

## Flow Monitoring For Golf Course Irrigation

“ We are all talking about the price of oil, but it's water we'll be fighting for in the future.”

Rory MacLennan  
Summerheights Golf Links

Summerheights Golf Links in Cornwall, Ontario draws irrigation water from the South Raisin River. Flow rates in the river can become very low during dry periods so water extraction is regulated and monitored closely.



**Clamp-on Ultrasonic Transducers  
Installed on 6" Steel Water Pipe**

Under a water extraction permit issued by the Ministry of The Environment in 2009 the golf course is allowed to draw a maximum of 500,000 liters per day at a flow rate not to exceed 1,380 liters per minute (and 600,000 liters per day at max 1660 liters per minute after July 1).

To measure and control water pumped into the sprinkler system, a Greyline TTFM 1.0 Transit Time Flowmeter with clamp-on ultrasonic sensors was installed on the outside of the main 6" steel pipe from their pump station. A Rain Bird® control system then manages water distribution to each sprinkler head.

Daily flow reports must be provided to the Ministry of Environment at the end of each golf season. So the Summerheights TTFM 1.0



Flowmeter is equipped with an optional 2-million point data logger which stores daily total, minimum and maximum flow rates. Rory MacLennan plugs a USB memory stick into the flowmeter periodically to download reports and transfer to his PC computer. From these daily reports MacLennan can transfer the data into the Ministry's online reporting system.

Links:

TTFM 1.0 Transit Time Flowmeter  
Summerheights Golf Links website



**Flow Report Download  
to USB Memory Stick**