Digital Platform for Water and Utility System

Digital Twin for Urban Water Management

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aquaWISE

A platform to manage urban water which creates a digital twin for urban water supply systems, so that you can measure, monitor and manage in realtime, leveraging IoT and Artificial Intelligence.

For Over 121 Urban Local Bodies

ENSURING UNINTERRUPTED SUPPLY OF WATER **MINIMIZING LOSSES AND MEETING SERVICE LEVEL AGREEMENTS**

10K +

IoT Devices for realtime intelligence

15 MILLIONS +
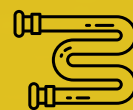
Visits per year as admins, citizens, and public

1500 +

Pump houses operation are being manged

4.2 MILLIONS +

Connections Managed by the Platform

35K MILES +

Length of distribution pipes managed

5650 MLD +

Daily water suuply managed in network

DIGITAL PLATFORM FOR
Water and Utility Systems

Enabling digital water ecosystem for cities bringing trsanparancy among stakeholders and improved SLA management.

Measure

Measure end-to-end water supply and demand with Intelligence on flow networks, assessments on leakages, forecasts, and analytics

Monitor

Monitor water quality and consumer consumption in a network in real-time from anywhere, alongwith assets working conditions and SLAs and consumer grievances

Manage

Real-time decision support on operating parameters, assets helath, pumping operations for distribution planning in realtime at each node to achieve optimum productivity

Predictive Maintenance

Automate hydrological predictions such as inflows at key points, stormwater flows as well as asset vulnerability predictions to reduce meantime failures

DIGITAL WATER
## components
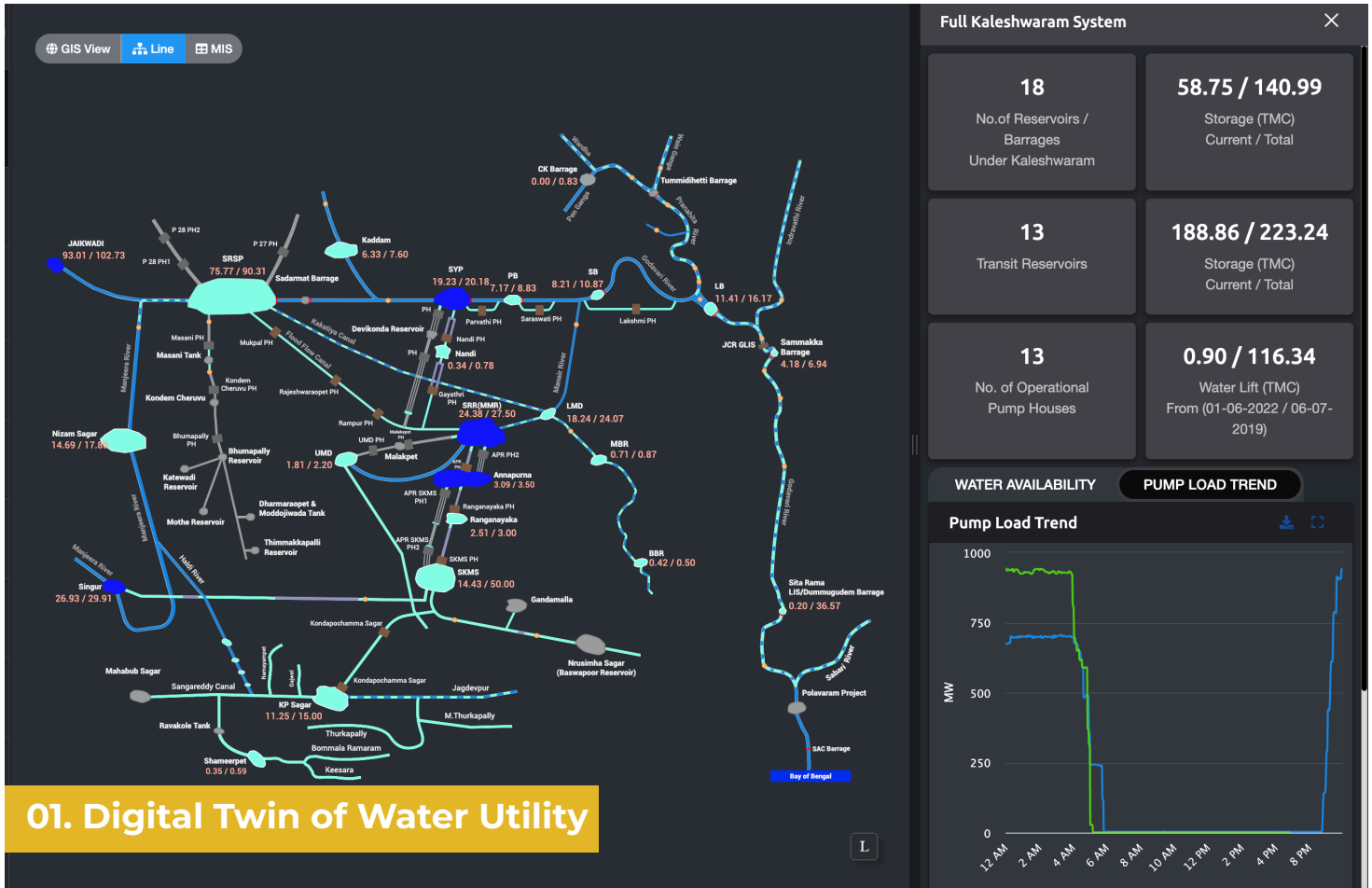
01. Digital Twin of Water Utility

