## Why build Mr. Floatie a home?

There are at least three strong reasons: direct environmental concern, long-term sustainability, and image.

Environmental concerns include seafloor sediment contamination, water column contamination and surface contamination. All three indicate a polluted environment. A 2006 BC government report indicates that sediment around the outfalls is contaminated, exceeding limits under provincial Contaminated Site Regulation for **19 chemicals**. Any one instance is enough to designate the site contaminated, forcing remediation. The options are clear: either stop polluting or clean it up.

On the seafloor, we find worms feeding on the contaminated sediment; pollution resistant worms now dominate the area around Macaulay outfall and fish eat these worms, concentrating toxins up the food web. In the water column, the only fish study found **liver lesions** in fish around the outfalls, a clear sign of contamination.

Surface contamination may be the greatest environmental concern. Oil and grease rise to the surface daily carrying pathogens and other toxins. Seabirds can be seen feeding on this plume, spreading toxins far and wide? The surface micro layer is habitat for many species in their larval stage, a critical development phase, and we know little of the impact the toxins are having. The recent result, in 2002 Environment Canada increased the **shellfish harvest closure** around the outfalls by 50% to cover **60 square kilometres**.

Dumping raw sewage is among the least sustainable options we have. Only by **closing the loop** – by recycling resources found in waste - will we be sustainable.

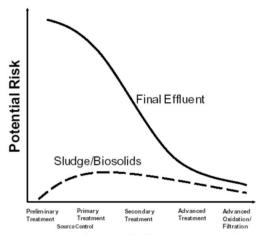
The 2008 Provincial **Resources from Waste** report uses Victoria's sewage in a case study and found sewage, when treated with solid wasted to maximize value, could pay for itself. There is enough energy in our system to heat 30,000 homes and fuel the regions buses. Using this approach our community can reduce green house gas emissions to 23% below 1990 levels. The associated business case shows that treatment need not cost \$1.2B; the consultants that came up with \$1.2B now agree.

We are all aware of the image raw sewage congers up, we don't need experts to tell use that sewage is full of diseases, we have been taught not to touch. Sewage infrastructure is a key component of community disease control, one of the ten great health achievements of the 20th century.

Image is also an important driver for tourism, one of Victoria's largest private sector industries. We have the choice of two very different community images: Victoria as the garden city destination or as *the* raw sewage pollution destination. In 1993 our tourism industry was hit by a targeted boycott because of our lack of treatment. Today tourism generates over \$1.2B per year and we don't want to put that at risk.

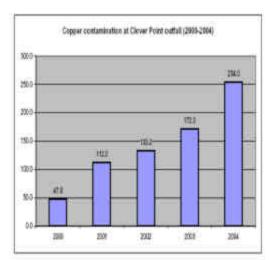
In 2005 we hired a panel of experts to review our 25 year raw sewage discharge plan and give us an **independent scientific opinion**. The panel's conclusion was clear: Victoria can't continue to use dilution in Juan de Fuca as a long-tem solution. They were also clear that after reviewing \$10's of millions worth of monitoring reports there were multiple fundamental questions that remain. Incredible given all the money we've spent

on monitoring over the past 30 years: is there any other community in the world spending more on monitoring than on treatment? Here is the panel's risk assessment:



Level of Effluent Treatment Risk vs Treatment Level Source SETAC 2006

By ignoring the problem now, it only becomes bigger.



Copper contamination Clover Point 2000-2004 Source SLDF 2005

Is this a legacy worth leaving our children and grandchildren?