



Franschhoek South Africa



CURRENT SITUATION

In South Africa's informal settlements, untreated wastewater pollutes the Stiebeuel River, affecting local farmers.

Biofiltration improves water quality, but low-flow periods and pollutants like microplastics and pharmaceuticals remain challenges.

NEGATIVE EFFECTS



Limited infrastructure causes untreated wastewater to pollute the Stiebeuel River, affecting farmers and introducing harmful pollutants.

Challenges

Ensuring consistent water quality, especially during low-flow periods



Improving the removal of CECs (e.g. microplastics and pharmaceuticals)



Ensuring biofiltration systems provide reliable, long-term treatment under varying conditions.



SOLUTIONS

WATERSENS will scale up the Water Hub system into a field-scale biofiltration solution with digital monitoring, improving removal of pollutants like ammonia, E. coli and CECs, and enabling safe water reuse for agriculture.