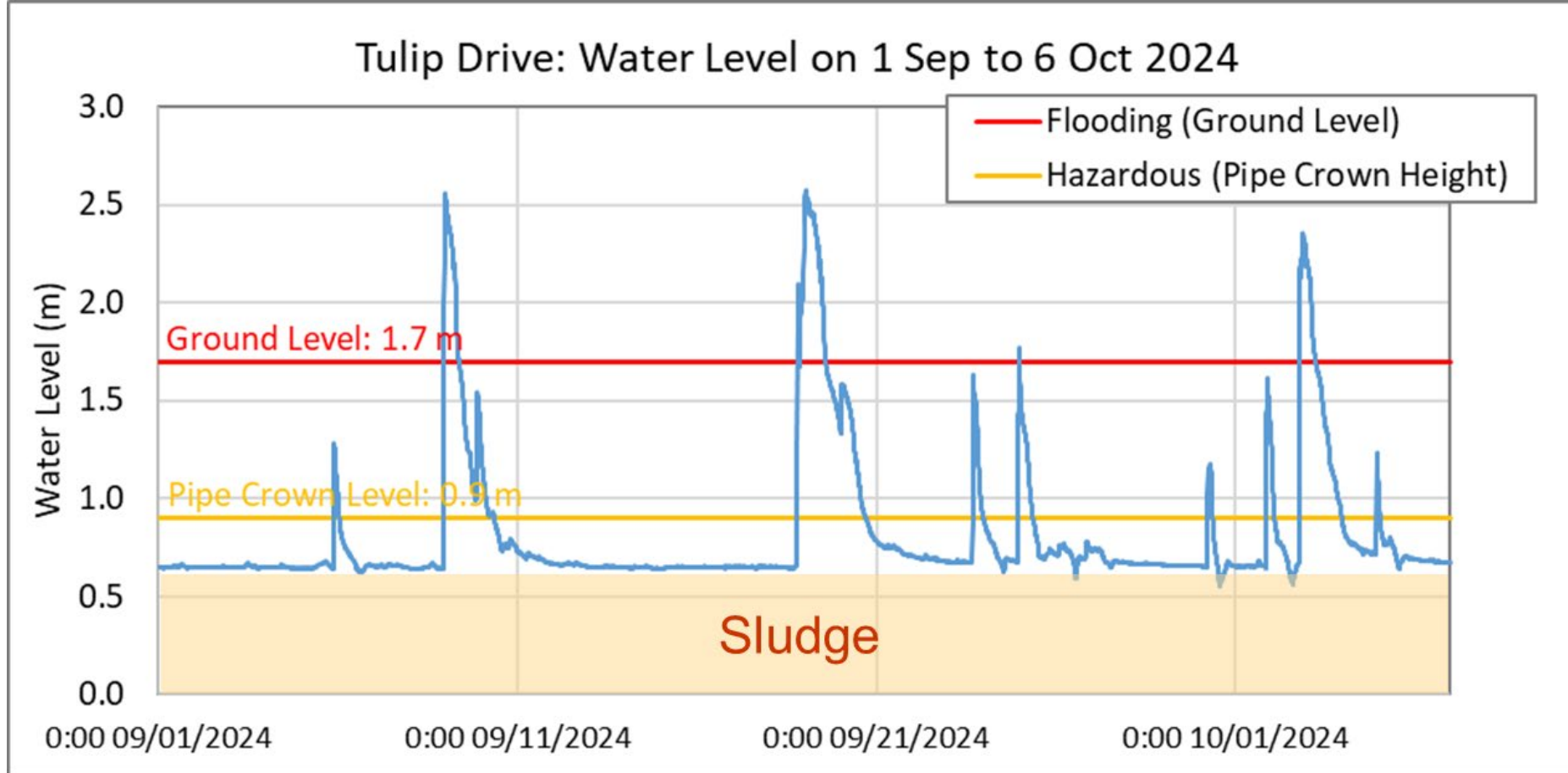
Stormwater Management System in Davao

Actual dashboard of Blitz-GIS during the heavy flood on 8 Sep 2024



Stormwater Management System in Davao

- Monitoring of the heavy floods during Sep and Oct 2024 at Tulip





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Water and Environmental Consultants

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E-Mail: keieikikaku@nissuicon.co.jp
URL. <https://www.nissuicon.co.jp/en/>
<https://www.nissuicon.co.jp/philippine/>