## **Full-scale Demonstration of DHS-MBBF System**



Joint research organization : SANKI ENGINEERING Co.,Ltd., Tohoku University, Kagawa College,

Kochi College, Japan Sewage Works Agency and Susaki City

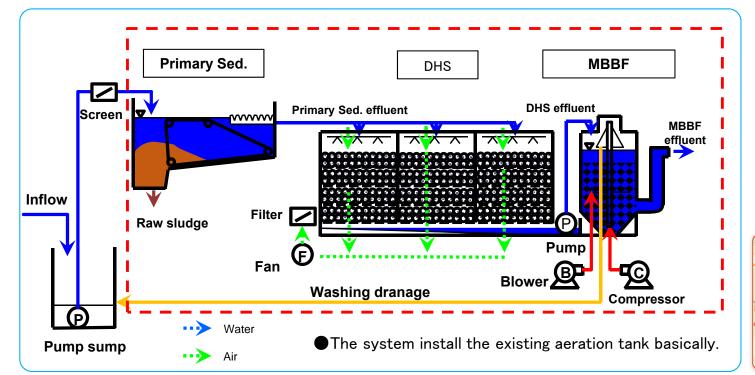
<u>Field</u>: Susaki-City Wastewater Treatment Plant (WTP) (Kochi prefecture)

## Summary of demonstration

In order to ensure the sustainability of sewage treatment in the population decreasing area, it is required that a technology of which treatment capacity can be changed flexibly according to the decrease of sewage inflow.

The new sewage treatment technology "the DHS-MBBF\* system" have an ability of tracking for flow rate change and reducing the life cycle cost according to the inflow. This energy-saving system is a sustainable technology for facility replacement of plant Conventional Activated Sludge (CAS) process with excessive processing treatment capacity.

\*\* DHS: Down-flow Hanging Sponge, MBBF: Moving Bed Biological Filter



## Results

- Improve the management cost of WTP
- Reduce the energy consumption in WTP
- > Easy operation
  - →the system can be operated by inexpert about sewage treatment



Flow diagram

Fied detail