



Off-grid washrooms on the Silver Creek Golf Course, Garden River First Nation.

Savings at the Forefront

Composting toilets are par for the course. BY AL SEYMOUR

BILL GATES SAYS the next big thing will be toilet technology. In fact, reducing or eliminating water consumption in design of new facilities or retrofitting of existing is already a change of practice.

Recent player demographics have changed the demands for golf course owners. With more seniors and women playing, “facilities” have become more important. Golfers are looking for clean, well built, on-course restroom facilities. The traditional on-course options have been the low-end port-a-potty, the full-service halfway house, and the mid-range building on a pump out tank.

What does this mean for water savings? If a course has an average of 150 golfers per day with 200 golf days in a season, and half the players use the on-course facility, a six-litre toilet facility requires 90,000 litres of water. For an old 3.5-gallon guzzler, that would be 210,000 litres. With a one-pint flush toilet, water usage is reduced by 80,000 litres and 200,000 litres, respectively. With a no-water composting system, the water

savings are 100 per cent.

The other savings are visible in capital costs. By disconnecting the infrastructure, the costs of running long-distance buried electrical cable, water lines, and sewer connection/septic bed construction are eliminated. By combining composting toilet technology, solar power, and an evaporation bed, you’ve got an off-grid facility which allows the building to be much more site flexible. The potential infrastructure savings are in the order of \$30,000 plus per building.

Composting toilets use bacteria to break down solids. The liquid keeps the compost moist and, combined with air flow, lets aerobic bacteria do their job. Excess liquid can go into an overflow drain which enters a mini evaporator bed.

The evaporation bed with shallow root perennial plants is designed to draw up from the shallow bed. Ultra-low water flush toilets or a non-water system mean that very little liquid goes into the ground. The small excavation area is

less destructive to tree roots and local ecosystems.

These solutions are by no means cookie cutter. There are specific course requirements, location considerations, design details, building logistics, and possible septic and building permits to consider. Each municipality makes its own call, with the responses being from “no permit required,” to “permit required, how can we help,” to some major challenges. But acceptance is growing.

It takes a little maintenance care to keep the biosystem happy, but the payoff of a green washroom facility is seen in the budget, the golfers’ experience, and the environment: the triple bottom line. **wc**



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