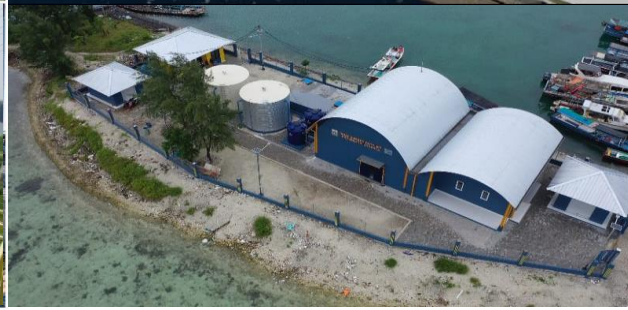




JAKARTA'S WATER: THE NEXT STAGE

Provinsi DKI Jakarta
June 2021

Image courtesy: Rizky Maharoni/Wikimedia Commons

A mega city with ± 10 million people during night time and supporting 20 million people in the Greater Jakarta Area

Capital city, a political and business hub of Indonesia

A very densely built metropolitan city

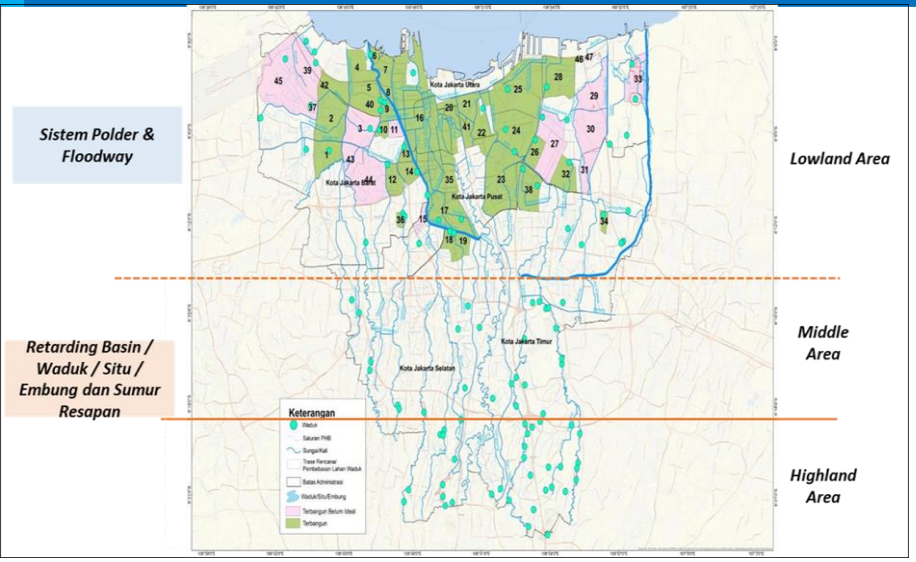
Low laying area, with parts of Northern Jakarta below sea level

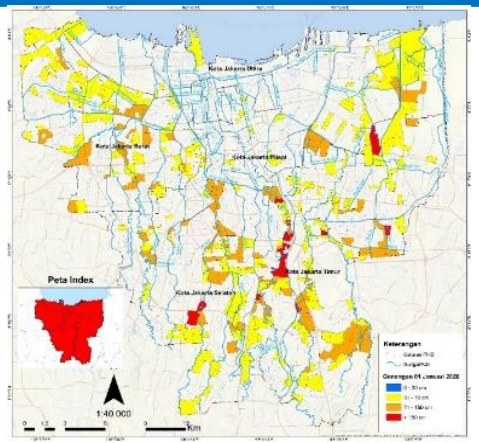
Delta city, with 13 rivers flowing through from outside of Jakarta

Experiencing many impacts of climate change

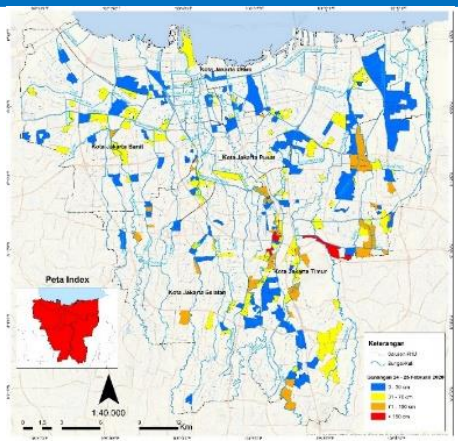

“Climate change is water change and WATER is a KEY RESOURCE for the sustainable development of megacities and a key factor of their resilience”
(International Conference Water, Megacities and Global Change UNESCO – ARCEAU IdF Paris, 2 December 2015)

Jakarta, rainfall and flood events





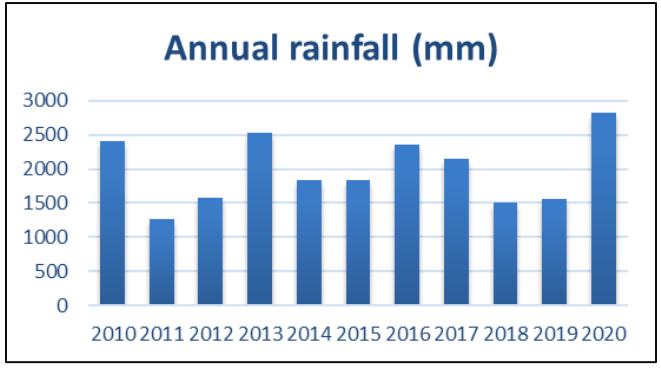
Flood 31 December 2019 - 1 January 2020



Flood 24-25 February 2020

- **Jakarta is located in downstream area with elevation around 0 – 90 m asl.**
- **Flood control management and program: highland area, middle area and lowland area.**

