### **Aquas Water Works**

## **Breakthrough Project!**



# Waste Water Keuse

# Aquas Water Works Waste Water Irrigation

Aquas Water Works has designed, provided and installed a turnkey system for the Natural Resources Canada and Camrose County research site located in Ohaton, Alberta.

The system utilizes



Reuse of lagoon water

treated municipal sewage wastewater for the production of wood biomass. This wood harvested from a 1.2 ha willow plantation which are irrigated with this municipal sewage wastewater. The wood biomass is used in county operations for generation of heat for county services buildings.

Utilizing a specialized surface dispersal irrigation system through 4 independent zones, the wastewater, from the Village of Ohaton sewage lagoon, is processed and applied using specialized



# System Benefits:

- Unattended operation
- Automatic irrigation of plantation
- Reuse of municipal waste water
- Ongoing low cost irrigation
- Low maintenance

# System Features

- pumping system able to respond to changing water levels without affecting performance

-floating pump platform anchored accommodates bank slope and changing water levels

- easily serviceable, low maintenance system

- removable for winter storage

-includes easily serviceable physical barriers to debris (plant material, obstructions) - compatible with other irrigation control systems

- able to automatically control pump motors and control valves

- able to be electronically controlled and monitored remotely

-accommodate expansion for up to 8 zones

-collect local climate data (windspeed, precipitation, temperature and humidity) for irrigation scheduling.



- water delivery volumes recorded

-includes main distribution pipeline through to surface distribution lines.

-non-intrusive installation

-delivers 16 cubic meters of water per hour per zone

-able to withstand wastewater/effluent requirements

-protected from heavy traffic related to lagoon maintenance