SDG 6

CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

6 CLEAN WATER AND SANITATION



https://sdgs.rmutsv.ac.th/evidence-2025/sdgs-6

RUTS TRACKING WATER USE ACROSS FIVE OPERATIONAL AREAS 2025

Total Annual Water Consumption

626,008

m^3/year

580,493 m^3
from mains water supply

92.73%

45,515 m^3
from natural water sources

7.27%

University Population

18,578
people

17,146
students

1,432
academic and support staff

Annual Water Consumption per Person

33.70

m^3/person/year

Daily Water Consumption per Person

92.32

litres/person/day

Water Consumption and Resource Monitoring

Rajamangala University of Technology Srivijaya (RUTS) monitors water consumption across five operational areas: Songkhla, Sai Yai, Thung Yai, Khanom and Trang. From January to December 2025, recorded consumption totalled 626,008 m³, of which 580,493 m³ (92.73%) came from mains supply and 45,515 m³ (7.27%) from natural sources. Consumption supports teaching, laboratories, sanitation, dining services, landscaping and campus maintenance, as well as specialist aquatic facilities in Trang.

Based on 18,180 students and staff (16,748 students and 1,432 personnel), consumption averaged 34.43 m³ per person annually, or 94.34 litres daily. Mains supply is measured through water meters operated by the Provincial Waterworks Authority; operational units compile and review records each month by area and source. This provides a basis for identifying consumption patterns and improving resource planning.



Wastewater Management and Water Conservation

The university's Announcement on Wastewater Guidelines and Standards A.D. 2022 provides a formal basis for wastewater treatment, pollution prevention and infrastructure maintenance. In effect during 2025, it guides the management of wastewater from buildings, food services and other campus operations. Treatment arrangements include building-level preliminary treatment, grease traps in canteens, and biological treatment with mechanical aeration. Treated effluent follows designated discharge arrangements, including municipal collection connections where applicable.

Routine inspection of aerators, pumps and other equipment, together with grease removal at six-month intervals, helps prevent blockages and reduce the risk of contamination. The approach links preventive action with the ongoing operation of treatment facilities.










Alongside wastewater protection, access to safe drinking water is an essential everyday service. Free drinking water stations are provided in academic buildings, offices and shared facilities for students, staff and visitors. The service is supported by routine cleaning, equipment checks and scheduled filter replacement, making access to drinking water part of everyday campus operations rather than a one-off initiative.These services are complemented by improvements to water efficiency within university buildings. Water-saving fixtures, including push-button and automatic shut-off faucets, help limit unnecessary water flow in washrooms and handwashing areas. The Announcement on Energy and Resource Conservation Measures A.D. 2025 complements these facilities by encouraging users to close taps, report leaks and maintain water supply equipment through scheduled inspection.





Beyond indoor facilities, water-conscious management also extends to campus green spaces. RUTS maintains landscaped areas using plants suited to local conditions and regular maintenance needs, including Cha Dat shrubs, Ficus species and selected palms. Established trees offer shade that can reduce direct sunlight on soil and help retain moisture. Appropriate watering and plant selection support attractive green spaces while taking account of water use.







Building on wastewater treatment and landscape management, RUTS also seeks to make beneficial use of treated water. Water reuse forms part of the university's broader Green University and environmental management approach. Alongside wastewater collection and treatment, RUTS supports the beneficial use of treated wastewater, principally for watering plants and maintaining landscaped areas. This practice connects pollution control with the conservation of freshwater resources.



Community Engagement in Water Conservation





Through free training in Smart Farming and Internet of Things (IoT) technologies, the university provides opportunities for local communities to learn how digital tools can support agricultural water management, improve irrigation decisions and encourage more efficient use of water resources. This commitment is also reflected in practical conservation activities undertaken with local communities and government agencies. RUTS Civil Engineering students and academic staff have contributed to the restoration and maintenance of Nok Kin Nam Weir in Nakhon Si Thammarat, working alongside community members to remove sediment, maintain water retention infrastructure and clear waste from natural waterways. These activities combine hands-on learning with community participation in protecting local water resources.



