

Mothership Kayaking Is Not Always Black and White

by Mike Richards

Ith the ink barely dry on new vessel sewage regulations which were introduced in 2007 under the Canada Shipping Act, there is now some talk of the federal government looking into grey water regulation. With BC boaters—including some of us with motherships—still coming to terms with black-water (sewage) discharge restrictions, the rumours about new grey water regulation are already raising some eyebrows. Notwithstanding the bureaucratic ability to complicate what should be common sense, there is some confusion as to what exactly is grey water and what impacts it can have on our kayaking and cruising waters.

Nothing's black and white.

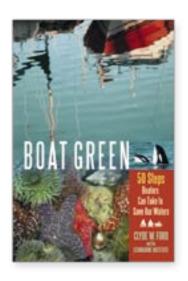
Although it may seem harmless, grey water, which is introduced into the marine environment via our galley sinks, showers and basins in the head, can pose a threat to the marine and aquatic environments. That is because it can contain toxins like phosphates, chlorine, inorganic salts and metals, and includes soaps and detergents from boat showers, dishwashing and laun-

dry facilities. It's also made up of the water and products we use to clean our boats.

These products, even those labeled "biodegradable," can contain substances that are harmful to marine life in a variety of ways. For example, many of them introduce excess nutrients, and some coat the gills of fish and other marine organisms, essentially causing suffocation. In larger vessels, grey water can also include ground-up vegetable matter from garbarators, which introduces even more nutrients into the ecosystem. Because boats are not connected to a sanitary sewer system, grey water flows untreated into our local waterways and oceans—potentially knocking the marine ecosystem out of balance.

During my travels this past summer, I noticed a number of areas where there seemed to be unusual algae blooms, possibly related to increased nutrient levels. As more and more boats use our favorite kayaking areas, it's possible we might see more blooms, unless we manage to reduce the impacts of grey water and other pollutants.

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Fill up the tank please.

What are some of the options available to us to ensure our grey water is doing the least amount of harm to our kayaking waters? Well, the most definitive solution is to install a grey water holding tank to collect all the water from showers and sinks in our galleys and heads. This water could then be discharged at an appropriate reception facility (pump-out) that would send it to a municipal treatment system before being discharged back into the ocean.

Sadly, reception facilities that would take grey water are few and far between in BC, so another alternative is to dump the collected water as far away from land as possible. This still introduces a sudden surge of pollutants into the marine environment, but at least it's away from enclosed waters. Regardless of how the collected waters are dealt with, there are still the challenges of installing a holding tank, including where to put one with enough capacity and the associated cost.

Down the drain.

Another option is source control, which is ensuring that harmful pollutants and/or excess nutrients don't go down our sinks and showers in the first place. On a small boat this is sometimes easier said than done. Nonetheless, paying just a bit more attention can result in huge reductions in the amount of our personal pollutant discharges.

For instance, what detergent product are you using to wash your dishes? Is it one that has surfactants made from petrochemicals or is it made from natural vegetable oils? What shampoo do you use in the shower? Conditioner? Soap? What cleaning products do you use inside and outside of your boat? We need to avoid phosphates, chlorinated compounds (like bleach), petroleum distillates, phenols and formaldehyde, amongst a growing list of harmful chemicals.

All these products have pretty safe alternatives, including ones you can mix yourself from readily available natural ingre-

dients such as vinegar, baking soda, lemon juice and olive oil. The recipes for the different jobs can be found in Georgia Strait Alliance's *Guide to Green Boating*, which can be downloaded free of charge at www.GeorgiaStrait.org.

For those who don't want to mix their own concoctions, there are a number of commercially available products to do the job with reduced environmental harm. The best way to identify which ones to use is to look for the term "Non Toxic" and even better, that it has been acknowledged as safe under Environment Canada's Environmental Choice Ecologo program, distinctive with its three doves in a maple leaf design.

Following the advice in the *Guide to Green Boating* is very helpful, because labelling on products can be confusing. For example, many products use the term "biodegradable" which can sometimes be deceiving, just like the term "recyclable." Being biodegradable just means that the product will break down into its individual components over time and return to nature. The trick question is how long will it take and how environmentally harmful are the process and the end products? Sometimes what the product

breaks down into is worse than the initial product! This information is not normally readily available, so it's buyer (and marine ecosystems) beware!

What does "clean" really mean?

Another way to reduce the potential harm of grey water discharges is to look even further than what we put down our drains to how much we put down them. Often the recommended amounts of product to use are excessive and a much smaller amount will do the job just fine. For example, for many people, only one wash with shampoo is necessary and the term "repeat" can be ignored, especially if you are using "soft" water. It is also worth noting that all surfactants (the ingredients that make the bubbles) can harm fish and other marine life no matter what their source, so using only what is necessary is critical.

Another question to ask ourselves: how often does the job need to be done? Cleaning product advertisers have managed to perpetuate a myth that bright, white and totally sanitized is always best, therefore we must clean things regularly whether they need it or not. Perhaps it's worth taking the time to appreciate what is around us out on the water and take less time cleaning something that just may not need it.

When it comes to cleaning our motherships, it's worth asking the question "What does clean really mean?" Do I want just a clean mothership or a clean and healthy ocean to kayak in too? Sometimes the answer to this is not black and white but quite grey as well.

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Marine Pump Out Station Locations

British Columbia: www.sanidumps.com/marinepumpout_cdn_bc.php California: www.pumpoutstations.com

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