

Water Design Rule of Thumb

Domestic water exiting a house is:

40-50% gray water, gray water is alkaline ph

50-60% black water

Subsurface irrigation saves 50% of irrigation from drying / evaporation

To grow food, the rain catchment surface must be 2.5 times larger than the cultivated area

Typical rain: 40% infiltrates, 15% goes to the watershed, 45% evapotranspires (becomes clouds again)

Rain falls ph 7, contact with carbon dioxide makes it slightly more acid to 5.7 ph, ponds are 8.0 ph. Concrete tanks & copper roofing make the water more acid. Below ph 7 copper pipe starts to etch & corrode. Add baking soda or a piece of limestone to make it buffered (more alkaline) .

Need gravity or pumps to provide 40 psi to 60 pst for a water tap/faucet

Remember air gaps to keep separate water systems from contaminating each other.

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