





# SNRU Sustainable Development Initiative

Clean water and sanitation





Suwannarong P.

#### SNRU's Water Management Concept

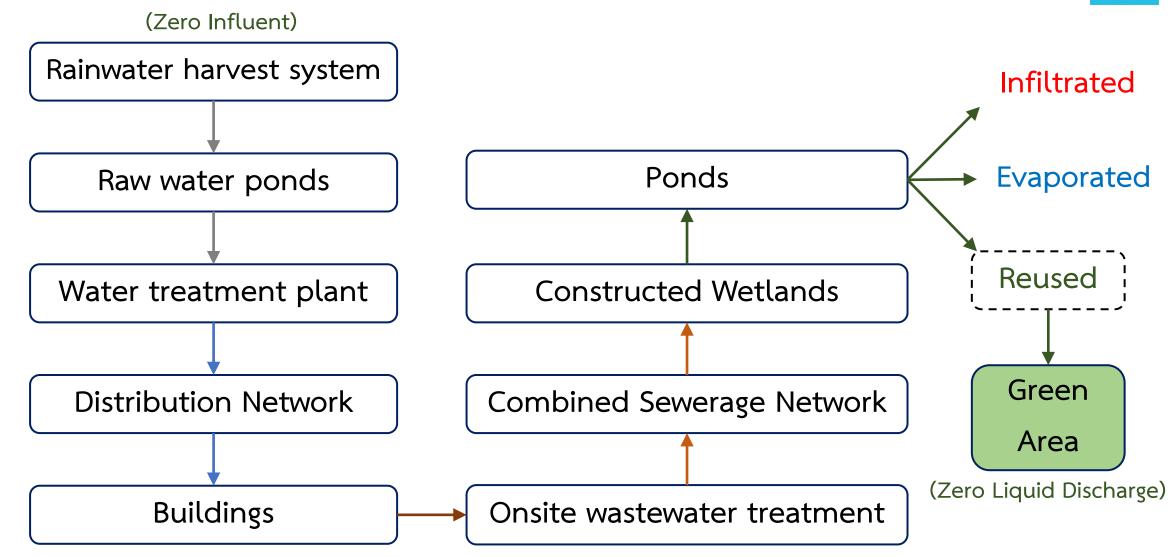


# Zero Influent and Zero Liquid Discharge

- All academic buildings use university water supply taps.
  (The raw water used in SNRU is rainwater)
- All buildings have onsite wastewater treatment.
- All treated water can be reused, infiltrated, or evaporated to the atmosphere.

