

AQUA TREATMENT TECHNOLOGIES INC.

The 'AQUA Wetland System'

A Modular Vertical Flow Constructed Wetland

The 'AQUA Wetland System' (AWS) by AQUA Treatment Technologies Inc. can be designed to treat almost any flow volume of wastewater. Our largest AWS is designed to treat 400,000 L/day of greenhouse leachate water from RosaFlora Greenhouses in Dunnville, Ontario, Canada. In addition, the modular design of the AWS allows for incremental construction as the flows from a facility increase. For instance the RosaFlora AWS began as a three cell system treating 150,000 L/day. As the greenhouse complex expanded six more cells were added, increasing the daily treatment capacity of the AWS to 400,000 L/day.

RosaFlora Greenhouses, treating 400,000 L/day of irrigation leachate water



The smallest AWS is treating 1,850 L/day of sanitary sewage at a remote cottage in Killarney, Ontario, Canada. Private cottage near Killarney, Ontario treating 1,850 L/day



The unique design of the AWS also allows for installation in remote areas where materials and manpower may be scarce. In northern Ontario the presence of the Canadian Shield, an expansive granite formation, makes installation of a typical in-ground system impossible. As a result many of our systems in this area are installed completely above ground, such as the AWS shown above. The AWS is approved under Section 53 of the O.W.R.A. for discharge to surface and ground water, allowing more design flexibility in areas were natural soil cover may be scarce. If winter-time operation is required the cell walls are simply insulated.