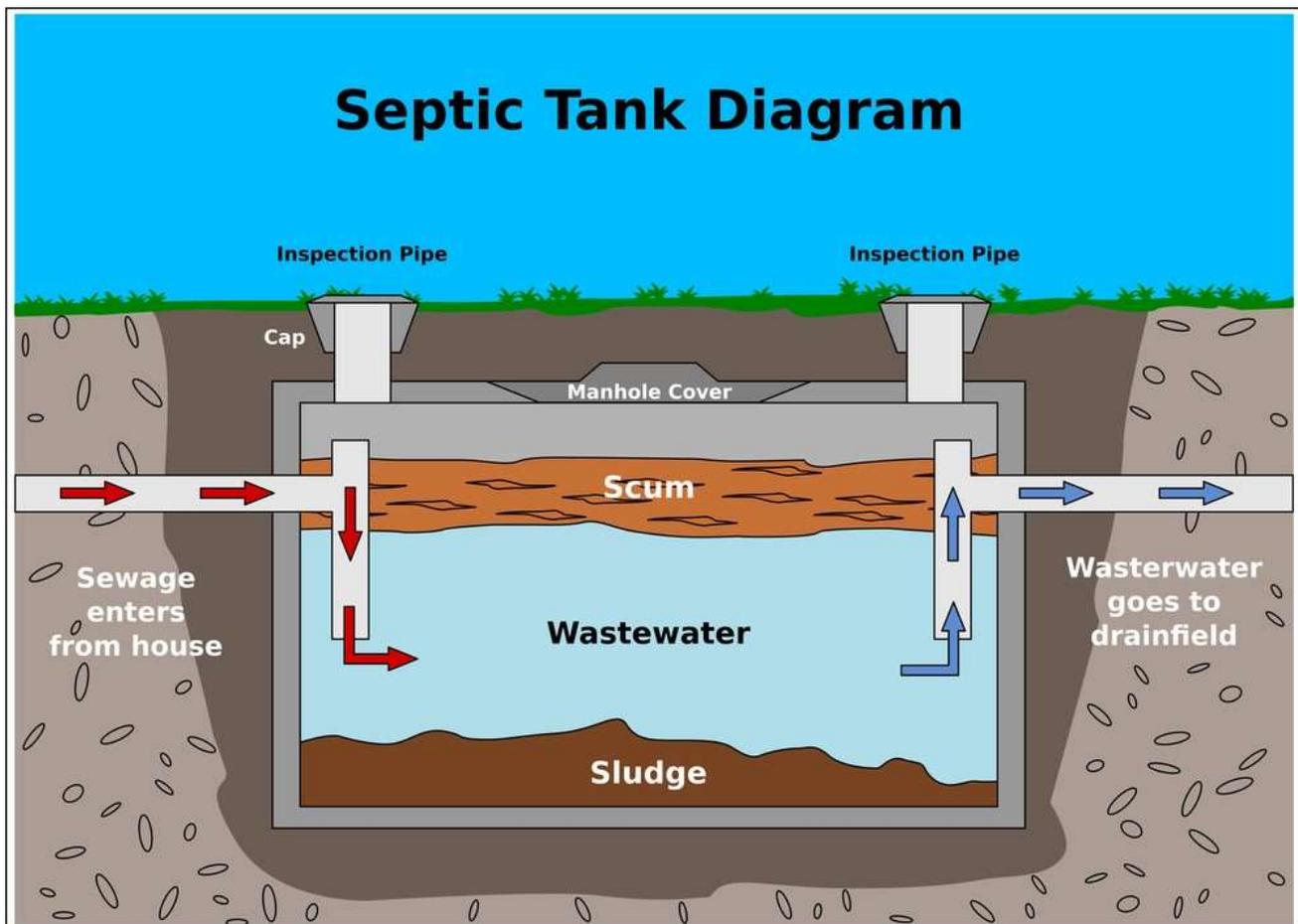


Septic System for Rancho Bonitos How it Works and How to Keep it Working Well

Septic systems are an effective method of collecting, treating and disposing of homeowner wastewater, provided they are properly sited, installed and maintained. A properly maintained septic system can last a very long time, but a well-sited, properly sized and installed system will fail if not properly maintained. A failed septic system creates problems such as noxious odors, lowered property values and surface water contamination. Groundwater pollution can be a health hazard. Repair and replacement costs are considerable.