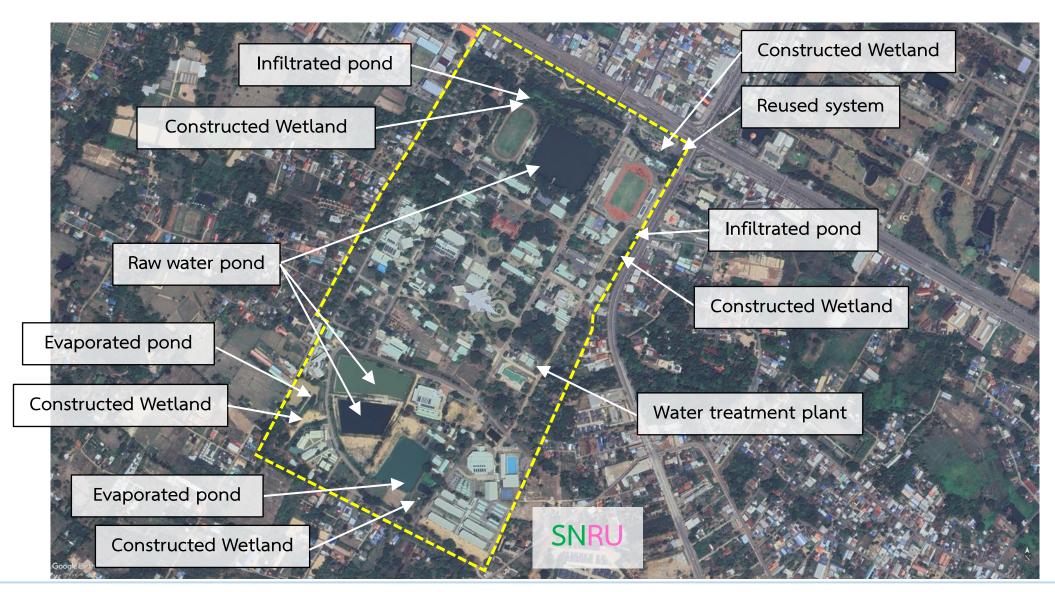
#### SNRU's Water Management System





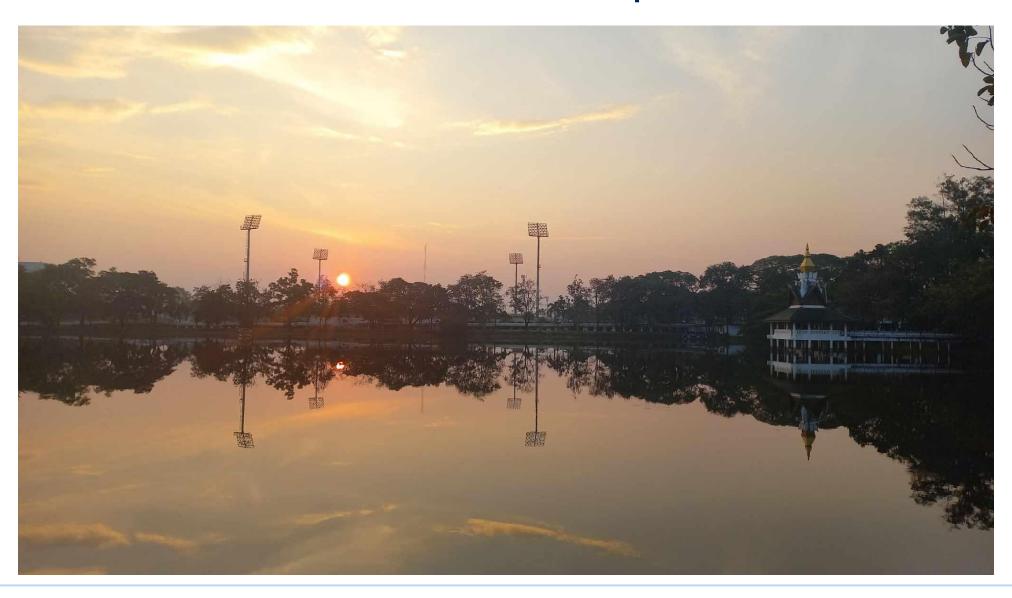
#### SNRU's Water Management System (Cont.)