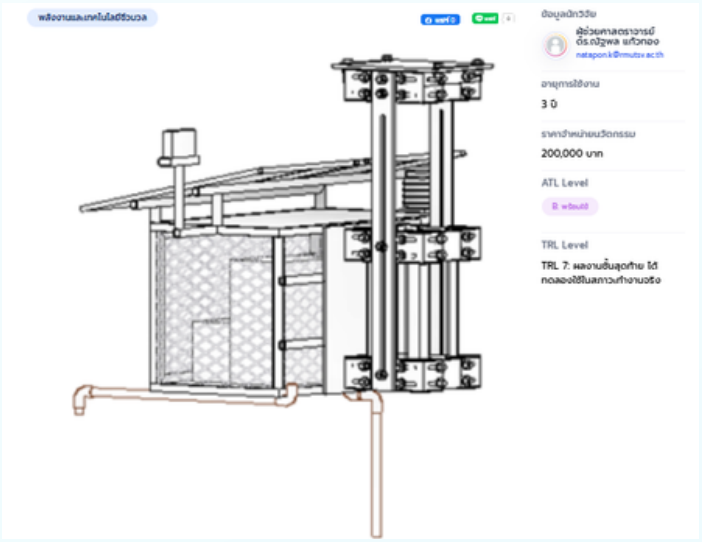


Water Research and Regional Partnerships

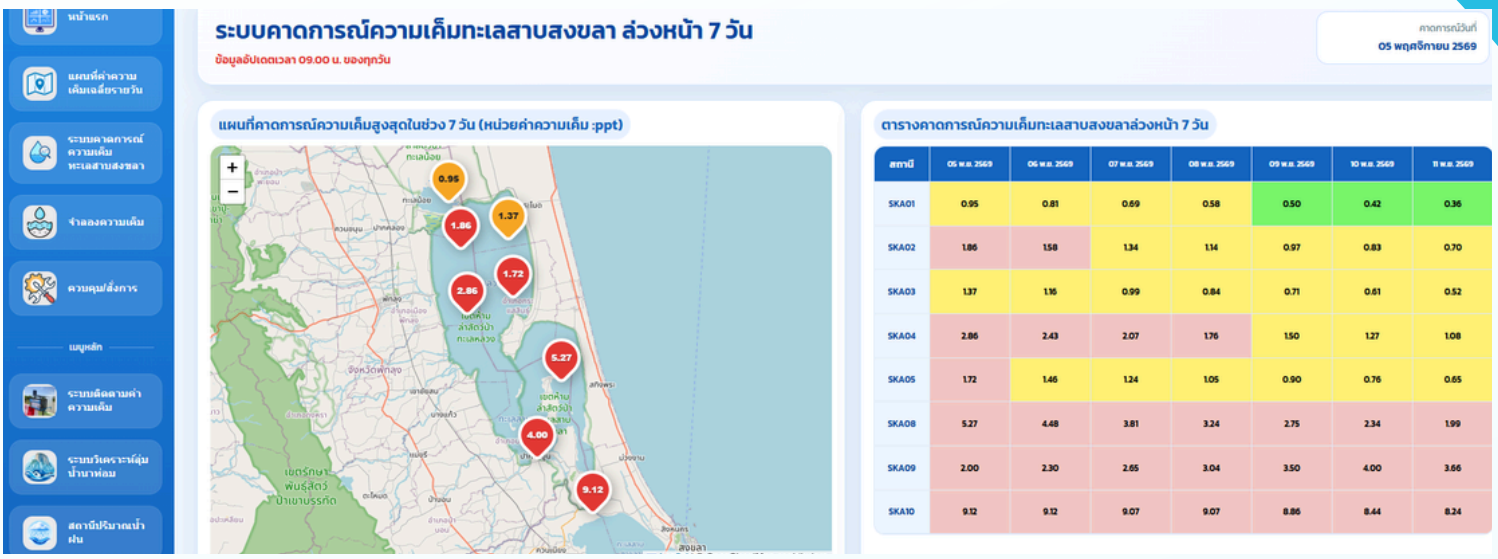
Beyond community activities, RUTS uses research and digital technologies to address water challenges in the Songkhla Lake Basin, where seasonal saltwater intrusion affects freshwater availability for agriculture. The university has installed and maintains 19 automated salinity monitoring stations, with measurements and seven-day forecasts made publicly available through the SKA Water platform. This information helps farmers and local water users assess water quality before extracting or storing freshwater, supporting more informed decisions about irrigation and agricultural water use.

The research is strengthened through cooperation with the Agricultural Research Development Agency (ARDA), the Hydro-Informatics Institute (HII) and other public-sector partners. Joint research, technical workshops, field assessments and knowledge-sharing activities help connect water monitoring technologies with practical needs. RUTS also works with agricultural communities to assess the economic and social outcomes of participatory water management research, including IoT-based initiatives in the Sathing Phra Peninsula, while sharing research innovations through public exhibitions and community networks.









สถานี	05 พ.ย. 2569	06 พ.ย. 2569	07 พ.ย. 2569	08 พ.ย. 2569	09 พ.ย. 2569	10 พ.ย. 2569	11 พ.ย. 2569
SKA01	0.95	0.81	0.69	0.58	0.50	0.42	0.36
SKA02	1.86	1.58	1.34	1.14	0.97	0.83	0.70
SKA03	1.37	1.16	0.99	0.84	0.71	0.61	0.52
SKA04	2.86	2.43	2.07	1.76	1.50	1.27	1.08
SKA05	1.72	1.46	1.24	1.05	0.90	0.76	0.65
SKA08	5.27	4.48	3.81	3.24	2.75	2.34	1.99
SKA09	2.00	2.30	2.65	3.04	3.50	4.00	3.66
SKA10	9.12	9.12	9.07	9.07	8.86	8.44	8.24