It creates digital twin, Providing real-time visibility into water supply, demand and pump operations to enable optimized pump operations with minimized power consumption. It provides What if scenario simulation to analyze various operations scenarios and their effectiveness to guide daily transmissions, distributions and lift operation.

It creates one source of truth to manage all existing and new connections with related assets ensuring seamless water supply and early interventions in case of failures and grievances.
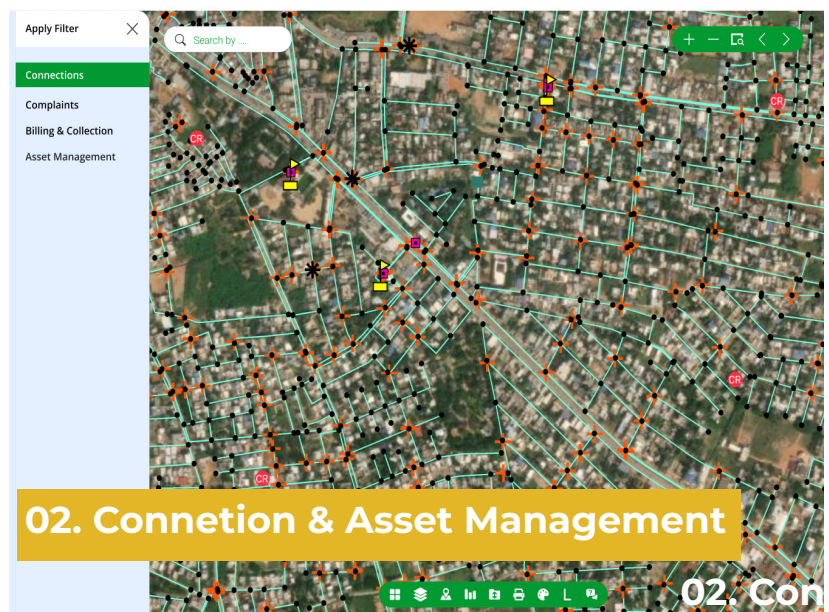