River capacity	**: 2357 m3/det**
River discharge on Jan 2020	**: 3389 m3/det**
Remaining discharge must be retained in *highland:*	**1032 m³/det**



Jakarta, rainfall and flood events

2020

2021

Jakarta has been experiencing more frequent extreme weather events, with high rain intensity in a short period

On the other hand…….

Jakarta is relying on outside source for its clean water, this including the increasing use of bottled water for drinking, and the polluted water bodies needs immediate treatment efforts

Goals? Goals?

Managing the Flood and Achieving Water Security

GAP ANALYSIS

CLEAN WATER SUPPLY

Existing 2020	Target 2030	GAP
Water Supply 20.725 lps Coverage ± 64 % NRW 45%	Water Supply 20.725 lps Coverage 36% NRW 26%	Water Supply 12.140 lps Coverage ± 100% NRW 18%

WASTE WATER TREATMENT

Existing 2020	Target 2050	GAP
WW (offsite) Treated 200.000 m3/d Sewerage Coverage ± 10 % (PE) Onsite Coverage ± 13.8 % (desludging)	WW (offsite) Treated 200.000 m3/d Sewerage Coverage ± 80 % (PE) Onsite Coverage ± 20 % (desludging)	WW (offsite) Treated 200.000 m3/d Sewerage Coverage ± 70 % (PE) Onsite Coverage ± 6.2 % (desludging)

Addressing Clean Water and Wastewater Management issues in combine with Flood Management efforts

Future: Jakarta, a model of multi function water Infrastructure

Central of local heritage

Babakan reservoir, South Jakarta
Central of groundwater recharge and flood control

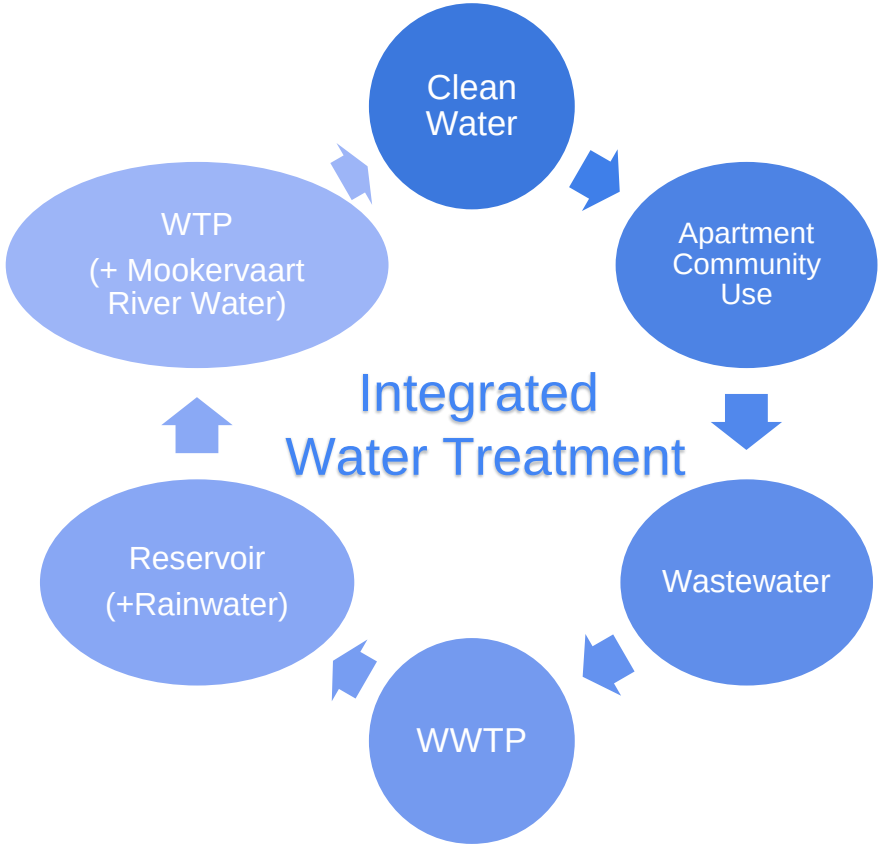
Central of eco-tourism and education

Central of wastewater Treatment

(interceptor system)

Central of clean water treatment

Mookervaart Daan Mogot Reservoir and Water Treatment Plant at Govt. owned Pesakih Apartment Complex



A combined use for water management and Public Space

Future Project: Pondok Ranggon Reservoir
"Creating a Multifunctional Blue – Green Public Space"

Groundwater Recharge

Wastewater & Clean Water Treatment

Flood Control System

Social – Cultural Hub

Ecotourism and education

Open Green Space

TERIMA KASIH

THANK YOU