

Stimulus cash needs to go right down the drain  
Spend it on waste water and sewage treatment systems  
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George Jennings, the English sanitary engineer who championed the novel mechanical contraption now known as the toilet (but then often called "a necessary"), built the world's first public washrooms for London's Great Exhibition in 1851. Almost a million people paid a penny each to experience the amenity in opulent "retiring rooms" in the celebrated Crystal Palace.

From this success, Jennings proceeded to build a number of underground public washrooms in London, all of them masterpieces of Victorian design and engineering. It was Jennings who asserted that the civilization of a people can be measured by the way they dispose of their own wastes - an environmental conviction of perhaps obvious but nevertheless profound insight. Only seven years earlier, after all, fecal production from Windsor Castle alone filled 53 separate cesspits, all of them to overflowing.

The two million people who lived along the banks of the Thames contributed 250 tons of sewage a day to the putrid waterway. First for Britain, and subsequently for much of the world, the toilet was emphatically a revolutionary, and civilizing, innovation - though WaterAid, the London-based charity, says 2.5 billion people still live without it. Although the London plumber Thomas Crapper often gets the credit for it, the toilet was apparently the result of incremental mechanical advances dating back to 1596. Crapper did, however, invent (and patent) the manhole cover - which leads directly to the sobering paradox of sewage disposal: out of sight, which is good; out of mind, which is not good. The toilet doesn't dispose of wastes.

As Jamie Benidickson observes in *The Culture of Flushing: A Social and Legal History of Sewage*, it merely moves them discreetly through the underground, too often to the closest stream, river, lake or ocean. "For most of us," Prof. Benidickson (faculty of law at the University of Ottawa) says in his compelling and encyclopedic 2007 work, "flushing just makes things disappear." The result is that, once the effluent exits the toilet, "it is difficult to find any discernible interest ... in anything that might happen after pulling the chain, pushing the button, pressing the handle or stepping away from the electronic beam." As magnificent a device as it is, the toilet can subvert the environment as much as it civilizes the home or the office. In this sense, Prof. Benidickson says, the space shuttle Columbia may symbolize the ultimate toilet - "[with its] capacity to vacuum human waste into the black holes of outer space."

Although the shuttle solution doesn't pollute waterways on earth, NASA's decision - "just get rid of it" - reflects the consensus of most earthlings. In a way, however, the pipes that deliver fresh water to toilets, and that flush away the waste from them, are essentially tributaries of our waterways. (By one estimate, it takes a million kilometres of pipe to deliver water to a large city.) Although much human waste in Canada now gets properly cleaned up in treatment plants, much doesn't. Rivers and lakes still function as "nature's

sewers."

Oceans still do, too - most egregiously in the flushing of luxury cruise ships. The remarkable thing about sewage pollution is that it is now overwhelmingly a public affair - as it has largely been for centuries. Five hundred years ago, Henry VIII employed sewage inspectors to check for wastes in "streams, ditches and gutters." More than 100 years ago, Toronto employed sewage inspectors to monitor obnoxious waste disposal. (In 1899, eight inspectors filed 18,000 privy reports.)

You might think that public control of sewage would ensure that the job would be done properly. You would be wrong. In a report this year in *Legion* magazine on the crisis in municipal sewage treatment in Canada ("Trouble Underground"), writer Sharon Adams says Ontario's water treatment plants alone sent 1.7 trillion litres of raw sewage into the Great Lakes watersheds in 2006. Ontario's 107 combined storm/septic sewer systems, she says, triggered the release of raw sewage into waterways on 1,544 separate occasions in 2006.

In one celebrated instance in the same year, the nation's capital spilled 960 million litres of raw sewage into the Ottawa River. The Federation of Canadian Municipalities says the country needs to spend \$30-billion now on water and waste-water services, and another \$90-billion in the next 10 years, to restore obsolete pipelines. The federation says 80 per cent of all public infrastructure in the country, not merely sewers, needs to be replaced.

The Insurance Bureau of Canada says sewage backup is now the No. 1 reason for home insurance claims - outnumbering fire, theft and vandalism claims. (A single Toronto storm, in 2005, produced \$500-million in sewage-related claims.)

In 2008, 1,800 municipalities issued boil-water alerts - though some of these municipalities issue similar alerts every year. Waste-water effluent - human waste, prescription drugs, debris of all sorts - has become the biggest source of pollution in Canadian waters. Canada's septic negligence suggests that the country isn't as civilized as we think - and the priority given to it by the stimulus spending of our three levels of government, alas, proves it.