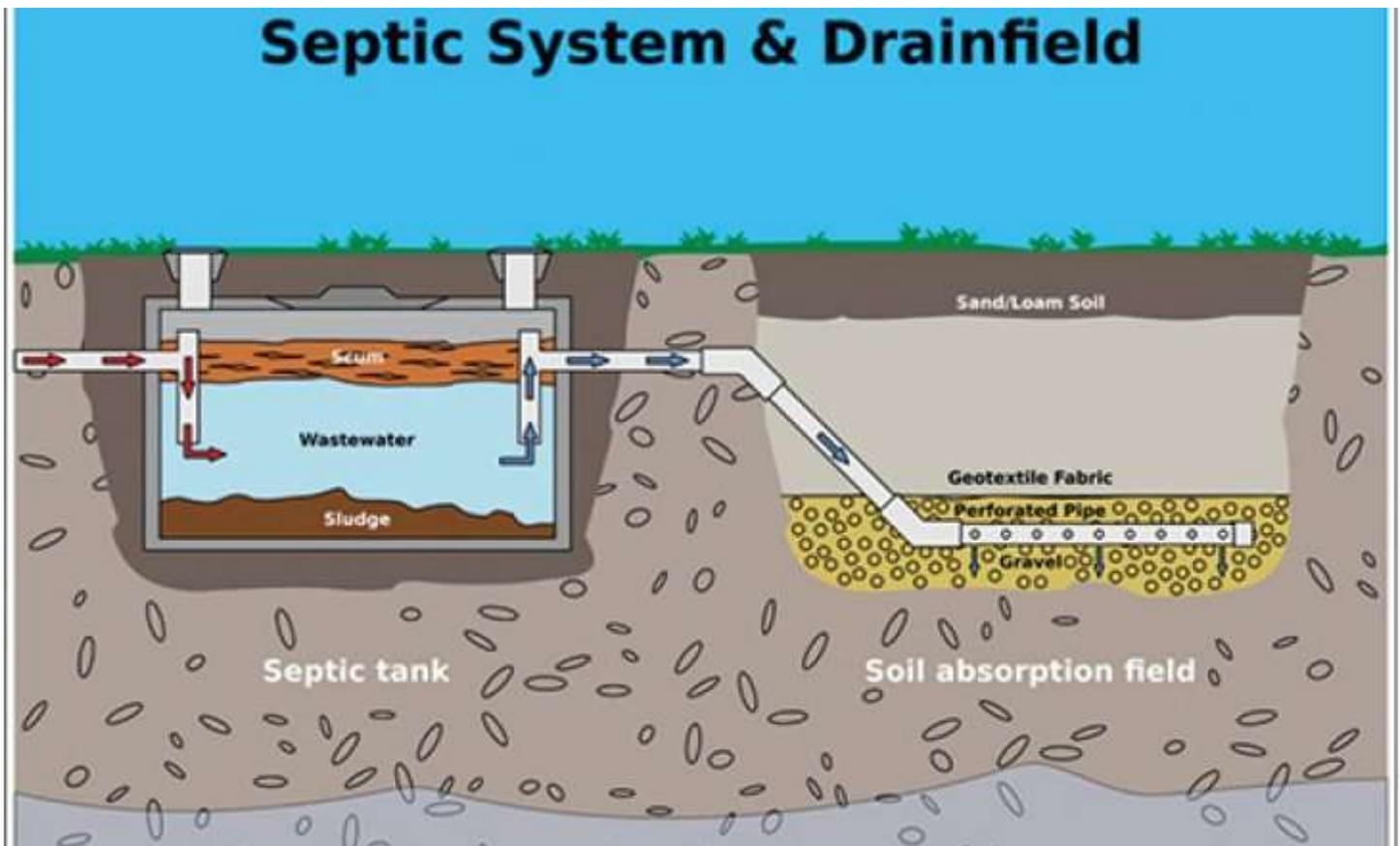
HOW DOES THE SEPTIC SYSTEM WORK?

Waste material from the house enters the septic tank. Heavier solids settle to the bottom and form a sludge layer. Lighter wastes such as toilet paper, oil and grease rise to the top and form a scum layer. Between these two layers, liquid wastewater collects in the center.



When waste enters the tank, bacteria begin to break down the solid materials. This break down reduces solids, but also leaves a residue behind in the tank. As time passes, this residue builds up and must be removed to prevent it from entering the drain field and closing the system. The center liquid layer flows slowly from the tank into the drain field. Our system is gravity fed. There are no pumps involved.

Perforated pipes allow the liquid to be equally distributed into a gravel-filled disposal field. Once the liquid reaches the disposal field, it soaks into the soil. The soil then acts as the final filter for treatment of wastewater received from the septic tank. While the most efficient septic systems allow for evaporation of the field water, our system here is strictly a drainage system underground. Additionally, much of our drainage field is covered by asphalt, cement and/or bricks. This creates an increased need for attention and care to preserve our system. This is also one factor in our park being a seasonal park rather than a fully year round park. Our septic system benefits greatly from its rest period in the summer.



WHY DO SEPTIC SYSTEMS FAIL?

Using more water than the soil can absorb is the most common reason for failure.

This problem is often the result of one or two problems. Either the system is improperly designed or there is a change in water use habits. For example, if there is an increase in the number of users of the septic system or if there is the addition of a water-using appliance, there is a change in water use. It could be noted here, that when our septic system was designed, it was not built to accommodate the present day fact that almost every site in our park now has its own washing machine. In the USA, average daily water use per person varies, but is estimated to be about 80-100 gallons per day.