02. Connetion & Asset Management

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03. Pump & Assets (From KW to MW)
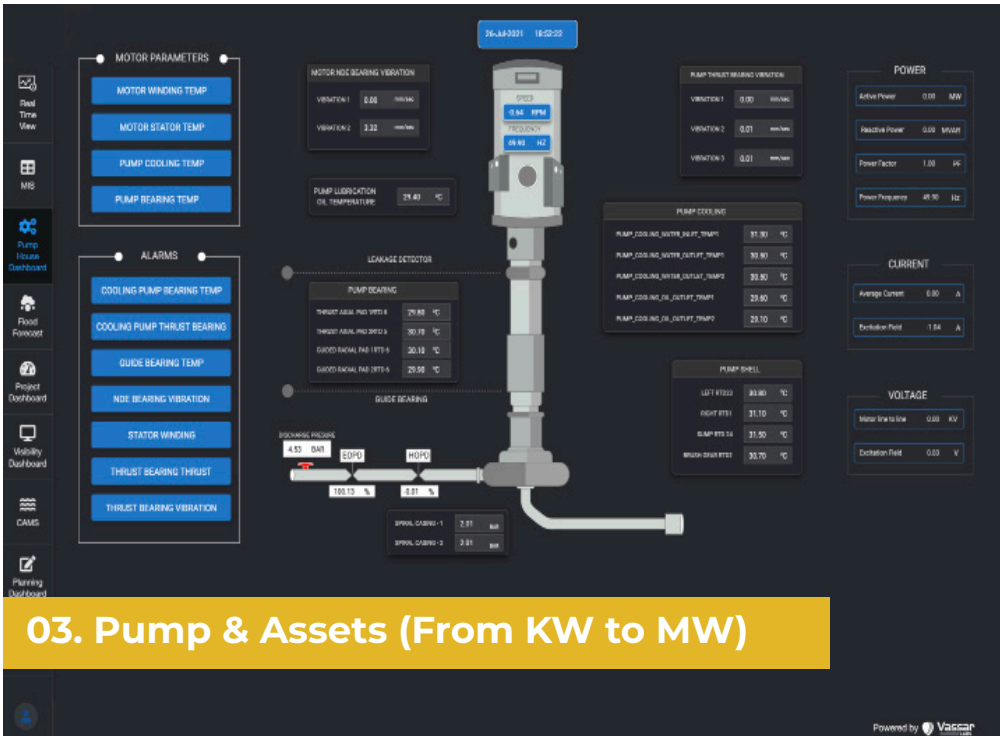
This helps manage water pressure & flow, energy consumption & efficiency, as well as provide health monitoring of each pumps to enable anamoly alerts, predictive and preventive maintenance. There are pumps ranging from capacity of few KW till 132 MW which are managed through the platform. This enables performance monitoring in realtime with analytics on seconds, hourly, daily, monthly or yearly in no time.

