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# Water & Wastewater Treatment CFD Capabilities Overview

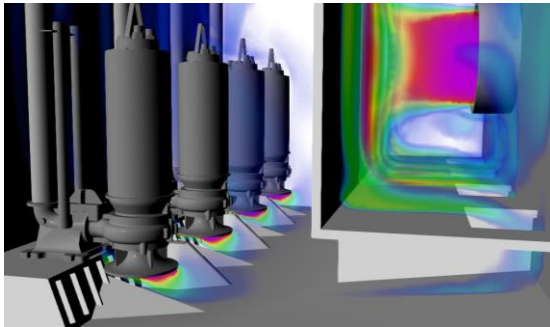
# WATER & WASTEWATER TREATMENT CFD CAPABILITIES OVERVIEW



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## Navier provides specialist analysis expertise in the design of water treatment equipment and systems using state-of-the-art Computational Fluid Dynamics (CFD) techniques

Computational fluid dynamics (CFD) is a rapidly emerging field in the water wastewater treatment sector and can be applied to almost all unit processes.



Navier Flow Consultants provide specialist analysis capability that utilises CFD to help design and optimise water & wastewater treatment facilities. This helps our clients achieve a lower total cost of ownership by analysing & optimising their equipment upfront during the design phase.

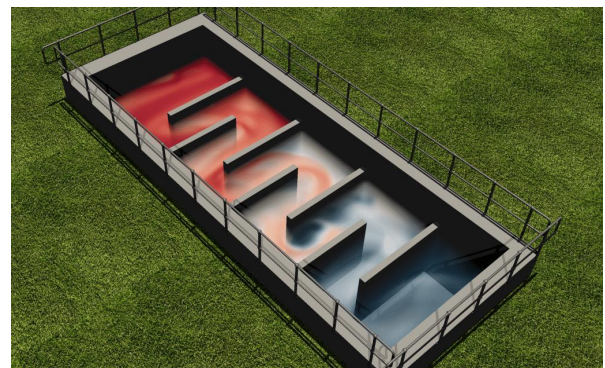
This service covers a wide range of processes from hydraulic elements like flow splitting, sump pumping and settlement tanks to physical, chemical and biological processes like suspended growth nutrient removal and anaerobic digestion. This enables a quantitative analysis of plant performance.

The physics involved within these processes are complex, ranging from non-Newtonian fluids, to multiphase systems and biokinetics.

Navier has the experience and expertise to ensure that our CFD consultancy services provide clients with timely, meaningful and actionable results that are truly adding value across the water and wastewater treatment industry.

### Key Outputs:

- Ultraviolet (UV) Water Treatment Dosing Effectiveness
- Pumping Station optimisation
- Assess hydrodynamic performance of Primary Tanks
- Flow Balancing for optimal treatment performance
- Improved effluent quality in Settlement Tanks
- Manage disinfectant concentrations within Chlorine Contact Tanks (CCT)



### To find out more, contact us:

E: [info@navier-flow-consultants.com](mailto:info@navier-flow-consultants.com)

W: [www.navier-flow-consultants.com](http://www.navier-flow-consultants.com)