# SNRU's Raw water ponds





# SNRU's Raw water ponds (Cont.)





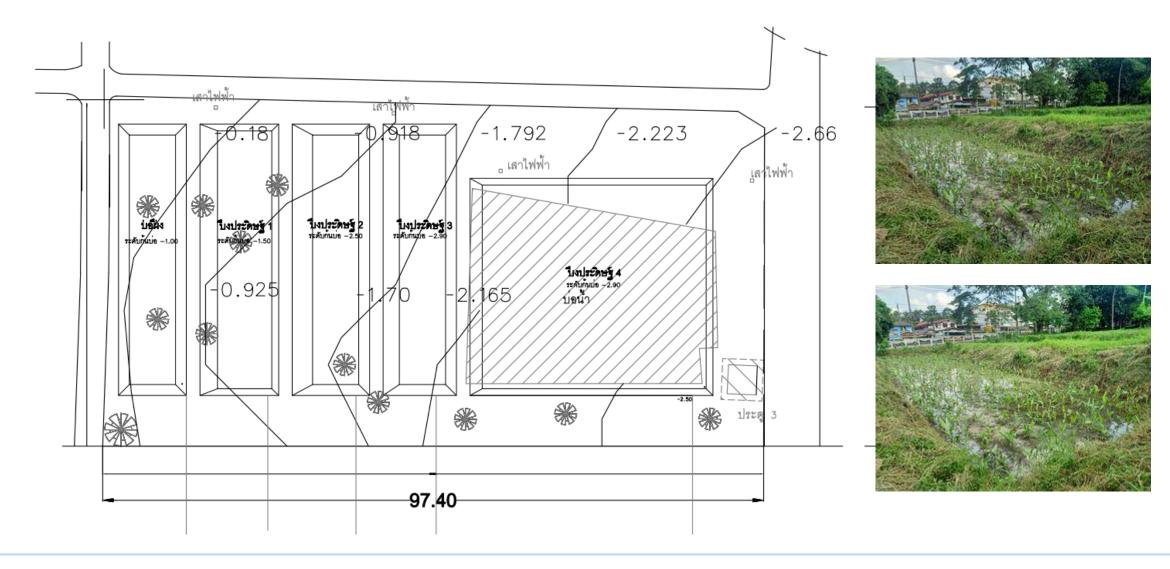
## SNRU's Water treatment plant





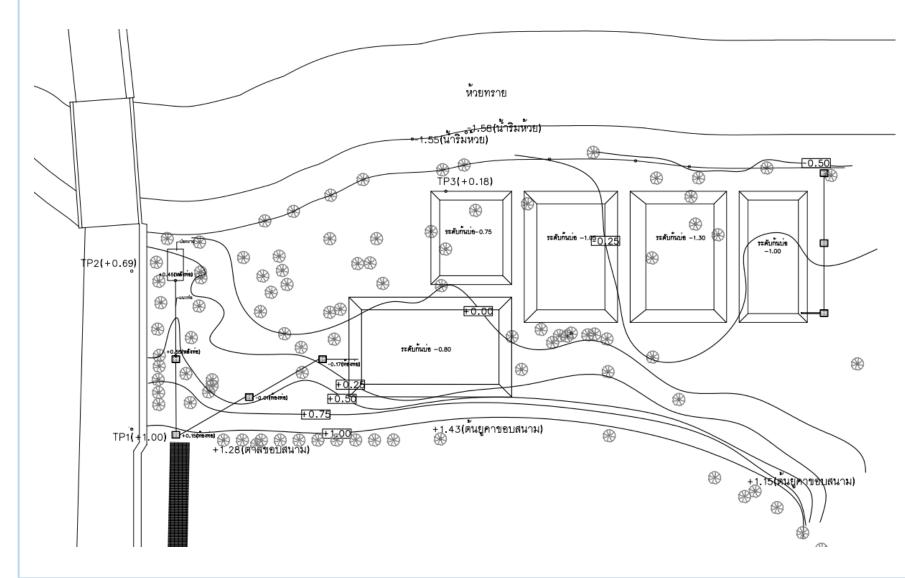
#### SNRU's Constructed Wetland





#### SNRU's Constructed Wetland (Cont.)



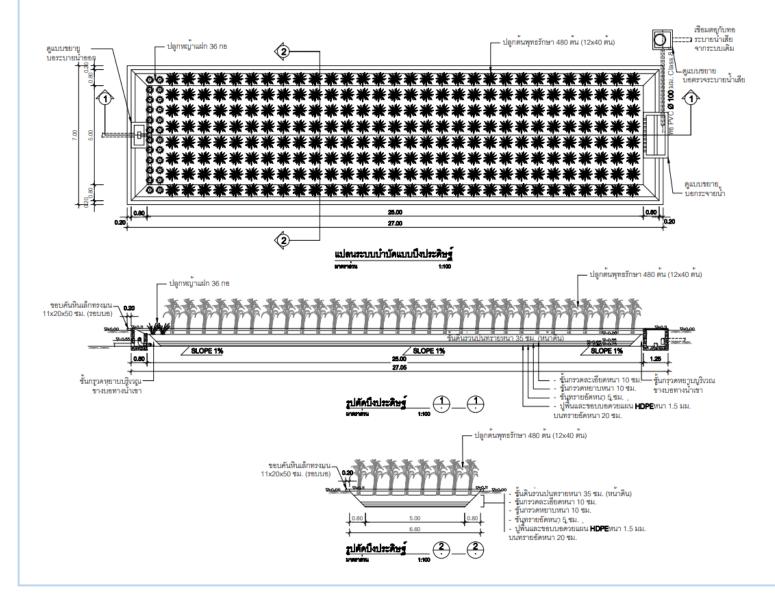






#### SNRU's Constructed Wetland (Cont.)







#### SNRU's Tap Water Quality Monitoring & Review



Parameter	Standard value	Result
рН	6.5-8.5	Pass
Turbidity (NTU)	5	Pass
TDS (mg/L)	500	Pass
Chloride (mg/L)	250	Pass
Nitrate (mg/L)	50	Pass
TCB (MPN/10 mL)	<1.1	Pass
E. Coli (MPN/10 mL)	<1.1	Pass

(Monitoring by Faculty of Science and Technology)

### SNRU's Wastewater Quality Monitoring & Review



Parameter	Standard value	Result
рН	5-9	Pass
BOD (mg/L)	20	Pass
TDS (mg/L)	500	Pass
SS (mg/L)	30	Pass
TKN (mg/L)	35	Pass
Oil and Grease (mg/L)	20	Pass
S <sup>2-</sup> (mg/L)	1	Pass

(Review by Pollution Control Department)

#### SNRU's Water Conservation Awareness







Building's water consumption

Building's carbon footprint

# SNRU Sustainable Development Initiative

#### Climate Action



# Carbon Capture and Storage in SNRU



- CCS of fruit trees
- Carbon Capture 212,283 kg CO2 eq.
- Carbon Storage 57,895 kg CO2 eq.









# Carbon Footprint for Organization (CFO)



- 2024th year of
  - The first Baseline of SNRU's CFO
  - Establishment of SNRU Center for neutrality Carbon (SNRU-CNC)