The SLA (Service Level Agreements) metrics or service delivery monitoring monitors performance parameters as baseline performance, lower performance and breach. All SLA calculations are done on cloud with the help of automated algorithms to manage them in realtime for greater customer satisfaction and infrastructure efficiency. The NRW monitoring alerts for leakaged in realtime and keep an accounting of NRW in the network.
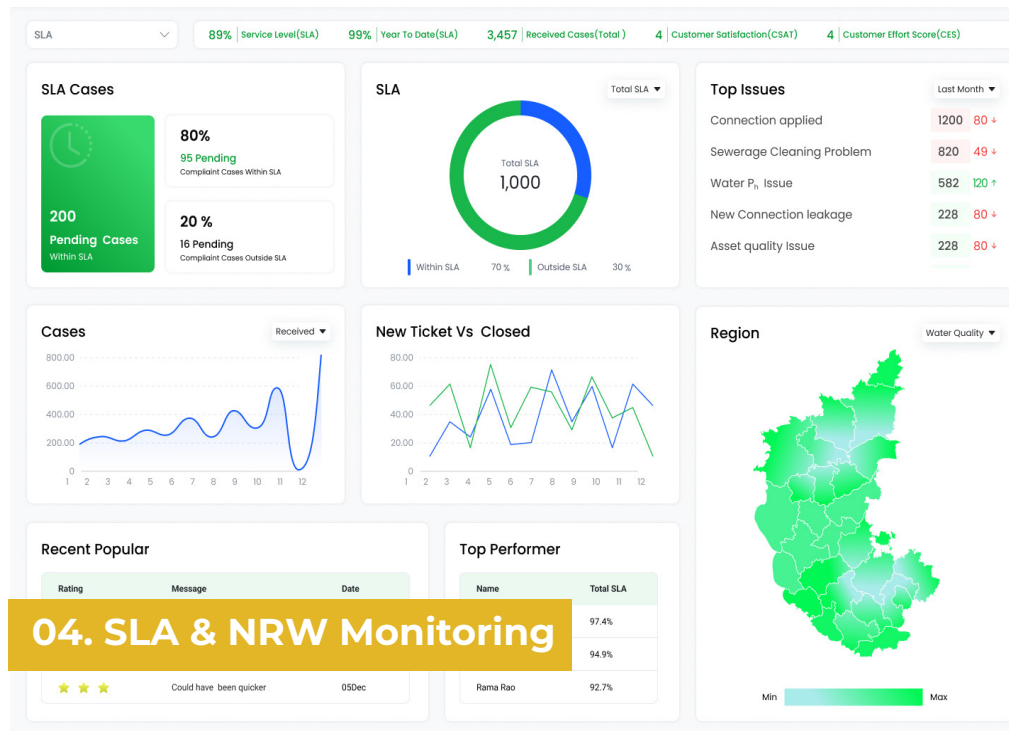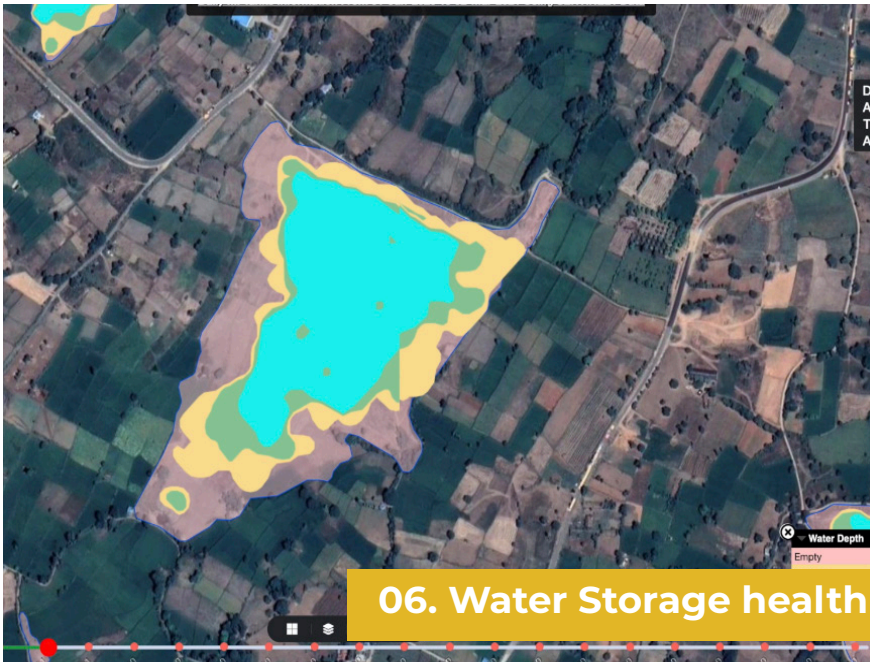

