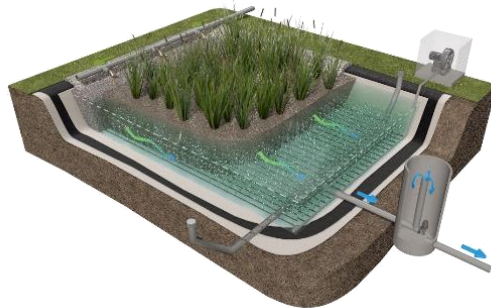


# Aerated Horizontal Flow Constructed Wetland (A-HFCW)



**HFCW** are wetlands that are fed horizontally, with wastewater flowing in a cross sectional direction through the entire bed. Wastewater enters the system on one extreme and treated water is collected on the opposite side. This system is composed of a layer of gravel with a uniform granulometry throughout the entire bed. The system is upgraded with forced aeration that allows the alternance between aerated and anoxic conditions, and that also allows an aerobic digestion of solids preventing the risk of clogging in the system.

## KEY POINTS:

- Treatment of pre-treated wastewater
- Nature Based Solution (NbS)
- Low energy consumption
- Small carbon footprint
- Low COD, TSS and nitrogen effluent
- Blower maintenance required

## MAIN FEATURES

- ✓ Removal of TN < 20 mg/l, COD < 60 mg/l,
- ✓ Reduction of pathogens (reuse of water).
- ✓ Footprint: 0,9 m<sup>2</sup>/PE
- ✓ Adaptation to load changes by means of O<sub>2</sub> sensor and aeration control.
- ✓ Energy consumption ~0,2-0,3 kWh/m<sup>3</sup>
- ✓ Mechanical elements (blowers, automatic valves).
- ✓ Aeration network