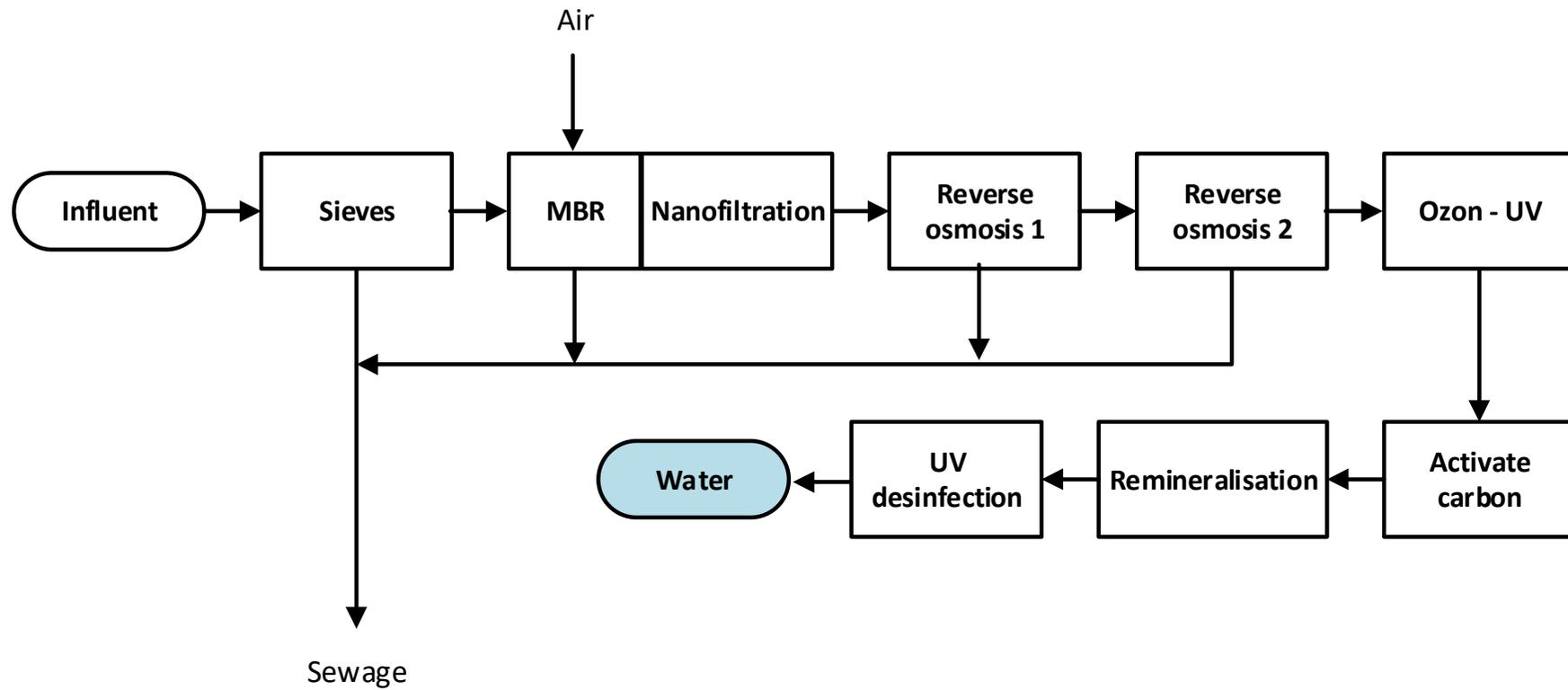


Process flow diagram (PFD)



Subtitles

Water

What worked and what not for water recovery?

Processes	Sieves	MBR			Reverse Osmosis	Ozon - UV
		Anoxic	Aerobic	Nanofiltration		
Main issues throughout steady-state operation	Worked well Water loss to be monitored	Not tested yet	Not tested yet	Not tested yet	Breakthrough of small hydrophilic organic compounds, ammonia and nitrite	OK for extra log removal Bacteria & viruses. Works also for odor removal Not suitable for high organic load removal (mineralisation)
Solution		Not tested yet	Not tested yet	Not tested yet	MBR necessary	

Colour code:

Too many non solvable issues	Solvable and non solvable issues	Solvable or no issues at all
------------------------------	----------------------------------	------------------------------

What worked and what not for water recovery?

Processes	Activate carbon	UV Disinfection	Recovered water
Main issues throughout steady-state operation	Not suitable for odour removal in this setup (anoxic formed). Less effect on TOC removal due to small hydrophilic substances	Does the job	Not suitable yet as drinking water
Solution			Further investigation, commissioning of the MBR

Colour code:

Too many non solvable issues	Solvable and non solvable issues	Solvable or no issues at all
------------------------------	----------------------------------	------------------------------

Lessons learned

Resource	Influent	Process sequence	Optimum scale	Location of the pilot plant	Operations & Maintenance	Recovered resource	Other
Water	High differences in “grey water” result highly dependable of type of grey water (need of MBR or not)	Not fully tested	Current pilots are too small to be economical feasible, economic study to define break even point is necessary. Not conducted within this project.	OK	Operational: not stable due to underspending in automation and personnel. NF did run stable, no harsh fouling practised.	Not suitable for drinking water yet	
Other							Economic break even point to be determined ⁴

www.NEREUS-project.eu

Interreg 
EUROPEAN UNION
2 Seas Mers Zeeën
European Regional Development Fund

“This project has received funding from the Interreg 2 Seas programme 2014-2020 co-funded by the European Regional Development Fund under subsidy contract No 2S03-011