04. SLA & NRW Monitoring

The system generates bills and integrates with payment gateways or any exiting billing management system to provide insights on bills genrated, paid, gap and defaults.
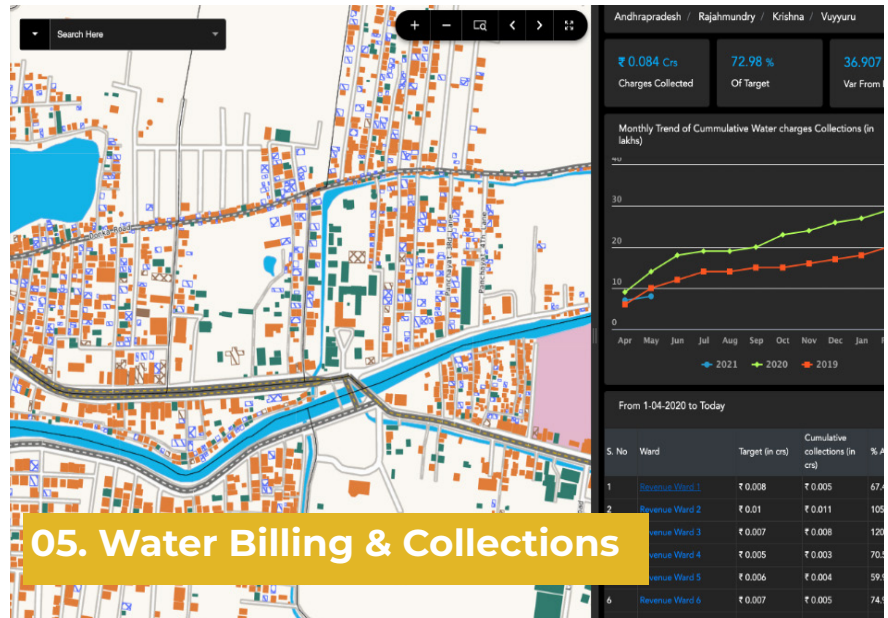

05. Water Billing & Collections

This leverages remote sensing data to continuously monitor waterbodies in near real-time for their health and capacity, as well as get notified against encroachments. The module also keep track of remote sensing based water quality parameters.

06. Water Storage health

The system will provide interactive GIS visualization for rainfall, flood intensity, inundations, zones, drainage networks, lakes, etc. to show risk zones and provide early warning alerts in real-time with 3D flood inundations and its potential impact.
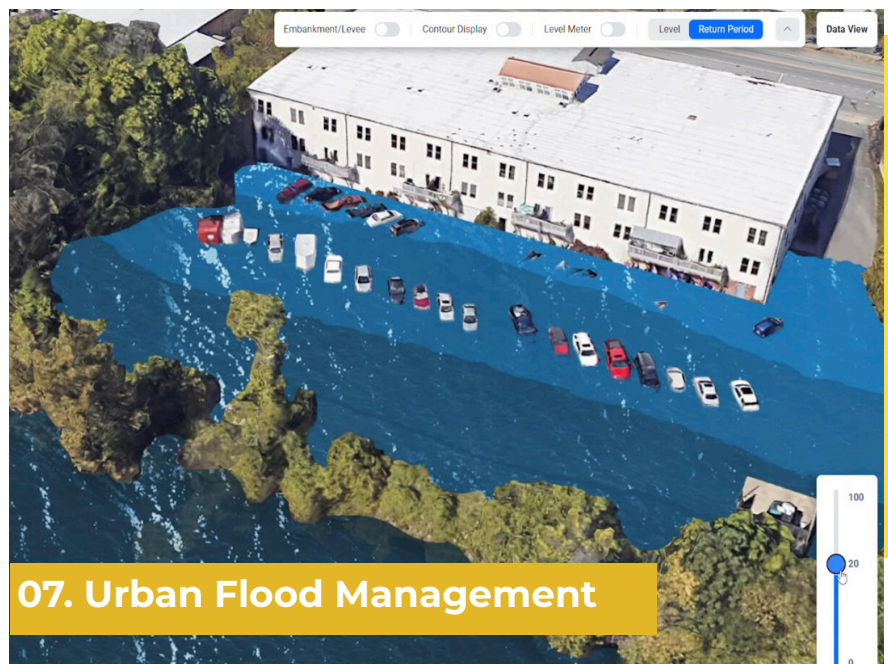
07. Urban Flood Management

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