HOW DO WE KEEP OUR SEPTIC SYSTEM WORKING WELL?

Maintenance of septic systems is often forgotten because they are underground (out of sight and out of mind). The following important information provides some good practices and some practices to limit, avoid or eliminate.

PRACTICES THAT AFFECT SEPTIC SYSTEM FUNCTION

Be aware of products and practices that can damage or reduce the effectiveness of the septic system...

IF your unit is a Trailer/ 5th Wheel/ Motorhome...

PLEASE DRAIN YOUR GREY AND BLACK WATER TANKS OFTEN.

This is so that full sewer solids don't overwhelm the system. Waiting until your tanks are full, is less desirable than draining a partial tank. Additionally, **check that any additives you use as sewer treatment, are septic tank safe.** Not all products are recommended for septic tanks. Please read the fine print on the product. If you cannot find a printed claim that the product is safe for septic tanks, it is probably not going to be safe for our septic system.

Check toilet for leaks. A slow flushing toilet or slow draining sink can be a sign that your septic system is failing. Check toilets at least once a year by putting a few drops of food colouring into the tank. Without flushing, see if the colouring enters the bowl. This indicates a leak.

Choose TOILET TISSUE that is safe for septic systems. Please read the label and choose products that are labelled to be safe for septic tanks. Choose white, septic tank friendly toilet paper without added colour.

WET WIPES (even those that claim to be flushable) should not be flushed. Throw them in the trash.

MINIMIZE GARBAGE DISPOSAL (GARBURATOR) USE - this will reduce the amount of solids going to the septic tank. Households with garbage disposal units produce more solids than those without such units. Try to dispose of kitchen waste into the garbage bins.

Avoid pouring cooking oils, grease or fat (lard, beef tallow, butter, cheese, cream) into the tank. Use paper towels to remove excess cooking oils and food scraps from pans, before washing dishes.

The scum layer on top of the wastewater in the septic tank is primarily made up of toilet paper, oils, fats and grease from the kitchen. When cooking oils, fats and grease are poured down the kitchen sink drain, they become part of the scum layer. They can accumulate until they clog the tank inlet or outlet. When homeowners use hot water to flush grease or fat down the drain, it may pass on through the tank directly into the drain field lines where it can rapidly clog the drain lines. Even though these products are organic in nature, they decomposed so slowly by microbes that further wastewater loading from the tank only speeds up clogging.

Limit water entering your tank... use water saving faucets, showers and toilets.

Spread out clothes washing and avoid washing large loads if you can.

USE ONLY LIQUID DETERGENT when washing clothes. Use bleach sparingly.

Large dumps of water into the system can cause the soil to saturate. Even clean water cannot be accepted if the soil is saturated and untreated wastewater will either rise to the surface or back up. Try to wash medium loads frequently, rather than several large loads of laundry in the same day.

Avoid using hand soap that is antibacterial. This product kills helpful bacteria in our septic system. As an alternative - wash hands with regular soap and then apply hand sanitizer product.

Never place pesticides, paint thinners, solvents, drain cleaners, poisons or other harsh household chemicals into the septic system.

These products kill the microbes in the tank. The microbes are needed to decompose solids and purify the wastewater. Without the microbes, the system is overtaxed and the biological action is destroyed within our system. This clogs our drain field.

DO NOT FLUSH OR WASH DOWN THE DRAIN...

Please throw all of the following items into the trash.

**COFFEE GROUNDS
FAT/ GREASE/ OIL
CONDOMS**

**KITTY LITTER
PAPER TOWEL
SANITARY NAPKINS**

**DENTAL FLOSS
CIGARETTE BUTTS
TAMPONS**

DISPOSABLE DIAPERS KLEENEX
WET WIPES (even those that claim to be flushable - do not flush)

DO NOT FLUSH OR WASH DOWN THE DRAIN... Hazardous chemicals such as...

PAINTS	PAINT THINNERS	VARNISHES
PESTICIDES	ANTIBACTERIAL SOAP	OTHER CHEMICALS
PHOTOGRAPHIC SOLUTIONS	R.V. ANTIFREEZE	
DRAIN CLEANERS	GASOLINE	

Please label these items and leave them for pick up beside the bins in the garbage/recycle area.

When closing your unit at the end of the season, you may add to your sink drains and toilet, a product called **STOR-SAFE.** Adding this liquid will keep seals on toilets and sink drains lubricated. This product is approved by the contractor that checks our septic system. It is available in Yuma from: RV Connection, 4475 E 32nd St, (480-288-1111) Costs about \$7. Follow directions on the bottle.

PLEASE PICK UP AN ABBREVIATED VERSION OF THIS INFORMATION FROM OUR OFFICE. KEEP IT ON HAND AND REFER TO IT IF YOU HAVE VISITORS OR RENTERS IN YOUR SITE.

If you have any questions or concerns, please contact,
George Mader (Site 79) or Ray Horth (Site 98)