

# Holey Hull, Boatman, the Vessel is Sinking

July 5, 2011

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Nothing will get your attention faster than going below for a cup of coffee only to find the floorboards awash – “*We’re taking on water!*”

**First priority, find the source** (this in itself can be a monumental task, one we will discuss next month).

Once you find the leak, stop it, and for that you may need some emergency supplies which you hopefully have aboard. Here’s a recommended list.

**1. Softwood tapered plugs.** These are available at most marine stores in a variety of sizes. In the case of a seized through hull or broken hose, the plug is jammed or hammered in place to stop the water flow. An appropriate sized plug should be located near each through hull fitting.

**2. Spare hoses and hose clamps.** Old or damaged hoses and bad hose clamps are a major concern. You should carry a small inventory of spare hoses to replace any hose on the boat. And don’t buy automotive hose clamps. These have ferrous metal tensioning screws, which rust away in short order leaving nothing but magic to hold the hose in place. As a precaution always use two marine grade hose clamps on hoses at through hulls.

**3. A collision mat.** We keep a 4’ X 4’ utility tarp aboard, made of sail cover material. It has three grommets on each side and serves many useful purposes around the boat. Should the need arise, it can be quickly rigged and secured to the outside of the hull to cover a hole. A sail, while a bit more clumsy to handle, can also do the job.

The prudent mariner will regularly inspect hoses and clamps, replacing any that show the slightest sign of age or damage. Don’t forget the engine hoses.

Oh yes, don’t have a wimpy bilge pump. It may be fine to keep the odd dribble under control but when water is pouring into the boat you’ll need the biggest, baddest, fastest pump your budget and space will allow. If the primary pump is electric, you should also have a high volume

manual bilge pump as back up. However, before you can stop the leak you must find it, often not an easy task.

Unless you hit a rock or something (use the collision mat for this – see the last installment), chances are the water is coming from an existing opening in the boat or from the fresh water tank. If you are on the ocean, tasting the bilge water (Yuck!!) is one way to find out if it is fresh water

If it is salt water, begin with the obvious – the thru-hulls. Hopefully you don't have too many and you do know where they are located. (If it is a charter boat, be certain to scout this out before leaving the dock.) It is helpful if you've opened and closed the sea cocks recently to make certain they are operating.

Check the hoses and clamps at each thru-hull. If a hose has popped off or ruptured, close the sea cock to stop the flow. If the sea cock is seized in the open position, cut the hose at the thru-hull and drive home the appropriate tapered wood plug. If the leak is at an engine hose, shut down the engine and close the cooling water inlet sea cock before attempting the repair. Use caution – the engine will be hot and the water could also be very hot. (180 degrees is a normal diesel operating temperature.)

If the water is entering at the stuffing box (where the propeller shaft passes through the hull), you should be able to reduce the flow by tightening the packing nut. This requires a special wrench. Do you have one aboard? Oh yes, it should go without saying, shut the engine down before messing with the stuffing box.

Water can also enter the boat through a sink drain, usually in a sink located close to the side hull which ends up below the water level when the boat is heeled. Such drains should have thru-hulls with sea cocks. Remember to close it before leaving the dock to avoid this problem.

Have fun out there... and keep the boat dry.